e-CourtReporter Presents:

e-Tips Newsletter

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Wil Wilcox: Calibrating Audio Sync
Keith Vincent: Hyperkeys & Macros for Audio Playback
Jeff Rusk: First Report on Olympus DM-1

Constant innovation is a hallmark of Total Eclipse, so there's always something new to learn. It may be an explanation of an amazing new feature or just a faster way to do a familiar task, but Eclipse users have always been eager to help each other. In this spirit, we continue our FREE newsletter to anyone who wishes to receive it.   Whether our **e-Tips** are a basic tip for editing efficiency or a challenging macro, we hope you'll find them helpful.

Wil's e-Tip

Calibrating your Audio Synchronization

Today we are focusing on audio synchronization. First, some handy information about how to calibrate or adjust the audio synchronization. Then an excellent Hyperkey/macro tip regarding audio playback from Keith Vincent. At the end you will find a follow-up to last month's newsletter regarding the Olympus DM-1 digital recorder by a court reporter actually using it. Jeff Rusk, a court reporter from Knoxville, TN, has purchased the DM-1 recorder and has generously sent this us this report on his first experiences using the audio recorded by the DM-1 on the job. Jeff was able to download the file recorded by the Olympus recorder to his computer and then synchronize that for playback with the transcript instead of using the standard WAV file created on his computer by Eclipse. The fact that this can be done with an external digital recorder is huge news and quite exciting. We can now get away from analog cassette tapes in favor of today's superior digital audio recorders for audio backups. Some of the many advantages of this are that these digital audio files can be backed up, sent over the Internet, and synchronized with our transcripts.

Just as many of us may trail a few words behind while writing, the audio playback can fall further and further behind as well. I will refer to this as long-term audio drift. If you find that your audio synchronization slowly goes off as the job goes on, you can correct the situation by adjusting your user settings. With the document open, press Alt-U, then click on the Document Tab, then click the Timecodes button. Adjust the number for WAV ms/sec. Ms/sec stands for milliseconds per second. The default is 1000 since there are 1000 milliseconds per second.

If you notice that when you press the Play key at a spot on page 100 of the job, the audio is playing from page 95, that means time is being counted too slowly by the computer for the program and so you need to use less than 1000 WAV ms/sec. Try 999. If that's not enough of a change, try 998 and so on. I usually adjust it to somewhere between 990 and 1010 depending on the particular computer. It's not uncommon for two models by the same computer manufacturer to need different calibrations. Once you have found the magic number, in most circumstances you will not need to adjust this setting on every job.

By changing this number, you can compensate for how the computer's system clock records time. It seems that system clocks are a place where computer manufacturers try to save a few pennies. They don't always keep accurate time. This is the cause of most long-term audio-drift problems. However, a badly fragmented hard drive, which may spend too much time jumping about trying to read all the fragmented audio segments, such that audio playback becomes intermittent or is interrupted can be a problem as well.

Since the audio tends to drift farther and farther behind as it goes along, it's best to go close to the end of the transcript before adjusting the number for WAV ms/sec. If you can get the synchronization calibrated well at the end of the file, usually the beginning is still pretty close to playing back from the position where your cursor is.

The Timecode Offset is another useful adjustment for calibrating your audio playback. Jeff Rusk explains this in his tip. Don't miss it. Thanks again, Jeff, for your excellent contribution.

Keith's e-Tip

Hyperkeys and Macros for Audio Playback

I use Eclipse's synchronized audio playback a lot, so I've set up Hyperkeys to quickly change the playback speed, volume threshold, and timecode adjustments. These are part of the default settings for Total Eclipse, and they've been part of the keyboard setup that can be imported from the Eclipse.SET file for at least a year now. So if you're using EclipseNT and have not yet migrated to Total Eclipse, this tip can still work for you.

Here are the keys:

Play: Hyperkey \
Stop: Hyperkey }
Audio Options: Hyperkey { then your choice
    1 - 100% (original speed)
    2 - 125% (faster)
    3 - 150%
    4 - 175%
    5 - 200%
    6 - 90% (slower)
    A - Volume Threshold
    B - Zero Threshold
    C - Adjust Backspace

Let's look at these more closely. Hyperkey { uses a group of macros, and each of these macros saves you the trouble of going to the Edit section of User Settings in order to adjust playback speed, volume threshold, or going to the Document section of User Settings to adjust timecodes.

