SCORM Player Properties

When adding a SCORM learning activity, you have the ability to adjust how the SCORM player behaves when the learning activity is launched by a student. The controls are preset so that courses properly built in an e-learning authoring tool will behave consistently and correctly within HealthStream.

As such, it is recommended that the SCORM player properties are not adjusted unless you have an understanding of SCORM and its behaviors.

SCORM compliance requires that control of the SCORM player properties is made available to administrators. Administrators should note that the majority of the player properties are considered advanced features and have serious ramifications in how the course behaves.

Explanations of SCORM player properties are found below categorized into user experience levels.

Adjusting SCORM Player Properties for a SCORM Learning Activity

SCORM Player Properties are automatically presented after the user adds a SCORM learning activity (see *Adding a SCORM Learning Activity* in the HLC Courses Management User Guide), with the default settings selected. These settings can be accessed at any time.

To do so

1. Perform a course search. See *Searching for a Course* in the HLC Courses Management User Guide for details on conducting a course search. The **Course Builder** page appears.
2. Click the name of the SCORM learning activity that you wish to edit from the **Course Structure** tree view. The **Course Builder** screen for that learning activity appears and allows you to view or edit SCORM player properties. The navigational controls appear by default.
3. Edit player properties as desired.
4. Click **Save** to save changes.
5. Access any subset of SCORM player properties by clicking the appropriate link the in secondary menu.

+ SCORM Player Properties for Beginner Users

For beginner users, HealthStream recommends that the standard SCORM player properties are not adjusted. If you authored your course in an authoring tool, your course was likely designed to include the course navigation and behavior that you desire, and the default SCORM player settings are established to display your content correct and consistently.

Navigational Controls

These settings determine the availability of navigational controls in the SCORM Player.

- **Show Navigation Bar:** Enables the default SCORM player navigation bar. If your course already contains controls for the user to navigate through the course and see his or her progress, there is likely no need to enable the navigation bar. When this is enabled, you can make further adjustments:
  - **Show Finish Button:** Determines if the **Exit Course** button appear within the SCORM navigation bar.
  - **Show Close SCO Button** - Determines if the **Close SCO** buttons appear in the upper right portion of the player window. It is recommended that this option remain off, as it isn't useful to most customers.
  - **Enable Previous/Next** - Determines if the **Previous** and **Next** buttons appear within the SCORM navigation bar.
  - **Show Progress Bar:** Determines if the progress appears within the SCORM navigation bar.
  - **Show Help:** Determines if the **Help** button appears within the SCORM navigation bar.
- **Prevent Right Click:** Prevents the learner from right-clicking in the SCORM player window. This should be used if you wish to prevent the user from looking at the internal structure of the content or data in the player.
- **Show Course Structure:** Determines if the course structure appears in the SCORM player. The course structure will appear to the left of the display stage in outline format. When this is enabled, you can make further adjustments:
  - **Course Structure Starts Open:** Determines if the course structure starts open or closed. The learner can always show/hide the course structure if it is available and the navigation bar is shown.
  - **CourseStructureWidth:** Determines the width (in pixels) of the course structure sidebar.

Launch Behavior

These settings determine how the parts of the SCORM Player will be launched.

- **SCO Launch Type:** Determines how the SCO will be launched, with the following options:
  - **Frameset** – Launches the SCO in the same window rather than opening it in a new window.
  - **New Window** – Launches the SCO in a new window.
  - **New Window After Click** – Launches the SCO in a new window after forcing the user to click on an explicit link. This setting can be useful for circumventing popup blockers.
  - **New Window Without Browser Toolbar** – Launches the SCO in a new window without the standard browser toolbar or other chrome.

- **Player Launch Type:** Determines how the SCORM player will be launched. Note that the SCORM player can have a separate launch type from that of the SCO itself. The SCORM player can be given the following options:
  - **Frameset** - Launches the SCORM player in the same window, rather than opening it in a new window.
  - **New Window** - Launches the player in a new window.
  - **New Window After Click** - Launches the player in a new window after forcing the user to click on an explicit link. This setting can be useful for circumventing popup blockers.
  - **New Window Without Browser Toolbar** - Launches the player in a new window without the standard browser toolbar.

