



HOW TO GUIDE - Camtasia Studio 4 SCORM Content Authoring

The objective of this document is to assist Firmwater's customers with the creation of SCORM content using Camtasia Studio 4. Firmwater tested SCORM 1.2 and 2004 content packages created with Camtasia Studio 4 (Version 4.0.1) on the Firmwater LMS. Camtasia is capable of creating course content containing a single sharable content object (SCOs), which can be used to train as well as test students. Camtasia does not support the creation of course content containing multiple SCOs. However, multiple individual SCOs can be manually combined to create more complex course structures. The instructions below summarize:

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- requirements for generating SCORM packages
- recommendations for relevant settings when generating SCORM packages.
- instructions on generating SCORM compliant content with Camtasia.

Camtasia's flash player does not provide a button to exit the training sequence if it was published in the SCORM 1.2 format. Therefore, we recommend using the SCORM 2004 format when creating training content for the Firmwater LMS. See section 3.7 for more detail.

1. Requirements for Generating SCORM Packages

The following outlines the requirements for creating SCORM 2004 content with Camtasia Studio 4:

- a. Your content must contain a Flash Hot Spot quiz or survey. Therefore, your content output must be Flash, otherwise the Flash Hot Spot quiz or survey will not be rendered.
- b. If your content contains a quiz that has a passing score, make sure you have manually modified the passing score in the manifest file of each content package, as the default value is zero. Alternatively, the passing score can be changed once the content has been loaded into the LMS.
- c. If your content contains a quiz, confirm that only final scores of quizzes need to be stored in the LMS database, as Camtasia is not capable of creating content that stores answers to individual questions.
- d. When publishing your content, ensure that the identifier, title, SCO identifier and the zip file name do not include any special characters such as &, \$, or %. Otherwise the content will not load.

Please refer to section 3 for detailed information regarding these requirements.

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2. Recommendations for Relevant Settings

2.1. Settings in the “Production Wizard”

The step-by-step **Production Wizard** contains all the relevant settings for creating a content package (Figure 1). To access the **Production Wizard**, select **Produce video as** in the menu on the left under **Produce**.

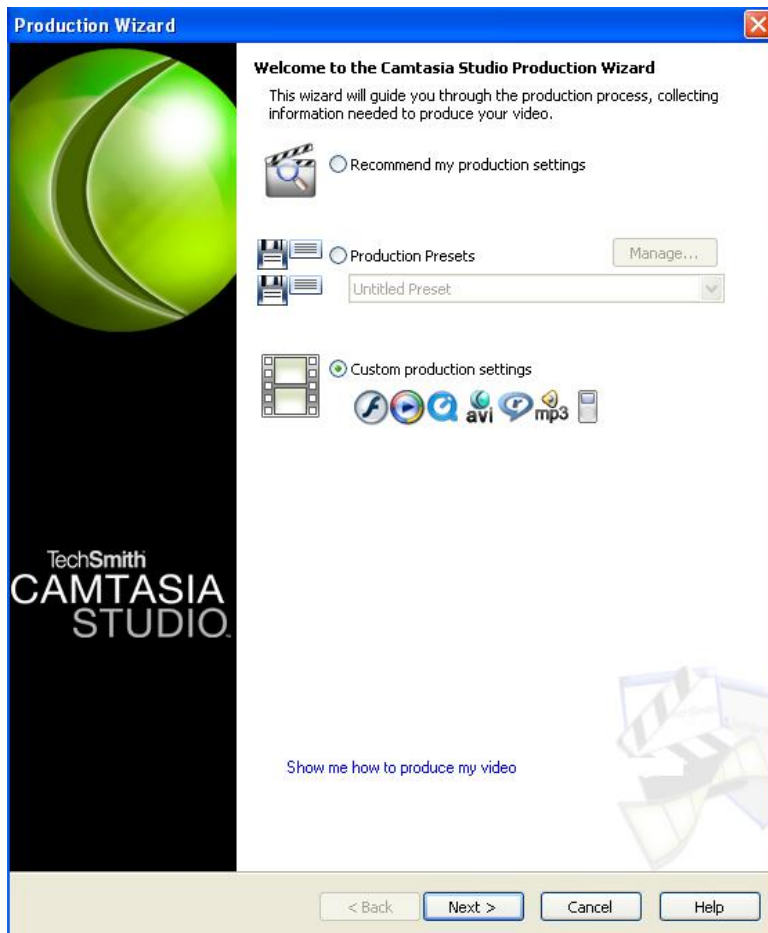


Figure 1. Screenshot of “Production Wizard”

