# Comparative Evaluation
Assignment #4

# ProfCast

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# Table of Contents

**Page     Section**

1

# Overview

In the pages that follow, we will compare ProfCast, the product we are evaluating, against several other applications with similar feature sets. The goal of this comparison is to examine similar products to determine what areas ProfCast excels in, and in what areas improvements can be made. Features, cost, platform, functionality, usability, and aesthetics were all considered in our evaluations, and our findings are grouped by application. We were able to obtain full or trial versions of Camtasia, CamStudio, and ScreenWatch Producer. After working with each one, we decided that Camtasia had the most to offer in terms of improving ProfCast, thus, we focused our usuability comparison on Camtasia. We were not able to obtain the software for MScribe or Apreso Podcast, however we still decided to include them to compare features outside of the interface. A summary matrix appears at the end of our analysis, comparing the "core" features of all applications evaluated in an easy-to-navigate grid.

# Product Description

### What is ProfCast?
Anyone providing a presentation to an audience using PowerPoint or Keynote has the option of providing the slides before or after the presentation. A better alternative would be to supply the slides along with audio to walk them through the material. ProfCast provides such functionality by creating a podcast of the slides and audio for the audience to download. This podcast benefits everyone: the presenter is able to show the slides in the intended context while the audience can review the lecture from the convenience of their laptop.

### How Does it Work?
The first step is to create the presentation in either PowerPoint or Keynote. The completed file is then dragged (imported, uploaded, or browsed) into the ProfCast application through a variety of methods. The second step is to select the audio input device in the drop down menu of ProfCast. You can select the default of using the audio device of your computer, but you may want to select a different option to increase the quality of your audio input.

The third step is to click *Start Recording* which will start up your presentation from the first slide. Begin speaking as if you were giving the presentation to your students, clicking through the slides until the presentation is finished. If you need to pause the recording, simply hit the escape button which will display a pop up screen with the options to continue recording or publishing the presentation. After the presentation is finished, you can click *Stop Recording* and then *Publish*.

Publishing in ProfCast offers multiple options to choose from. The ProfCast Manager helps you save the file into a podcast that you can upload or email. The Save option allows you to save the file and return to it at a later time to upload or delete. The

GarageBand option helps you modify the audio segment of the presentation (if you need to delete or change audio sections of your presentation, etc). The Send to iWeb option creates an enhanced podcast to be uploaded and used in iWeb. The final result of whichever publishing method you choose from is a podcast that can be viewed on either an iPod or iTunes.

## Comparative Analysis

## Camtasia

### Overview
Camtasia is perhaps the strongest competitor to ProfCast. It is produced by Techsmith (which is also located in Ann Arbor), and boasts a feature set beyond that of ProfCast. Whereas ProfCast is designed solely to record, encode, and share podcasts, Camtasia was originally designed for full screen captures and video. The recently released Camtasia 4.0 now includes quick, efficient recording of PowerPoint slides, which makes its interface very similar to ProfCast. An analysis of these similarities will be provided below.

### Cost
A major difference between Camtasia and ProfCast is their respective costs. An individual license for ProfCast will cost $25, while an individual license for Camtasia is listed at $299. While Camtasia gives a user far more features for their money, someone who simply wishes to record presentations would be hard pressed to justify the extra $274.

### Platform
Even though ProfCast and Camtasia perform similar functions, they run on different operating systems. ProfCast is only available on Mac OS 10.4 or higher, which Camtasia requires Windows 2000 or XP. Users who favor a specific operating system have a clear choice between the two. There are rumors that a Mac version of Camtasia could be released in the future, which could increase the competition for Mac users of ProfCast.

### Support
The Techsmith website is clean and easy to navigate. Documentation and tutorials for all Techsmith products, including Camtasia, are available and easy to use. There are also online forums where users can share tips and strategies for using Camtasia.

### Interface
We were able to download and test the Camtasia software to compare its interface with ProfCast. While Camtasia supports a variety of screen capture activities, we will be focusing on the aspects of the interface that are used to record lectures and create Podcasts.

