

CLOSED CAPTION SOFTWARE

MacCaption Closed Captioning Software

by Michael Hanish

With the recent FCC mandate now in effect, closed captioning is a hot topic. To encode closed captions into your video, you can either send it to a service (at an average cost of between \$700 and \$1,000 an hour) or acquire the necessary tools to do it in-house. Until now, the do-it-yourself option involved a substantial investment in a hardware encoder to insert the closed caption information into line 21 of the analog video signal, as well as the software necessary to generate the captions for insertion.

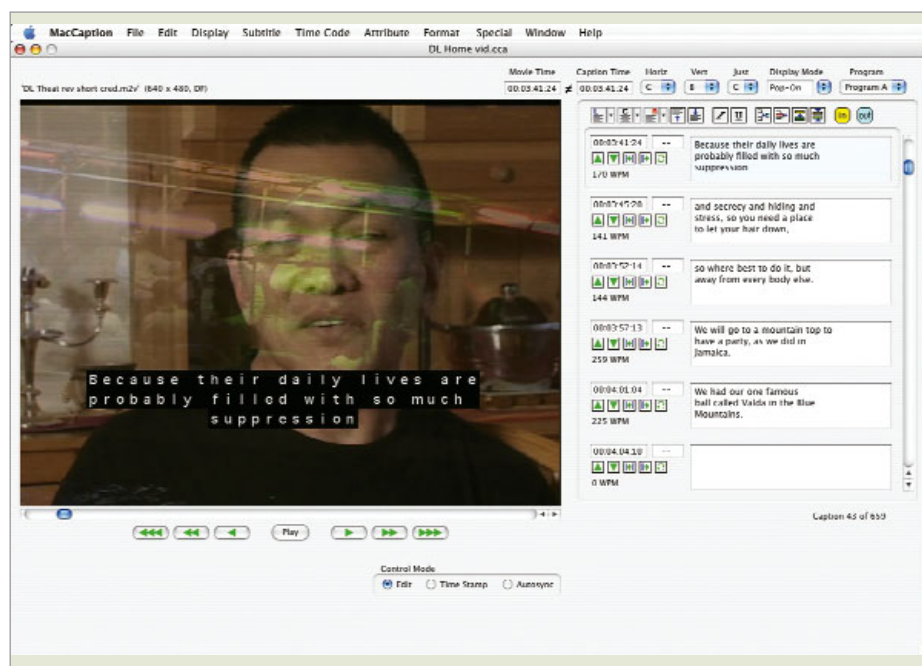
FEATURES

Computer Prompting and Captioning Co., a long time expert in captioning, has a software solution to closed captioning that allows encoding to be performed without hardware. The program is MacCaption for Macs. There's also a parallel products line, CaptionMaker, for Windows.

The workflow starts with a transcription of the video, which must then be broken into two to three line segments of text, each of which gets cued to appear and disappear at specific timecode locations in the video.

Finally, the caption file has to be encoded into the video file. This can basically be done in one of three ways: by producing one of the myriad closed caption formats for import into a DVD authoring program or other encoding system; by producing a new, self-contained digital file, in any codec, that holds the captions; or by producing a caption file that can be used in virtually any of the current NLE systems, for output to tape or encoder.

The most expensive MacCaption pack-



Buttons on the MacCaption GUI allow you to adjust the captions by pushing or pulling words between captions, splitting or combining caption cells, or inserting or deleting cells.

age, which was chosen for this review, contains all the above features. It has the ability to organize a text file into discrete captions, to assign them to specific timecode points, and to output a caption file, encoded digital file, or caption file suitable for NLE use.

The price goes down as feature sets are stripped away, until the least expensive package provides just basic encoding of an already prepared caption file into a self-contained digital file.

MacCaption takes the plain text transcription file, and on import, breaks the text into discrete caption according to Preferences settings, making text cells of two lines for "pop-up" captions or one line for "roll-up". You can see these caption cells

along the right side of the window in the illustration. Buttons allow you to adjust the captions by pushing or pulling words between captions, splitting or combining caption cells, or inserting or deleting cells.