Hyperkey \ just plays back at whatever speed you were using previously. Since I live in Texas, where people tend to speak slowly, as God in her wisdom intended, I often switch to faster playback. With Hyperkeys on, I can press {2 and the playback will be 25% faster than the original recording. If I recorded a New Yorker, I'll probably need to slow down the playback. Hyperkey {6 would play 10% slower than the original recording.

With these Hyperkeys, it takes just a moment to switch from normal to fast to slow playback. Of course, Hyperkeys must be turned ON. Also, press the { key first, then the number of letter that corresponds to the choice you want to use from the window of choices. The { key is just the [and Shift keys pressed together.

What about Volume Threshold? This is like the Squelch on a Citizens Band (CB) radio. Choice A raises the volume threshold from 0 to 5. That means that during playback (NOT during recording), the system will skip over pauses and silences because these will now fall below the playback threshold. This is especially helpful if you've used a good microphone and have a nice contrast between voice and background silence. Choice B just sets the volume threshold at zero, which means you're not squelching anything.

When you press Hyperkey { and select Choice C, you're taken to the Timecodes part of the Document section of User Settings. This is the same part of User Settings that Jeff Rusk is referencing in the fine report that he's sharing with us today. How do I use this? To adjust the "backspacing" (Timecode offset) on my audio playback. Why? Well, I once had a Dell Inspiron 5000 that I just couldn't quite calibrate by means of the WAV ms/sec adjustment. In longer documents, I might need to increase the Timecode Offset so that the sound would match the text where my cursor was positioned. Necessity, mother of invention.

One last note. The macros behind the Hyperkey { can be adjusted. For example, you might want speed choices of 100%, 115%, 130%, 150%, 90%, and 80%. If so, press the Macros button in the Edit section of your User Settings. For example, find {Playback:2 - 125%} and click on "Edit". Within the macro, change the number from 125 to 115 or whatever you want. While you're at it, edit the macro name so that it matches the speed you'll be choosing when you select Choice 2 in the playback options.

Likewise, you could edit the {Playback:A - Volume Threshold} macro to use a playback threshold of 4 instead of 5. That might work better on your computer.

Jeff's e-Tip

First Experience: Olympus DM-1 Digital Voice Recorder

If you're interested in a digital voice recorder for use as an audio backup, here's a report of my first experience with the Olympus DM-1.

Admittedly, this is something I'll probably rarely use because I very seldom have audio crashes. Still, it's nice to know it's there. Plus I've been wanting to get away from cassettes. It seems like the only thing I ever do with them anymore is just rewind them to use again.

First of all, the DM-1's digital files will sync up with your Eclipse jobs. To me, this was huge. The recorder comes with software and a USB cable to read the files off the recorder and onto your hard drive. It records the audio in a DSS format, which is Digital Speech Standard format. You read the DSS files into the program and they're converted to the WAV format. The program is simple to use, and it only takes a minute or so to read most of a day's worth of recording. Converting to the WAV format just takes a few seconds.

If you do end up having to use the audio file from the recorder, you'll probably have to make a small adjustment in the starting timecode of your Eclipse document. When you set up the time on the DN-1, it does not let you adjust the seconds, so your timecodes may be off a little. During recording, however, it does store the seconds on the recorder for playback, so adjusting your starting timecode in Eclipse is no problem.

I recorded all day in SP (standard play mode) with the standard 64mb SmartMedia card. If you'd like extra, the 128mb card is only $55. That would give you three days of recording time. If you did have a multimedia crash, you would be reading the files into your computer as soon as possible anyway. Then you would just erase the card before your next job.

The sound quality on the recorder is very good. It's not quite as clear as I get with audiosync, but considering you're only using it as a backup, it's more than adequate. Honestly, I really couldn't tell a whole lot of difference. (My audio compression in Eclipse is the default PCM 11,025 kHz, 8 Bit Mono, 10 kb/sec.) I did not use a microphone with the recorder either.

Here are a few things to watch out for. The recorder automatically stops after being PAUSED for ten minutes. If you come back from a long break and had paused the recorder, it would start a new file. That could be kind of a pain, having two or three WAV files and having to rename them. I'll probably just let it keep recording. I can't find any information about appending to existing

files on the recorder itself, but I'm sure there's audio editing software out there that will allow you to do it on your computer later, if need be.

I also inadvertently erased two short files. I was fooling around with it and ended up creating one or two files I wanted to erase and ended up erasing ones I didn't want to. I guess that was to be expected, not having used it before.

The best price I found for the recorder on the internet was $171.11 at Etronics.com. As I said, this was only my first day using it, but I think it will be well worth it and I would recommend it to anyone.