When the user launches Camtasia 4, they see a popup window (Figure 1) that gives them four options, including "Start recording a PowerPoint presentation". If the user selects this option, PowerPoint will launch. This dialog box can be disabled, in which case the user will see the Camtasia program opening screen (Figure 2). Prominent in the upper left area (which draws the eye), is the option to "Record PowerPoint", which will also launch PowerPoint when pressed. Despite the array of options in Camtasia, the option to record PowerPoint lectures is prominent when the program is launched.
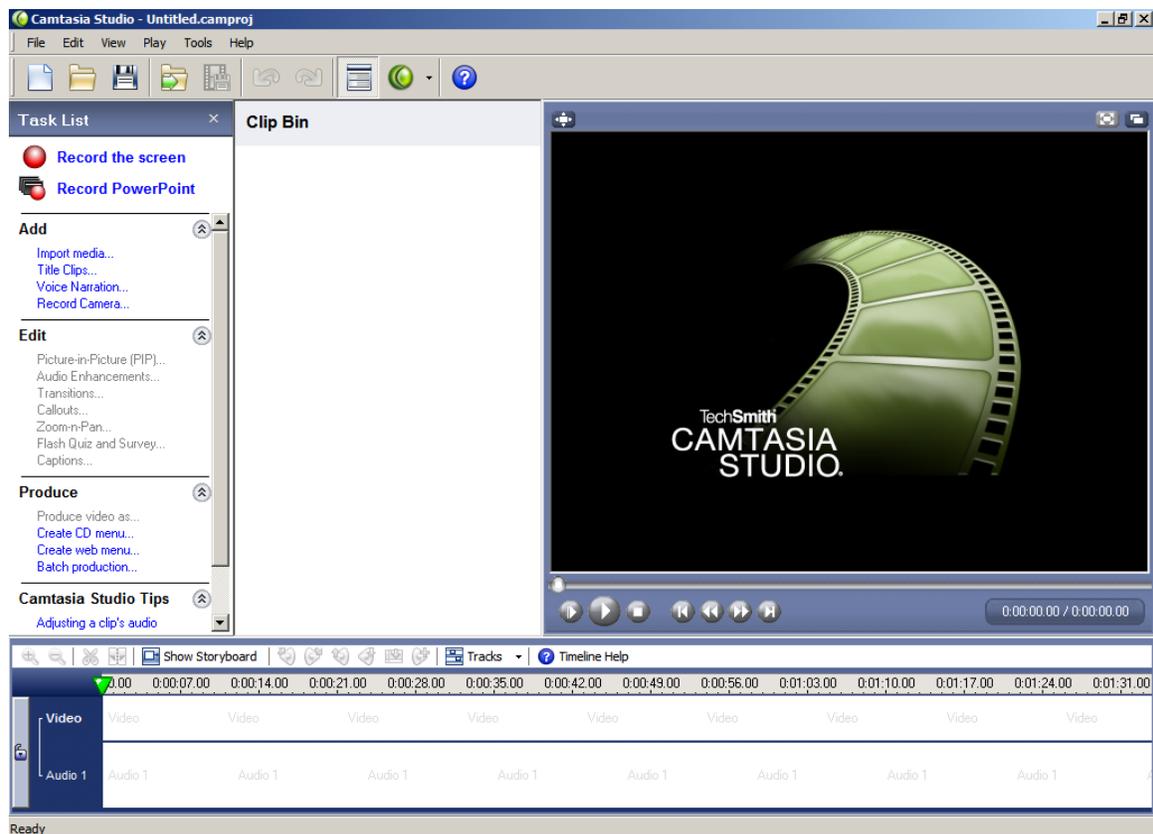


