

Changing output buffer size in dsp plugin

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Hi There,

I have created a plugin which is able both to increase and decrease the speed of an audio sample. In addition to this it will have influence of the length of the buffer. I.e. if the speed is increased, then the stream will be shorter and opposite if the the speed is decreased the length of stream will be longer. If the speed is slowed down it will unfortunately have the side effect that the output buffer is overwritten – a buffer overrun – therefore I need to find a way to realloc this output stream so it matches the actual length of the stream.

>From the MSDN: "The Player allocates both an input buffer and an output buffer and gives the plug-in access to both buffers."

What I can understand so far is that both buffers are allocated by the player before they reach the plugin, which makes it much more complicated to perform a realloc on them because the plugin doesn't have full control of all pointers pointing to the buffers. I have already tried a couple of ways but unfortunately not with a good result. I.e.:

- 1) performing the realloc in the DoProcessOutput
 - 1.1) both by increasing the existing allocation (realloc) and destroying/freeing the old and allocating with the new larger size
 - 2) deallocating and allocating in the AllocateStreamingResources
 - 2.1) both by increasing the existing allocation (realloc) and destroying/freeing the old and allocating with the new larger size
 - 2.2) when allocating, coping all properties from the old buffer into the new allocated object

Does any one know a way around this, so it is possible to realloc the buffers and prevent such a buffer overrun?

Thanks in regards,
Jess