

Timecode in QuickTime movies

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There is a growing need for a method of embedding SMPTE timecode into QuickTime movies. Apple has committed to adding this functionality to a future version of QuickTime, but the time frame element is still very fuzzy. There are many of us who need the functionality right now.

For most editing applications, only the timecode of the first recorded frame is needed. This implies that the subsequent timecodes are all contiguous, but in most cases, this is true anyway.

This document proposes a standard way for applications to place timecode information into QuickTime movies (or any other Mac file). The method used will not hinder in any way the final solution which Apple will someday release, since it involves only a few resources added to the file.

The specification also provides a methodology for allowing the user to override the timecode, while still retaining the original timecode in the file.

Timecode Specification 1.0

Timecode in QuickTime movies will be accomplished through 2 'STR' resources.

'STR' #128

This contains a text version of the timecode. The format is:

Hours:Minutes:Seconds:Frames

for example

01:20:05:12

Colons (:) are used as separators for non-drop-frame timecode, semicolons (;) are used for drop-frame timecode. If the timecode refers to other than 30 frames per second, the timecode can have an optional frame rate, enclosed in brackets, to the right of the timecode, separated by a space character. For example:

01:06:17:22 [25]

Except for the space between the timecode and the optional frame rate, there are no additional white-space characters in the timecode string. The leading zero on the hours field is required.

'STR' #129

This is a string containing the reel name for the source material. This is generally entered in some way by the user, but may be computer generated as well.

In some applications it is desirable to allow the user to override the timecode information embedded within a movie. In these cases the application that is modifying the timecode resources should first make copies of the two original resources, adding the copies to the file with numbers 130(timecode) and 131(reel name), if those resources do not already exist. This allows the user to return to the original timecode at some later point in time.

Note: If the user is allowed to change or enter the timecode in a file, they should not see the actual timecode string, with colons/semicolons and the optional frame rate in brackets. The user interface should provide for these items in radio buttons or pop-up menus.