**Figure 1 – The welcome dialog**



**Figure 2 - Opening screen for Camtasia**

## The PowerPoint Plugin

When Camtasia is installed, the user is given the option to install a recording plugin for PowerPoint, which is required to record presentations.  Once PowerPoint is launched (either from Camtasia or manually by the user), the user needs to open a power point presentation.  If PowerPoint was launched from Camtasia, the user is immediately given a dialog box to search for and open their file.  The user is then prompted by a tooltip balloon (Figure 3) to click the Record button, which begins the PowerPoint presentation.
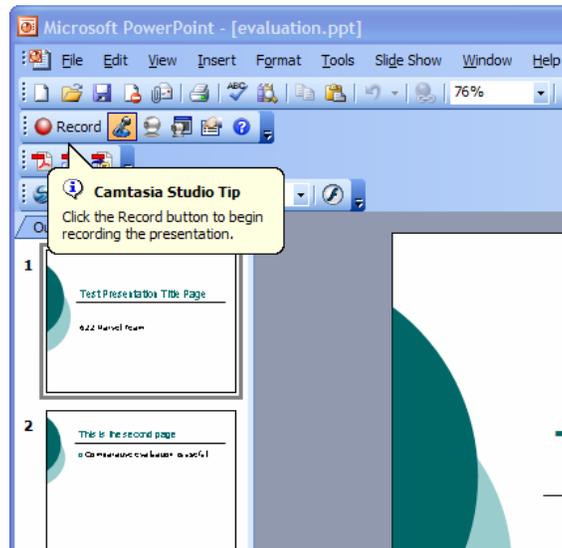


**Figure 3 - PowerPoint with tooltip balloon**

Once the user starts the presentation with the record button, they will see the first slide displayed as usual in a PowerPoint slide show.  They also will see a small dialog window in the lower right (Figure 4), which gives them the option to start recording.  In this dialog window, the user can set the Microphone volume and see the sound being picked up on a volume bar.  There is a large button labeled "Click to begin Recording".  When pressed, the slide show will begin.  The letters REC are displayed in red on the right of the slideshow for a few seconds to provide the user with feedback that the slideshow is being recorded.
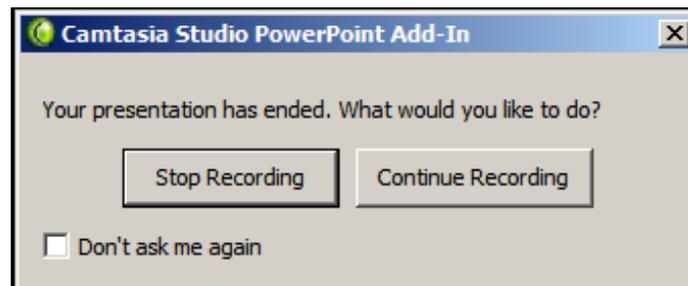
ProfCast does not provide any feedback during the PowerPoint or Keynote slideshow. Microphone volume can only be set by modifying the system properties in Mac OS X. The user also cannot get any feedback on their audio level once PowerPoint or Keynote is launched.  We believe that this is a major feature that ProfCast should add, and we plan to explore it further in our future usability testing.
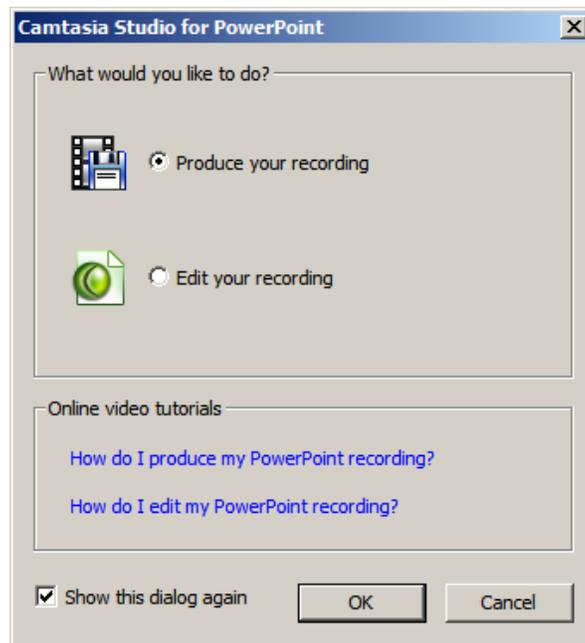
**Figure 4 - Slide show recording dialog**

Once a presentation is ended, either by reaching the end or pressing the escape key, the user is given a dialog box with two options: Stop Recording and Continue Recording (Figure 5). Pressing the Continue recording button will resume the presentation (or start it from the beginning if it reached the end). Pressing the Stop recording button will give the user a dialog box with forces them to save the recording. The user is then given a new dialog box with two options: "Produce your recording" and "Edit your recording" (Figure 6).

