ASIO Windows Media Player Plugin

Introduction

One of the main challenges of building a PC based music server is the difficulty of passing a digital audio stream from storage media to sound hardware without any modifications. The Windows audio stack was not designed to be bit transparent, and almost always distorts the audio stream. Some software/hardware configurations are known to be bit perfect. They are limited however to either a specific brand of hardware or to third party player software. The purpose of the ASIO plugin is to achieve bit-perfect playback by standard Windows Media Player and Windows Media Center applications for a wide variety of sound cards. It may be used on its own or together with the Sample Rate Doubler plugin, hosted at http://srdoublerwmpplg.sourceforge.net. For audio devices with no vendor-provided ASIO driver, the universal ASIO driver ASIO2WASAPI is recommended, see http://asio2wasapi.sourceforge.net.

ASIO is an alternative software API and driver model developed by Steinberg Media Technologies GmbH. It bypasses the Windows audio stack and lets applications to transfer audio data directly to/from memory mapped hardware buffers. This guarantees data integrity and shortens playback and recording latencies.

Installation

The plugin is hosted on SourceForge at http://asiowmpplg.sourceforge.net. Its source code and Windows binaries are available under the GPL license. To install a plugin, unzip its distribution, go to the Release subfolder and double-click the Install icon. A message will appear that ASIOWmpPlg is successfully installed.

Configuration

Start Windows Media Player, go to Tools/Options/Plug-ins/, select the Audio DSP category and then ASIOWmpPlg plugin, click Properties. The plugin property page appears, where you can select which ASIO enabled audio device will be used for audio playback. From the same dialog, launch the device-specific ASIO Control Panel and select the highest available latency or buffer size. Close the ASIO Control Panel, click OK and go to the Devices tab. Select Speakers and click on Properties. In the Speaker Properties, choose any device that will NOT be used for playback. On most computers, the on-board audio device is a good choice. Click OK, OK again and restart Media Player. The configuration is now complete.

Addendum. Build Instructions.

The plug-in is developed in C++ with Microsoft Visual Studio. To build it, it is necessary to download the ASIO SDK from Steinberg's web site, see http://www.steinberg.net/en/company/3rd_party_developer/sdk_download_portal.html

The SDK is available under its own license and cannot be posted online on an unrestrictedly accessible web site.