- **New Window Options** - If you specify that the SCO or player should launch in a new window, you can also specify how the new window should be sized, with the following options:
  - **User Browser Defaults** - The size of the window defaults to the user's default browser settings.
  - **Full Screen** - The browser opens to its full screen size.
  - **Specify New Window Dimensions** - The browser opens in the dimensions (in pixels) that you define.
- **Prevent Window Resize** - Disables the user's ability to re-size the SCO and/or player windows.

+ SCORM Player Properties for Advanced Users

Advanced users with an understanding of the SCORM Player at the expert level can make further adjustments to the SCORM player properties. Advanced features are outlined below:

Note: While SCORM player properties can be adjusted with a great deal of granularity, HealthStream suggests the administrator proceed with caution. The options detailed below are for advanced users only and should only be attempted by administrators who are expert in understanding the behavior of the SCORM Player.

Rudimentary Sequencing

These settings control what action the SCORM Player will take when an SCO exits. There are three factors the SCORM Player looks at when determining the action to take: the position of the SCO in the course (is it in the middle or is it the last SCO), the state of the SCO/Course, and the SCORM exit type specified by the SCO.

Note: This sequencing is ONLY AVALIABLE FOR SCORM 1.2 courseware and attempts to mimic the more advanced sequencing that is pre-built into SCORM 2004 standard.

You can specify the action per exit type (Normal, Suspend, Timeout, Logout) and specify different actions when the course is satisfied or not satisfied. You can also specify different settings for Intermediate SCO (SCOs that are in the middle of the course) and the Final SCO (the last SCO of the course).

Note: The **Normal** mode below handles 99% of the sequencing you might require; as such, HealthStream recommends that these settings not be changed.

The exit types are:

- **Normal** – when a user exits an SCO using correct navigation methods.
- **Suspend** – When a user exits an SCO in an unexpected manner; for example, skipping between SCOs in a multi-SCO course.
- **Timeout** – When a uer's LMS session times out.
- **Logout** – When a user ends his or her LMS session while an SCO is still active.

Each exit type can be given the following options:

- **Exit course** - The user closes the SCORM Player and is returned to the LMS automatically.
- **Exit course after confirm** - The learner is asked to confirm the wish to exit the course. If so, the learner will return to the LMS. If the learner cancels the request, a message page is displayed.
- **Go to next SCO** - The learner is taken to the next SCO automatically. This is useful when there are multiple SCOs in a SCORM course and you desire the course to flow seamlessly from SCO to SCO. If applied to the final SCO, a message page is displayed.
- **Display message** - The learner is presented a message page. The SCORM player determines what message to display based on the current state of the player.
- **Do nothing** - The SCORM player will take no action.

Rudimentary Rollup

These settings specify how to score courses. These settings are not applicable to SCORM 2004 courses since SCORM 2004 Simple Sequencing allows the content to specify these behaviors.

- **Score Rollup Mode** - Determines the way in which the SCORM Player will rollup scores to the course level, with the following options:
  - **Score Provided by Course** - Useful for single-SCO courses, this parameter simply transfers the score provided by the first SCO in the course to the course-level.
  - **Average Score of All Units** - Sums up all the provided scores and divides by the total number of SCOs in the course.
  - **Average Score of All Units with Scores** - Sums up all the provided scores and divides by the number of units that actually reported scores.
  - **Fixed Average** - Sums up all the provided scores and divides by a fixed number (as specified in the **Number of Scoring Objects** setting).

- **Number of Scoring Objects** - Indicates how many SCOs should report a score. This setting only applies if the **Score Rollup Mode** is **Fixed Average**.
- **Status Rollup Mode** - Determines how completion status is rolled up to the course level, with the following options:
  - **Status provided by course** - Useful for single SCO courses, this parameter transfers the status provided by the first SCO in the course to the course level.
  - **Complete When All Units Complete** - The course is considered complete when all of the SCOs have achieved completion. This means that the lesson status value is **Failed**, **Completed**, or **Passed**.
  - **Complete When All Units Satisfactorily Complete** - The course is considered complete when all of the SCOs have achieved completion in a satisfactory manner. This means that the lesson status value is either **Completed** or **Passed**.
  - **Complete When Threshold Score is Met** - The course is considered complete when its rolled up score (as determined by the **Score Rollup Type**) exceeds a certain threshold (specified in the **Threshold Score For Completion** parameter).
  - **Complete When All Units Complete and Threshold Score is Met** - The course is considered complete when all of the SCOs have achieved completion and when its rolled-up score exceeds the threshold specified in the **Threshold Score For Completion** parameter.