This behavior is similar to ProfCast's behavior. When a presentation ends in ProfCast, the user is given the option to Publish, Pause Recording, or Continue Recording. We feel that the wording in Camtasia (Start and Stop Recording) may be easier for the user to follow than the wording in ProfCast (Publish and Pause Recording). ProfCast also does not force the user to save the recording to publish or edit it. Instead, ProfCast gives them the options to save, edit, produce the recording in the same dialog. We feel that this probably gives the user more flexibility, but will be exploring it further.
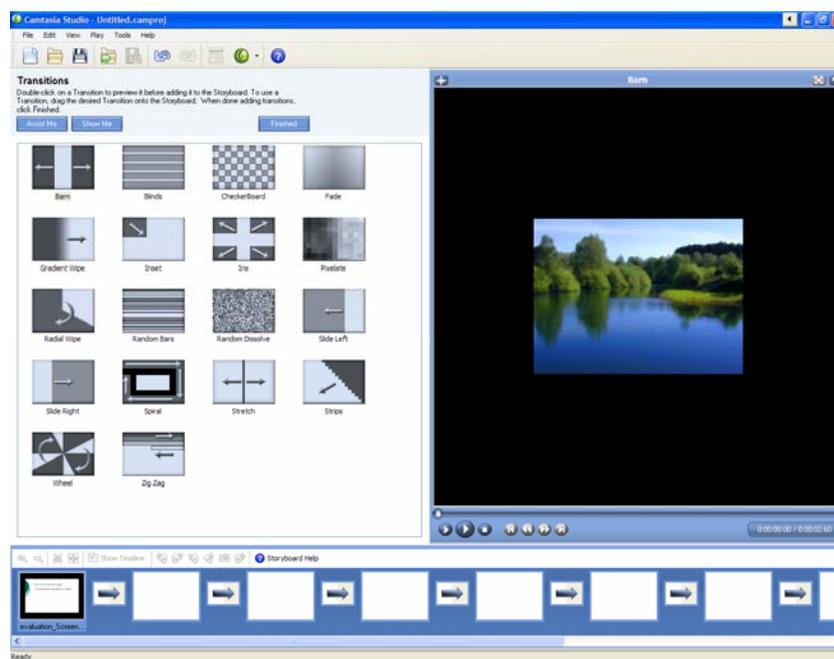

**Figure 5 - Options at the end of a slideshow**

**Figure 6 – Options after user stops recording**

## Editing the Recording

Selecting "Edit your recording" opens the recording in Camtasia studio for editing. The user can add a full range of video options to the recording, including transitions, callouts, and captions (Figure 7). These changes affect the video file that Camtasia will output in the end. The user can also view the recorded presentation and change the audio stream, either removing voice or dubbing over with new narration.
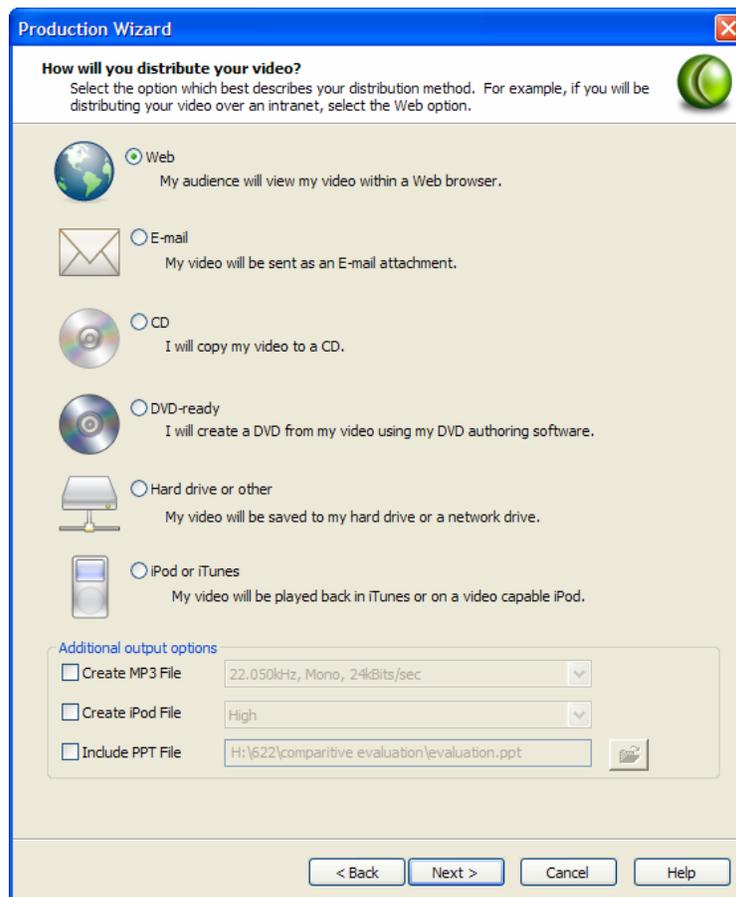