- ▶ In the **Production Wizard**:
- ▶ Select **Custom production settings**, and click on the **Next** button
- ▶ Select **Flash**, and click the **Next** button
- ▶ On this page:
 - Choose the required template (choose **One video** if your content does not contain a Table of Contents. Choose **One video with TOC** if your content contains a Table of Contents)



- Click the **Flash Options** button and set the settings as appropriate
- Select the appropriate size/dimensions
- Click on the **Next** button
- ▶ On this page
 - Add video information and a watermark if necessary
 - Under **Quiz and Survey Reporting**, click on the **Options** button. On the pop-up window, select **Report score using SCORM** (the settings for the SCORM manifest are described in section 2.2)
 - Click on the **Next** button
- ▶ Follow the production wizard until you finish

Note: The other two production options **Recommend my production settings** and **Production Preset** (Figure 1) cannot be used to produce SCORM content, as the SCORM feature is disabled when using either of these options.

2.2. SCORM manifest

On the pop-up window for **Quiz and Survey Reporting Options**, select **Report score using SCORM** and click on the **SCORM Options** button. On the pop-up window for **Manifest Options** (Figure 2):

- ▶ Enter a unique **Identifier** (or use the one generated automatically by Camtasia), a **Title** for the course, and other information if necessary (e.g. **Description**, **Subject**). This **Identifier** name is what the Firmwater LMS uses to distinguish between different content packages. Therefore the **Identifier** must carry a unique name. Otherwise new content may not load or may erase existing content. The **Title** of the course should be descriptive to capture what the content contains.
- ▶ When creating SCORM content in the 1.2 format, navigation controls lack an exit button. Therefore, we recommend selecting the 2004 format when choosing the SCORM version. See section 3.7 for more detail.
- ▶ Enter a **Title** for the content (SCO)
- ▶ Select **Produce zip file**
- ▶ Click the **OK** button

