

Timecode in RIFF files

A need exists to add timecode and reel name information to AVI and WAV files that references the original source material from which the file was created. Microsoft has defined a timecode field that should be embedded in the INFO section of an AVI file, but this is inadequate for several reasons:

1. There is no provision for defining a non 30fps timecode, and no provision for documenting the reel information.
2. The INFO chunk is located near the beginning of the AVI file. Placing the INFO chunk and its information in pre-existing files would require rewriting the entire portion of the AVI file that follows the INFO section.
3. The INFO chunk is undefined in WAV files.

The LIST 'Tdat' Structure

Timecode in RIFF files will be accomplished by adding a custom LIST chunk containing time and reel information. The LIST chunk has a four character ID of 'Tdat', and may contain data in four fields. The LIST chunk can reside anywhere at the top level of the RIFF file, but for convenience is generally appended to the end of the file.

The format of the time LIST chunk is as follows:

```
LIST 'Tdat'
    tc_O          // original timecode, 18 bytes
    tc_A          // alternate timecode, 18 bytes
    rn_O          // original reelname, 40 bytes
    rn_A          // alternate reelname, 40 bytes
```

Time and reel information is normally stored in the fields marked 'original' and duplicated in the 'alternate' fields. In some applications it may be useful to override the embedded timecode and reel name in a file while retaining the original information for reference purposes. To accomplish this, changes to the timecode or reel name in existing files should be stored in the 'alternate' timecode and reel fields, and applications reading timecode information should always get that information from the 'alternate' fields.

Timecodes

The format for the timecode information is:

Hours:Minutes:Seconds:Frames

for example:

01:20:05:12

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

