December 1991

(December 1992 see note at end about Video for Windows)

From Jerry Turpin 1120 WoodCrest Dr. Bedford, VA 24523 (800) 456 7775 (703) 586 8067

This accompanying Visual basic program is a simple example of using the MCI commands under the MME API. The global Function definition is the only entry into MCI I used and you can do a number of things with it.

By passing a string with the following format... you can open / pause /resume /play /resume /record and get various information about simple MultiMedia devices:

COMMAND	Device_Name	Arguments
OPEN PLAY CLOSE	C:.XYZ.WAV ALIAS TALK TALK TALK	(NO ARGUMENTS) FROM 5000 TO 15000 (NO ARGUMENTS)
OPEN PLAY	C:ABC.MMM TYPE MMMOVIE MOVIE	E ALIAS MOVIE
OPEN RECORD STOP SAVE CLOSE	NEW TYPE WAVEAUDIO ALIA TALK TALK TALK IJK.WAV TALK	S TALK NEW (for recording)

Of course there are no tabs in the command string. Look at the actual strings I use in the Command1.Click Sub - Command5.click subs......

Although I have not tried with actual CD audio, "cdaudio" is a valid device as are the following:

cdaudio
dat
digitalvideo
mmmmovie
overlay
scanner
sequencer
vc
waveaudio
videodisk

Information on this can be found in the publication <u>Microsoft Windows Multimedia Programmers</u> <u>Reference</u> from Microsoft Press, Chapter 7 MCI Command Strings.

The required DLL **"MMSYSTEM.DLL"** is included in the <u>MultiMedia Extentions</u> and hopefully will be included in Windows 3.1.

INSTRUCTIONS...

Three types of files are usable with this demo program .WAV .MID .MMM. .WAV files are digital audio files, which might be speech or music that has been digitized. I use a SoundBlaster from Creative Labs (not the SoundBlaster Pro), and the MME included all three types of files. The .MID files are type 1 MIDI (music) files, which play through either an internal synthesizer or externally through a keyboard or other MIDI compatible device (my son has a keyboard) The .MMM files are special animation files that are created on a Macintosh using MacroMind Director program, and then converted using a utility from the MultiMedia SDK (which I do not have).

Use the Drive/Subdirector/File selection boxes to highlight an appropriate file (only .WAV .MID and .MMM files display). After highlighting a file, press the OPEN control. When the Play box becomes available, press it. Sound/Music/Movies will play.

Although in the demo program, I allow only one file to be opened and played at a time, you can actually start a .WAV file playing then start a .MID file and then a .MMM file and have all three going together. Usually when you have both .MID & .WAV going at the same time it is just choas, but they both will play at the same time.

You may PAUSE any type file and resume it. You can add a control to play FROM & TO. Press CLOSE (it actually issues a CLOSE ALL command).

This is a very simple demo, I spent more time getting the drive/subdirectory/file section to work than getting the multimedia part to work. I did not include any error checking, and if you try to load a large .WAV file you will get an error message. A problem with VB is trying to read the Windows Messages.

There is now every reason to begin including MultiMedia in our programs....It is so simple to include "background music" or audio prompts or audio help. I am sorry that it is not as easy to create the mmmovies (although it is easy to play them). A small speciality market might develop for someone who can create about a hundred simple (5 - 15 second) movie/cartoons on various subjects in the MMM format and sell them like the ICON packages that are now available.

1/25/92 addendum...

This program works under Win 3.1 using .MID & .WAV files,and .MMM.. I have updated the program to record also. The record function is, as the play functions, simple. I have added two timers, one beeps about 3 seconds after the Record function begins, this is because it takes a short time to set aside the necessary buffers (windows does this so you don't have to) If your system takes longer or shorter to be ready to record, you can change the Timer1.Interval from 1000 to some other value in increments of milliseconds. The other timer looks at the length of a .wav file and issues a CLOSES ALL when the .WAV should be done This only closes .WAV files, and not .MID or .MMM files.....It saves you a step, but I am not certain that the timing is right, so if the recorded file (or any .WAV file) stops short, change the value in that timer that issues a "CLOSE ALL" string command".

You may also OPEN CDAUDIO ...
OPEN CDAUDIO ALIAS CD
PLAY CD FROM 1:1:1 to 2:1:1

My SYSTEM.INI includes the following:

[mci]
CDAudio=mcicda.drv
WaveAudio=mciwave.drv 9
Sequencer=mciseq.drv

MMMovie=mcimmp.drv

WIN.INI includes the following:

[mci extensions] wav=waveaudio mid=sequencer rmi=sequencer mmm=animation

BTW, the form1 itself can be clicked and it brings up an input box with the default string "CLOSE ALL". You can issue any valid mci string..... The Microsoft Windows MultiMedia Programmer's Reference set is an excellent reference for MCI

The MCI calls are highlevel and are not as extensive as the low level calls. The MCI calls work on a "FILE" and not on buffers in memory......

If you have .MMM files that you can share... please send me a copy at the above address.

DECEMBER 1992 --- Notice VIDEO FOR WINDOWS.

THE PROGRAM NOW PLAYS VIDEO FOR WINDOWS .AVI FILES!!!

The preceding was written in December 1991......With the introduction of .AVI files having interleaved video & sound, I decided to try to modify the program to play the new multimedia format. It required the addition of one new line of code to all five basic controls.

If InStr(TheFile, ".avi") > 0 Then FileType\$ = "VID"

and also adding .avi to the "pattern" for the 'files control'.

The program plays all multimedia formats, it also records .WAV. REMEMBER this is only to demonstrate the MCI String capabilities. Just to let you know that MultiMedia is really easy in VR

This program is a VB 1.0 program. With the exception of the change mentioned above, it has been

unchanged since last year (DEC. 1991). BTW, <u>MSJ</u> Jan 1992, page 46 tells you how to do .avi files.

It is talking about writing in C, but it also applies to VB.

Where is all of the great education software that should be appearing now? Windows, finally, has everything to do great instructional programs. !!!!! Is anyone THERE?