Audio Toolbox / Audio Unit v3 Plug-Ins

API Collection

Audio Unit v3 Plug-Ins

Deliver custom audio effects, instruments, and other audio behaviors using an Audio Unit v3 app extension.

Topics

Host App

📄 Migrating Your Audio Unit Host to the AUv3 API

Update your Audio Unit (AU) host app to take advantage of the new features and capabilities of AUv3.

📄 Hosting Audio Unit Extensions Using the AUv2 API

Update your existing Audio Unit v2 host app to load and use Audio Unit extensions.

Audio Units

📄 Creating an audio unit extension

Build an extension by using an Xcode template.

{} Creating custom audio effects

Add custom audio-effect processing to apps like Logic Pro X and GarageBand by creating Audio Unit (AU) plug-ins.

{} Incorporating Audio Effects and Instruments

Add custom audio processing and MIDI instruments to your app by hosting Audio Unit (AU) plug-ins.

📄 Debugging Out-of-Process Audio Units on Apple Silicon

Connect to out-of-process audio units using the Xcode debugger.

`class AUAudioUnit`

A class that defines a host's interface to an audio unit.

`class AUAudioUnitBus`

A class that defines an input or output connection point on an audio unit.

`class AUAudioUnitBusArray`

A class that defines a container for an audio unit's input or output busses.

`class AUAudioUnitPreset`

A class that describes an interface for custom parameter settings provided by the audio unit developer.

`class AUAudioUnitV2Bridge`

A class that wraps a version 2 audio unit as version 3 audio unit.

`func AudioUnitExtensionCopyComponentList(CFString) -> Unmanaged<CFArray>?`

Returns the component registrations for a given audio unit extension.

`func AudioUnitExtensionSetComponentList(CFString, CFArray?) -> OSStatus`

Allows the implementor of an audio unit extension to dynamically modify the list of component registrations for the extension.

`protocol AUAudioUnitFactory`

An object that creates a version 3 audio unit.

Parameters

`class AUParameter`

An object that represents a single audio unit parameter.

`class AUParameterGroup`

A parameter group object represents a group of related audio unit parameters.

`class AUParameterNode`

An object that represents a node in an audio unit's parameter tree.

`class AUParameterTree`

An object that represents a top-level group node that contains all of an audio unit's parameters.

See Also

Audio Units

{} Generating spatial audio from a multichannel audio stream

Convert 8-channel audio to 2-channel spatial audio by using a spatial mixer audio unit.

☰ Audio Components

Find, load, and configure audio components, such as Audio Units and audio codecs.

☰ Audio Unit v2 (C) API

Configure an Audio Unit and prepare it to render audio.

☰ Audio Unit Properties

Obtain information about the built-in mixers, equalizers, filters, effects, and other Audio Unit app extensions.

☰ Audio Unit Voice I/O

Configure system voice processing and respond to speech events.