**Figure 7 - Transitions are just one enhancement that can be added**

ProfCast does not allow for the range of video enhancements that Camtasia does. Part of the reason for this is that ProfCast creates slideshow podcasts, which are smaller in file size than Camtasia's videos, but also more limited. On the audio side, ProfCast offers a similar range of editing options as long as the user is willing to use Garageband to do the editing.

## Produce the Recording

The user can produce the recording either through the dialog box that pops up after recording, or from the left-side menu while editing a recording. The user is led to the "Production Wizard", which begins by asking the user if they want to use the recommended production settings or select their own. If the user selects recommended production settings, they can select the type of medium for the recording to be used in, such as a web page, email, or DVD (Figure 8). Camtasia then encodes the video in a format appropriate to that medium. If the user selects a custom setting, they can select the output format, such as flash or avi, and level of compression themselves.



**Figure 8 - Recommended production options**

Camtasia offers many more options than ProfCast, though this is to be expected, as it records videos as well as simply slideshow podcasts. The more important question is whether the dialog boxes for encoding the recordings are more intuitive for Camtasia than the PodCast manager is for ProfCast. That is for our user testing to discover, but we

feel that the "Production recommendation" dialogs in Camtasia could serve as a basis for icon visibility and usability improvements in ProfCast's Podcast Manager.
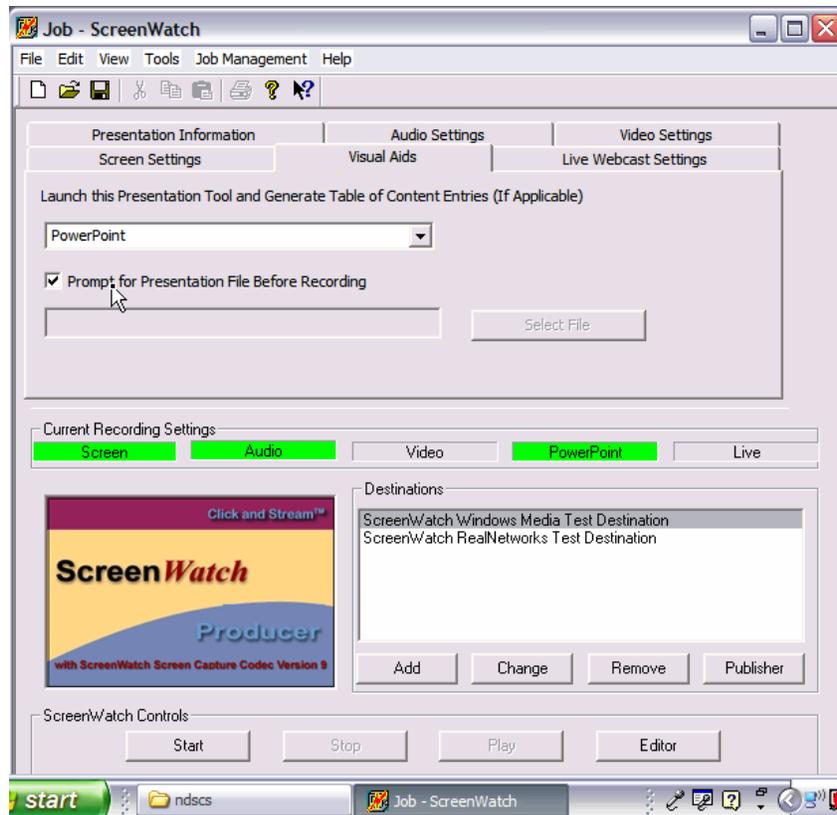
## ScreenWatch Producer

ScreenWatch 6.0 is a commercial screen capture application that is focused on recording presentations.  ScreenWatch supports PowerPoint and SmartBoard Notebook and runs only on Microsoft Windows.  Screenwatch, like Camtasia, records all actions on the entire screen, outputting a video file after the recording is finished.  The video file is set up with a table of contents that allow a viewer to jump to any slide in the presentation.

