

Re: Audio scrub

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On Thu, 9 Mar 2006 18:28:58 -0600, Bibo mushi wrote:

I am trying to implement audio scrubbing in my player so that if the user scrubs the slider control, they can hear the audio in the speed they moved the slider.

First I was just to catch the HScroll message and use IMediaSeeking::SetRate to set to whatever rate it is.

But I cannot call SetRate with more than 2, it returns VFW_E_UNSUPPORTED_AUDIO.

Now, I am not sure how to approach this problem.

Any information is greatly appreciated.

Scrubbing is difficult to do right and even harder to implement in DirectShow.

For your solution you will need to write a custom transform filter. The transform filter will sit just before the audio renderer and stretch or shrink the audio data (using a pitch shift) to the appropriate size for the desired rate.

The pitch shift isn't difficult to implement if you have some basic audio knowledge. e.g. to double the audio rate, simply copy every other audio sample, to triple every third sample. Slowing down the rate is actually harder. To slow down to half speed you can duplicate every sample but you will hear some aliasing. Better is to use an averaging method or sinc interpolation.

<http://www.chrisnet.net/code.htm>

<http://www.avdevforum.com/AV>

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