


Microsoft® Research

Kinect™ for Windows® SDK beta

# Audio Deep Dive

A high-speed photograph of a water splash on a dark surface. The splash is captured in mid-air, forming a crown-like shape. The water is clear, but there is a prominent red glow emanating from the center of the splash, which fades into the surrounding blue water. The background is a solid, light blue color.

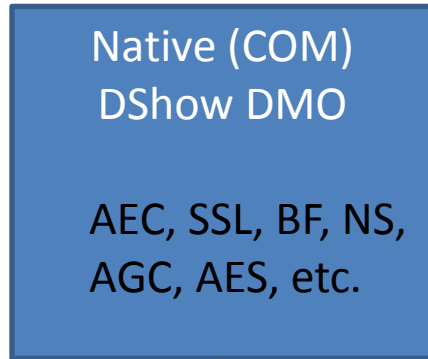
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Microsoft Research

# Audio Architecture

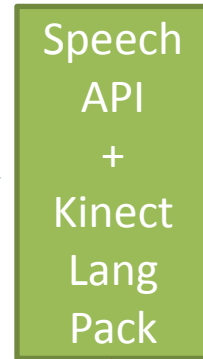


4 element microphone array  
(USB Audio class driver)

4 channel  
audio  
32 bit, 16khz



16 bit  
16khz  
1 ch

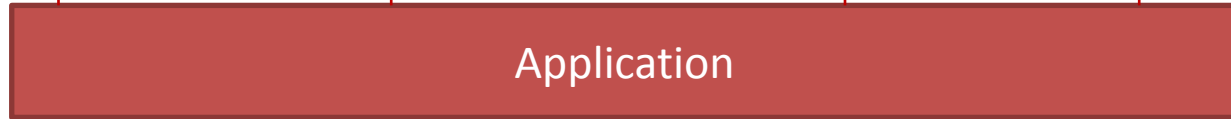


↑  
WASAPI

↑  
COM

↑  
.NET

↑  
.NET



# Common Questions/Issues

- Can multiple Kinects be used? How?
- Can I write 64 bit applications? I get a crash ...
- I get a "Speech platform not installed" error (x64)
- My WPF app crashes shortly after starting with a COM Exception
- What's the difference between beam angle and sound source position?

# Summary

- Build for x86
- Use KinectAudioSource in MTA thread
- Install x86 Speech platform

# Resources

Main site:

<http://research.microsoft.com/kinectsdk>

Forums:

<http://social.msdn.microsoft.com/Forums/en-US/category/kinectsdk>

# Questions?

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