On the left side of the illustration is the movie window; MacCaption can open and play any movie your system can. Below the window are the playback controls, and below those are the three control modes: Edit, Time Stamp and Autosync. Time Stamp plays the movie, and as you hear each hit point for a caption, you simply hit the "+" key and the caption is time stamped. In Edit mode, you can adjust any of the caption's parameters (start and end time, placement, composition, line break); Autosync plays the movie and sound, while

displaying the captions for proofing.

When everything is as it should be, it's time to export the captions. Depending on what the final project is, there are numerous export options, including the possibility to do closed and open captions and subtitles. This is yet another area in which MacCaption really shines.

You can export a caption file in any one of a number of formats, including files for Scenarist, Spruce, DVD Studio Pro and industry standards .scc and .on1, for both closed and open captions. As another option, closed or open captions can be encoded directly into a DV format movie, which can be printed to video via FireWire, from the MacCaption application.

CPC has also developed an ingenious method for outputting closed-caption-encoded video directly out of just about every nonlinear editor, including Avid, Media 100, Final Cut Pro, Matrox and Pinnacle, or any other editor that supports 720x486 frame size. This method involves exporting a QuickTime movie with only black content, and containing the closed caption information on line 21, out of MacCaption, then importing it into the NLE of your choice and applying it to the picture track as either a picture-in-picture or crop effect, at very specific settings so that only the caption-bearing lines are revealed. Then, you just record to tape directly out of the NLE as you normally would.

IN USE

I had the pleasure of using MacCaption to create closed captions for a documentary I edited a couple of years ago. Somehow, in the madness of the late stages of post, we had updated the working script to something that conformed very closely to the final product. It was easy to select and export a plain text file, and bring that into MacCaption, which formatted the text into two-line, 32-character captions, as I had

specified in the Preferences setting.

Next, I loaded a QuickTime movie of the documentary that I had exported for reference, to save disk space, from my Media 100 NLE. At this point, I simply played the movie in MacCaption's Time Stamp mode, and at every line I heard, I pressed the + key to cue the caption, all in real time. Naturally, the transcription wasn't totally accurate, so some text editing, insertion, and reformatting among captions was required, all of which was easily done in the application itself.

MacCaption provides an estimated reading speed in words per minute for each caption, making it easy to see objectively which were too long. It was also necessary to set out-points for many of the captions to avoid confusion. This was also easily done by either inserting a blank caption at the appropriate point, or by setting the out point on the caption itself.

With all the captions cued, it was necessary to review the entire piece in Auto Sync mode with the captions displayed, and make adjustments to screen placement (to avoid conflicts with already existing lower thirds) and timing.

I used the same caption placements for multiple forms of export. First I exported an ".scc" file for use in DVD Studio Pro, in which adding closed captions was as easy as adding the file in the track inspector. Next, I made a DV version and printed it to miniDV through my Mac's FireWire port. Then I exported the QuickTime movie (with black screen only) to the animation codec at 100 percent quality, and brought that and the reference movie into After Effects.

In AE, I laid the movie on top of the reference movie, applied a horizontal wipe so that all except the top few lines were wiped off, leaving the closed-captioning information (visible on underscan as a series of moving dashes) just visible. I then rendered that to the Media 100 codec and played it out of Media 100. No problems.

FAST FACTS

Application

Closed captioning generation and encoding for broadcasting purposes

Key Features

Does open and closed captioning, as well as subtitles; requires no line 21 hardware encoder.

Price

\$995 to \$6995, depending on features, functions and capabilities.

Contact

Computer Prompting
and Captioning Co.
800-977-6678
www.ccaption.com

SUMMARY

The process is pretty simple and straightforward, if a bit time consuming. A certain level of expertise is required in placing the captions correctly and timing them for best reading. The MacCaption manual and the captioning guidelines booklet provided by CPC offer many tips for achieving satisfactory results.

The captioning application is very polished, brilliantly done and well worth the price it commands. My hat is off to CPC for providing such a stable and well-conceived program. If you're considering bringing captioning in-house, you can't avoid looking very seriously at MacCaption or CaptionMaker.

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