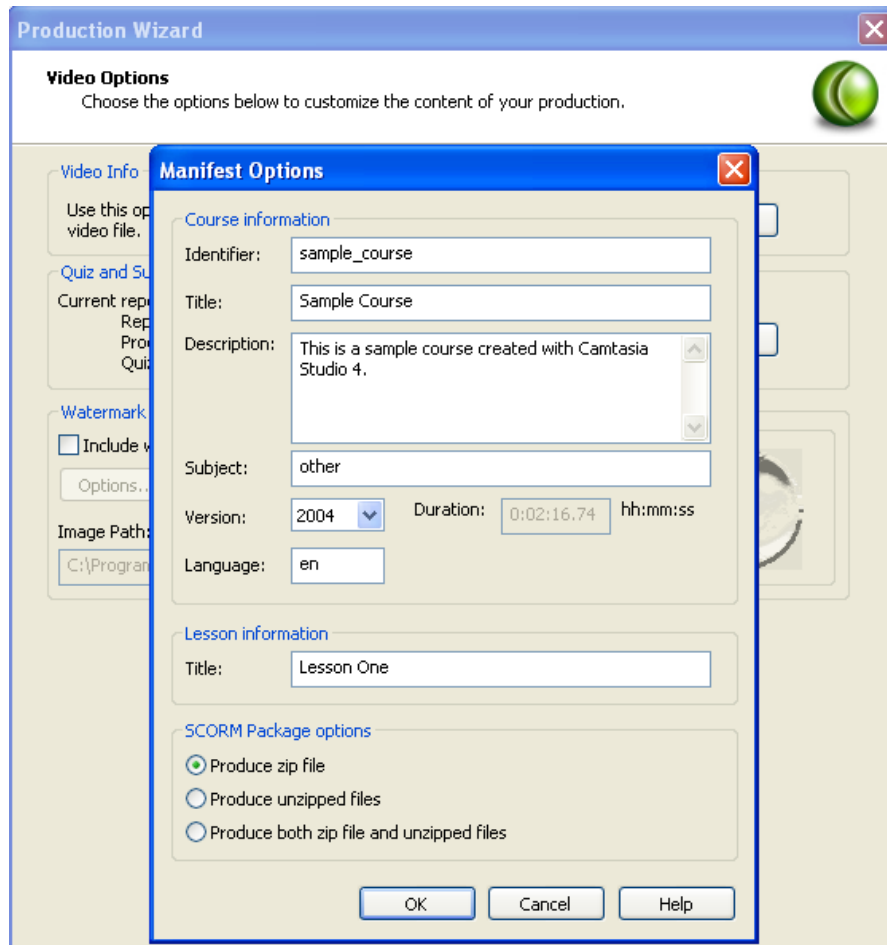


Figure 2. Screenshot of “Manifest Options” pop-up window

3. Creating SCORM Content

3.1. Students’ answers to quiz and survey questions are not stored in the LMS database

When the option for reporting quiz results is set to **Report score using SCORM**, then students’ answers to quiz and survey questions will not be stored in the LMS database. Only the final score will be reported to the LMS. Camtasia does not provide any facility to change these reporting options.

3.2. No facility for setting quiz passing score

Within the tool there is no option for setting the passing score of a quiz. The default value for `<adlcp:masteryscore>` in the manifest file is zero. Therefore, if a content package contains a quiz, and needs to have a passing score, you have to manually modify the value for `<adlcp:masteryscore>` in the manifest file. To do this, open the file `imsmanifest.xml` of



your content package, modify the value for `<adlcp:masteryscore>` using a number between 0-100, e.g. 60 for 60%, 80 for 80%.

Alternatively, the passing score can be altered once the content has been uploaded into the Firmwater LMS.

3.3. `<adlcp:masteryscore>` rather than `<imsss:minNormalizedMeasure>` for SCORM 2004

Within the manifest file, the element `<adlcp:masteryscore>` contains the passing score for SCORM 1.2 and 2004 content packages. The element `<adlcp:masteryscore>` should not exist in a SCORM 2004 manifest file. The Firmwater LMS automatically adjusts for this mistake, yet this type of content may not run on other LMSs.

3.4. Students' statuses cannot be correctly reported for content that contains neither a quiz nor a survey

Content created with Camtasia must contain a quiz or a survey in order for the status to be properly reported to the LMS. If neither a quiz nor a survey is present, the student's status will be reported to the LMS as **incomplete** or **unknown**. As a work-around, we suggest adding a simple survey-type question at the end of a lesson asking, for example, whether the lesson was relevant or effective.

3.5. No option for setting the weight of quiz questions

Camtasia does not provide an option for setting the weight of quiz questions. Camtasia automatically distributes weight (in percentage) evenly among all questions. For example, if a quiz contains three questions, the weighting of each question will be 33%. The weight of each question will be 20% if a quiz contains five questions.

3.6. Suspending and resuming is not supported

Content packages created with Camtasia do not support suspending a current training session and resuming it later. The student cannot resume from where s/he exited the training during a previous attempt.

3.7. No "Exit" for SCORM 1.2 content packages

The playback toolbar of Camtasia does not contain an **Exit** button, whereas the LMS navigation bar does provide an **Exit** button. For SCORM 1.2 content packages, the LMS navigation bar does not appear, whereas it appears for SCORM 2004 packages. Consequently, if a student wishes to exit SCORM 1.2 content before it reaches the end, s/he can only click on the **Back** button of Web browser, or close the browser if the content was launched in a new window.

To resolve this issue, we suggest using the SCORM 2004 format when creating content with Camtasia Studio 4.



3.8. No special characters allowed

If the Course Identifier, Course Title, Description, Lesson Title or the .zip filename contain special characters such as \$, % or &, the content will not load into the LMS.

The recommended solution is to use names that do not contain any special characters.

Note:

The information provided here was the result of our review of Tech Smith Camtasia Studio 4 and Adobe Captivate 2 over a four month period. We have attempted to fully and accurately reflect our experience using these tools. Both products are available on a trial basis and we recommend you test the product to ensure its suitability for your needs before purchasing. If you have any comments or questions, please send them to info@firmwater.com. Your feedback is most welcome.

About Firmwater

Firmwater is an Internet consulting and development firm based in Toronto founded in 2001. Our focus is on enabling learning content providers to deliver their courseware and assessments simply and economically via the Internet to any number of their clients. Firmwater's leading product is the Firmwater LMS, a training delivery solution offered on a software as a service (SaaS) model. Firmwater offers consulting, custom development, and courseware creation services in support of the Firmwater LMS.

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