Screenwatch does have online documentation and tutorials, but the website is somewhat difficult to navigate.  The video tutorials failed in Firefox, due to the need for an ActiveX control.  During one video tutorial, the person using ScreenWatch encountered an error message, which seems unprofessional in a tutorial.  The web site did contain a forum where users could share information.

To record a video file, the user opens ScreenWatch and goes to the Visual Aid tab.  The user then selects the type of presentation (SmartBoard or PowerPoint).  The user can select the presentation file on this window, or start the recording and drag the file into a dialog box.  The presentation will then play, though the user gets no feedback about the recording while the slideshow is being shown.  After the slideshow is completed, the user is taken back to the ScreenWatch window, where they can view the presentation video.  A built-in editor is available, though it is more limited than the editor in Camtasia, allowing the user to add simple transitions between slides and crop out sections of the video (but not dub it over with new audio).

Compared with ProfCast, ScreenWatch seems to have a more complicated interface.  Whereas ProfCast forces users to go to the system preferences to set up audio and video options, these settings can be configured within ScreenWatch, though the layout is fairly cluttered.  Setting up a PowerPoint presentation for recording requires several more clicks than ProfCast does.  Indeed, it takes four clicks just to arrive at the dialog that presentation files can be dragged into, whereas ProfCast allows this on the initial dialog window.  While the editor for the audio and video is built in, it is much more limited in the scope of audio editing than GarageBand is.  Overall, ScreenWatch seems to do nearly everything worse than Camtasia, and as it costs more than twice as much, there is little that ProfCast could take from ScreenWatch that is not already present in Camtasia.

**Figure 9 - ScreenWatch Producer Main Window**

# CamStudio

CamStudio is an open-source screen video capture tool that integrates real-time audio recordings into the video clip via the use of a PC microphone, or other recording system patched into the computer's microphone port. Able to be used to capture presentations (PowerPoint as well as others), the feature set complimenting this application provide for uses far beyond the classroom.

Perhaps the largest difference between ProfCast and CamStudio (or CamStudio and all other applications mentioned in this report) is that CamStudio is open source and available free-of-charge through a GPL license. In addition to being open-source, CamStudio is made for the Windows platform, in contrast to ProfCast's Mac-only configuration.

In a side-by-side comparison, it can be seen that CamStudio is designed primarily for whole-screen capture with audio, versus ProfCast, which is intended for capturing presentations with audio syncing. While CamStudio can capture a presentation (provided the presentation is in 'full-screen' mode), its capabilities go far beyond presentation capture. The application's website touts the program as an excellent application for creating IT training videos, answering frequently-based software questions, or for creating tutorials.

Another difference between CamStudio and ProfCast is that CamStudio allows captures to be recorded in a variety of formats, including Windows Media, Quicktime, and DivX. Moreover, with an included SWF encoder, recordings can be converted from CamStudio's native format to a shockwave/flash .swf video for convenient emailing and streaming (due to the small file size of .swf files). For those preferring to leave recordings in CamStudio's native video format, a codec is included.

Recording screen activity is made simple through the use of CamStudio's user interface. A small user interface is similar to that of ProfCast, however the majority of options are controlled through the use of pull-down menus. The number of menu options is greater than ProfCast, necessitated due to the increased functionality. Recording and formatting options are controlled at the conclusion of recording in a modal window, and do not require the use of a 'manager,' as in the case of ProfCast.
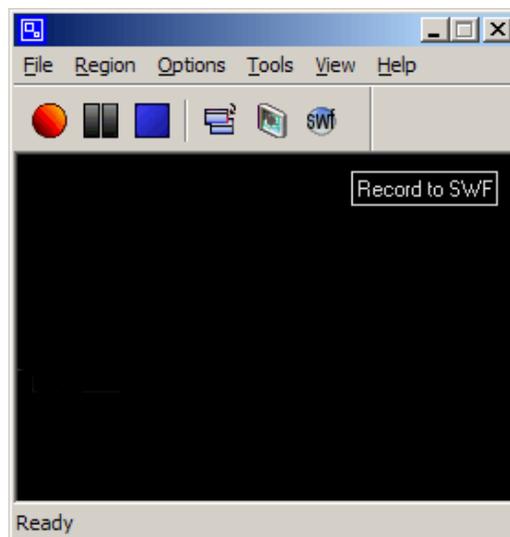


