

Profile

The company

Longcat is a France-based provider of innovative 3D audio solutions for the pro-audio, simulation, museographic and entertainment industries.

Founded in 2007 with a team that brings state-of-the-art experience in 3D audio and Virtual Reality, Longcat has been twice granted the Innovation Prize from the French Ministry for the Industry and Research.

Services and expertise

The **Longcat** team and its partners have state-of-the-art experience in Virtual Reality and audio processing for the industry, entertainment and research fields.

We provide technical consulting services, including:

- Long term consulting contracts
- Audio installation design
- 3D sound technologies.

Technologies

Kitten

3D Audio Engine and API

Kitten is a very versatile, multi-platform, multi-threaded, high-performance sound spatialization engine.

Kitten is the base component of all **Longcat** developments and products, achieved through a very rich and user-friendly API that permits inclusion of high-end 3D sound in any standard Windows, Mac OSX or Linux application.

The high-level API provides C++ bindings to the power of the Kitten rendering engine.

Key features

ASIO, CoreAudio, ALSA support, for low latency rendering.

Several spatialization techniques: stereo headphones (binaural), stereo loudspeakers (standard, enhanced stereo, and virtual 3D surround), or any arbitrary loudspeaker setup using VBAP or Ambisonics.

Room Acoustics: environment early reflections and reverb, multiple rooms support, portals...

High performance rendering: powerful multithread architecture.

VST and AudioUnits support: standard effects and instruments are supported, which allow the use of professional audio effects.

Products

SoundPack for Virtools™

3D Audio Engine for Virtual Reality

SoundPack is an extension to Dassault Systèmes' 3D Via Virtools Dev™, adding **Kitten**'s powerful 3D audio capabilities to this Virtual Reality platform, while retaining full compatibility with legacy compositions.

AudioStage

Virtual 3D mixing console

Longcat is currently developing a software audio mixing tool based on **Kitten**. This product aims to provide mixers with an ergonomic tool that enables them to author real 3D sound.

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