STEP-BY-STEP INSTRUCTIONS FOR USING OLYMPUS DM-1 WITH ECLIPSE

This is regarding downloading the sound file recorded with the Olympus DM-1 recorder to your computer and converting it to a WAV file using the Olympus DSS recorder and its software.

1. Double click on the Olympus DSS Player Icon to open the program.

2. You will see three windows. The lower-left window is the Removable Drive window. Double click on the words "Removable Drive" and three folders will show up – Folder A, B and C. (These instructions will assume the voice recorder files are in Folder A.)

3. Double click on Folder A. The voice recorder files will appear in the large window.

4. Double click the desired file. You may get the message "Since this is a large file, a database for high speed access is being created. Please wait."

5. Click Download from the menu. You can choose what files to download.

6. The files will download to the Dictation Folder in same folder name they were originally in (Folder A).

7. Click Folder A in the Dictation window. You will see the downloaded files appear in the main window.

8. Click to highlight desired file. At this point it would also be a good idea to Right Click on the file and then go down and choose Properties and jot down the time the file was created because you may want to put this as your starting timecode later.

9. Click on File. Click on "Convert to WAV file".

10. A window will open that says Select Folder. This is where you choose where you want the wav file to end up. By default, it chooses to convert to Folder A in the Olympus Folder. You want it to save in your Eclipse User folder where all your jobs are. You can do this by clicking on the C:\ folder and then clicking to the folder where your jobs are stored. (The default location of your Eclipse job folders is C:\Program Files\AdvantageSoftware\Eclipse NT\Users\[your user name].) Then click OK to convert.

11. Now the file should be in your Eclipse jobs folder. It will still be named DM- and whatever the number of the file was. The name needs to be changed to match the name of your .ECL file.

12. To change the file name, go into Eclipse and click on the Files folder. Scroll down until you find the DM-(number).WAV file. Right click that and choose Rename.

13. Rename the file to match your .ECL file.

ADJUSTING ECLIPSE TIMECODES

Adjusting the timecodes can sometimes be a bit tricky, but it can be done. At the time of writing this, I have converted five to six files from the digital recorder and have successfully synced them up in Eclipse. Here are some things to try. I think the best case scenario would be if you started recording on the digital record at the same time you started your realtime file. The closer together these were started, the smaller adjustment necessary.

The first thing I do is go to my document and press my Play key to see where in the transcript the WAV file is playing compared to where my cursor is. If you started recording at the same time you started your realtime file, the playback should be pretty close. So I listen to a bit of the recording and then scroll down or search for a word I heard. I make note of both the timecode where my cursor is and the timecode where the playback is. If the recording is, for example, 30 seconds in front of my cursor, the timecode offset needs to be changed by 30 seconds.

You can change your Timecode Offset by clicking the Eclipse Settings icon and going to the Document tab. There you will see a Timecodes box. Click that.

For this example I'll assume the recording is 30 seconds ahead of the cursor. Take your mouse and click on the very beginning of the Timecode Offset, before the left-hand zero. Then type a hyphen. This will act as a "minus" key, since we need to subtract seconds from the playback. Each Eclipse timecode indicates the hour, minute, second, and frame (there are 30 frames to a second). So in our example we'll arrow over and change the fourth zero from the right to a three.

Timecode before change (HH:MM:SS:FF):   00:00:00:00

Timecode after change (HH:MM:SS:FF):   -00:00:30:00

Now, you may be able to change your Starting Timecode to match the starting timecode on the recorder file. That's why I said before it's a good idea to right click on Properties and jot down when the file was created. I have had success doing that before, but it may have been because I started the recorder at, or very close to, the same time I started my realtime file. I say that because I've converted a couple files from depositions I've just taken where I started my realtime file 10 or 15 minutes before I pushed record on the DM-1, and the only way I could sync the files up was by changing the Timecode Offset instead of the Starting Timecode.

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Who Are We?

Wil Wilcox is a freelance court reporter in Los Angeles, California, and has been a technology consultant for reporters since 1995. Since 1998, he and Robert Denos have been the Advantage Software representatives for Southern California.

Keith Vincent is a freelance court reporter in Houston, Texas. He's been an Advantage Software rep, trainer, and tester since 1992. In 1997 he wrote the Hyperkeys tutorial for Eclipse users.

Robert Denos is the manager and event coordinator for e-CourtReporter, LLC.

Any questions on seminars or workshops should be directed to Robert at this address:
e-CourtReporter@pobox.com   or call (818)766-7346.