**Figure 10 – CamStudio's main user interface**

# MScribe

MScribe was created to record lectures using robot controlled cameras. The video is then published on the web for the audience to view. "[MScribe]… is built into a cart that can be wheeled into classrooms, and captures the lecturer's audio/video feed, any slides displayed on his/her laptop, as well as images of anything the lecturer writes on the chalkboard." (http://www.umich.edu/~mscribe/).

The similarity to ProfCast is that both the presentation slides and audio are captured. The benefit of MScribe, however, is that the solution also provides a way to acquire and present other aspects of the presentation such as chalkboard writing, or seeing the lecturer presenting his or her material (as opposed to just hearing their voice-overs). The disadvantages of MScribe include set up and cost. Resources are needed to set up MScribe for lecturers, and publishing may not be intuitive (thereby relying on resources again).

## Apreso Podcast

Apreso Podcast is one of the main products under the 'Apreso Anytime' suite of applications. Apreso Podcast records the audio of a lecture through software that is installed on the classrooms' podium computer, and produces MP3 audio files.  This is very similar to ProfCast in that the files use RSS feeds that can later be downloaded from iTunes.

The benefit of Apreso Podcast is that the file is available to any MP3 player, and is therefore not limited to iPods.  The drawbacks of Apreso Podcast are the need to install software onto a classroom's podium computer instead of on any personal laptop, and that one would need to also use another of their applications, Apreso Classroom, to be able to synch a viewable presentation with the audio file. Apreso Classroom is similar to MScribe in that it allows capture of the presentation and presenter via video. (http://www.anystream.com/prod-apreso-podcast.asp)

# Summary Matrix

**Table 1.  A matrix comparing multiple facets of podcasting applications**

| | ProfCast | Camtasia | Screen Watch | CamStudio | MScribe | Apreso Podcast |
|---|---|---|---|---|---|---|
| | | | | | | |
| Cost – individual license | $25 | $299 | $695 | $0 | Not available publically | Not available individually |
| Enterprise Pricing Available | X | X | X | N/A | Not available publically | X |
| | | | | | | |
| Windows | | X | X | X | | |
| Mac | X | | | | | |
| | | | | | | |
| Forums online | | X | X | X | | X |
| Tutorials online | X | X | X | | | X |
| Trial version available | X | X | X | X | | |
| | | | | | | |
| Records Audio | X | X | X | X | X | X |
| Records Presentation Slides | X | X | X | X | X | |
| Records all screen movement as video | | X | X | X | X | |
| Types of Presentation files allowed | Power-Point, Keynote | Power-Point | Power-Point, SmartBoard | Any, so long as host computer can display it | Any, so long as host computer can display it | Records Audio Only |
| Allows editing of recordings | Audio through GarageBand | Excellent built-in editor | Limited built-in editor | Allows file format conversions | Not available | Not available |
| Our rating of the interface of the product (1-10 scale) | 9 | 9.5 | 6 | 6 | Not available | Not Available |

## Key Findings and Summary

Through our analysis, we discovered several other applications that are capable of performing similar functions as ProfCast. Despite different methods of doing so, and differing user interfaces, the main differences we found were in the areas of price, platform, and export formats. While many applications cost hundreds of dollars, others with similar feature sets were free. A ProfCast license will cost $25, a modest fee compared to some applications. Similarly, while all other applications analyzed were designed to run on the Windows platform, ProfCast runs on Mac OS, another key factor for those with Apple Products. Finally, while ProfCast is designed with podcasting in mind, its export features are not as broad as other applications considered. This may be in part due to the fact that ProfCast is designed for recording slides with audio input (as compared to full screen capture with real-time audio), but nevertheless, it is a discrepancy in the feature set that should be considered.