

## Re: Kernel streaming

**Source:**

<http://www.tech-archive.net/Archive/Development/microsoft.public.win32.programmer.directx.audio/2004-10/0013.1>

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**From:** Iain (IainXXX\_at\_idcl.co.uk)

**Date:** 09/30/04

Date: Thu, 30 Sep 2004 18:18:53 +0100

On Thu, 30 Sep 2004 09:55:03 -0700, gonzo wrote:

> *Every once in a while I see a reference to "Kernel streaming" here.*  
>  
> *What does this refer to and where can I find out more about it?*  
>  
> *Thanks,*  
>  
> *gonzo*

I'm not sure where to start from.

Kernel streaming is a scheme to push data through the PC at the Device driver level whilst controlling it from an application.

This avoids bringing samples across the OS (kernel) / Application interface which apparently is inefficient. It also (probably) allows samples to stream between devices without requiring processor intervention.

The architecture reflects that of Direct Show with Filters and Graphs.

Direct Show itself provides some wrapper filters which sit in application space but control real filters sitting in kernel space.

The documentation sucks (actually, being English I was strongly inclined to use a stronger term...).

There is a smidgeon in the Direct Show documentation, but most of what documentation there is in the Device Driver SDK.

An example of where you can use this is to use the kernel versions of hte audio IO devices to achieve VERY low latency ( 2mS is quite feasible) throughput.

Hope this is useful.

Iain

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