- **Threshold Score for Completion** - Determines the threshold for completion. This is a decimal value between 0.0 and 0.1 (multiplied by 100, this value equates to a percentage). This setting only applies when the **Status Rollup Mode** is set to **Complete When Threshold Score is Met**.
- **First SCO is Pretest** - Enabling this option indicates that if the first SCO achieves a lesson status of **Passed**, the rest of the SCOs in the course will be marked complete.

Compatibility Settings

The compatibility settings are used when content is not acting in a desired manner with the default settings.

- **Finish Causes Immediate Commit** - This setting is provided to manage single-SCO configurations in which it is difficult to capture the exit effectively. You may wish to set this to **True** if a single SCO course is not recording completions successfully.

- **Wrap SCO Window with API** - When an SCO is launched in a new window, some poorly implemented SCORM content may have trouble accessing the SCORM API. This setting will wrap an empty frameset around the SCO window which presents an API that relays calls back to the SCORM Player API.

- **Always Flow to First SCO** - If enabled, the SCORM Player will always load the first SCO in a course upon initial launch regardless of whether sequencing rules dictate this behavior.

- **Enable Validation of SCORM Interaction Results** - Determines whether the interaction responses are validated for the expected SCORM format. Use this setting when you want to include descriptive text in addition to the single number/character allowed by SCORM 1.2. This affects both the user response and the correct response.

- **Mastery Score Overrides Lesson Status** - The mastery score is a score set within the content. This setting lets the mastery score trump all other pass/complete settings in the SCO.

- **Reset RunTime Data Timing** - Determines when to reset runtime data, with the following options:
  - **Never** - SCORM Player will never reset CMI runtime data.
  - **When Exit Is Not Suspend** - Only preserves CMI runtime data if exit is suspend.
  - **On Each New Sequencing Attempt** - The SCORM Player will reset the CMI runtime data every time the SCORM 2004 sequencing algorithms dictate that a new attempt should begin.

- **Return to LMS Action** - In response to the SCORM 2004 4th Edition requirement that LMS's provide an interface that allows learners to choose their exit type when leaving a course, the SCORM Engine now has a menu prompt when the learner clicks **Return to LMS**. This package property allows course administrators to turn this prompt on and off and also to control the default exit type used when the prompt is turned off.

- **Disable Root Activity** - Forces the root level course activity to be disabled to prevent creating a new attempt.

- **Rollup at SCO Unload** - Forces rollup at all SCO unloads to handle when Terminate/LMSFinish is not called by the SCOs.

- **Completion Status of failed Success Status** - The value of the **Completion Status** field if the success status is failed.

- **Make Student Preferences Global to Course** - When selected, any student preferences specified for an SCO will be applied to all SCOs in a course.

Communication Settings

These settings affect how the player saves course status.

Note: It is highly recommended that these settings not be changed; they are used by HealthStream only when troubleshooting SCORM player issues.

- **Maximum Failed Attempts** - Determines the maximum number of attempts to try a runtime data update to the central server before declaring failure.
- **Commit Frequency** - Determines how often, in milliseconds, runtime data sends updates back to the central server.
  Note: Some events force immediate updates.

Debugger Options

These settings relate to client-side (browser) logging.

Note: It is highly recommended that these settings not be changed; they are used by HealthStream only when troubleshooting SCORM player issues.

- **Control** - Determines the level of logging that should be performed within the control subsystem on the client.
- **Runtime** - Determines the level of logging that should be performed within the runtime subsystem on the client.
- **Sequencing** - Determines the level of logging that should be performed within the sequencing subsystem on the client.
- **Include Timestamps** - Determines whether timestamps should be recorded within the client-side log.

History Options

These settings affect the collection of launch history information.

- **Capture History** - Determines if the course should report information about each attempt.
- **Capture Detailed History** - Determines if the course should report detailed information about each attempt.