

[Audio Toolbox](#) / Audio File Components

API Collection

Audio File Components

Get information about audio file formats, and about files containing audio data.

Topics

Opening and Closing Audio Files

```
func AudioFileComponentCreateURL(AudioFileComponent, CFURL, Unsafe
Pointer<AudioStreamBasicDescription>, UInt32) -> OSStatus

func AudioFileComponentOpenURL(AudioFileComponent, CFURL, Int8, Int32)
-> OSStatus

func AudioFileComponentOpenWithCallbacks(AudioFileComponent, Unsafe
MutableRawPointer, AudioFile_ReadProc, AudioFile_WriteProc, AudioFile
_GetSizeProc, AudioFile_SetSizeProc) -> OSStatus

func AudioFileComponentCloseFile(AudioFileComponent) -> OSStatus

func AudioFileComponentOptimize(AudioFileComponent) -> OSStatus

typealias AudioFileComponent

typealias AudioFileComponentPropertyID

typealias AudioFileComponentCreateURLProc

typealias AudioFileComponentOpenWithCallbacksProc

typealias AudioFileComponentOpenURLProc

typealias AudioFileComponentCloseProc

typealias AudioFileComponentOptimizeProc
```

Configuring the Callbacks

```
func AudioFileComponentInitializeWithCallbacks(AudioFileComponent,
UnsafeMutableRawPointer, AudioFile_ReadProc, AudioFile_WriteProc, Audio
File_GetSizeProc, AudioFile_SetSizeProc, UInt32, UnsafePointer<Audio
StreamBasicDescription>, UInt32) -> OSStatus
```

☰ Audio File Component Selectors

```
typealias AudioFileComponentInitializeWithCallbacksProc
```

Getting the Global Information

```
func AudioFileComponentGetGlobalInfo(AudioFileComponent, AudioFile
ComponentPropertyID, UInt32, UnsafeRawPointer?, UnsafeMutablePointer<
UInt32>, UnsafeMutableRawPointer) -> OSStatus
```

```
func AudioFileComponentGetGlobalInfoSize(AudioFileComponent, AudioFile
ComponentPropertyID, UInt32, UnsafeRawPointer?, UnsafeMutablePointer<
UInt32>) -> OSStatus
```

```
typealias AudioFileComponentGetGlobalInfoProc
```

```
typealias AudioFileComponentGetGlobalInfoSizeProc
```

Accessing the User Data

```
func AudioFileComponentGetUserData(AudioFileComponent, UInt32, UInt32,
UnsafeMutablePointer<UInt32>, UnsafeMutableRawPointer) -> OSStatus
```

```
func AudioFileComponentSetUserData(AudioFileComponent, UInt32, UInt32,
UInt32, UnsafeRawPointer) -> OSStatus
```

```
func AudioFileComponentCountUserData(AudioFileComponent, UInt32, Unsafe
MutablePointer<UInt32>) -> OSStatus
```

```
func AudioFileComponentGetUserDataSize(AudioFileComponent, UInt32,
UInt32, UnsafeMutablePointer<UInt32>) -> OSStatus
```

```
func AudioFileComponentRemoveUserData(AudioFileComponent, UInt32,
UInt32) -> OSStatus
```

```
typealias AudioFileComponentCountUserDataProc
```

```
typealias AudioFileComponentGetUserDataProc
```

```
typealias AudioFileComponentGetUserDataSizeProc
```

```
typealias AudioFileComponentRemoveUserDataProc
```

```
typealias AudioFileComponentSetUserDataProc
```

```
typealias CountUserDataFDF
```

```
typealias GetUserDataFDF
```

```
typealias GetUserDataSizeFDF
```

Accessing Properties

```
func AudioFileComponentGetProperty(AudioFileComponent, AudioFile  
ComponentPropertyID, UnsafeMutablePointer<UInt32>, UnsafeMutableRaw  
Pointer) -> OSStatus
```

```
func AudioFileComponentGetPropertyInfo(AudioFileComponent, AudioFile  
ComponentPropertyID, UnsafeMutablePointer<UInt32>?, UnsafeMutable  
Pointer<UInt32>?) -> OSStatus
```

```
func AudioFileComponentSetProperty(AudioFileComponent, AudioFile  
ComponentPropertyID, UInt32, UnsafeRawPointer) -> OSStatus
```

```
typealias AudioFileComponentGetPropertyInfoProc
```

```
typealias AudioFileComponentGetPropertyProc
```

```
typealias AudioFileComponentSetPropertyProc
```

```
⋮ Audio File Component Specific Properties
```

Reading and Writing Data

```
func AudioFileComponentReadBytes(AudioFileComponent, Bool, Int64,  
UnsafeMutablePointer<UInt32>, UnsafeMutableRawPointer) -> OSStatus
```

```
func AudioFileComponentReadPacketData(AudioFileComponent, Bool, Unsafe  
MutablePointer<UInt32>, UnsafeMutablePointer<AudioStreamPacket  
Description>?, Int64, UnsafeMutablePointer<UInt32>, UnsafeMutableRaw  
Pointer) -> OSStatus
```

```
func AudioFileComponentReadPackets(AudioFileComponent, Bool, Unsafe  
MutablePointer<UInt32>, UnsafeMutablePointer<AudioStreamPacket  
Description>?, Int64, UnsafeMutablePointer<UInt32>, UnsafeMutableRaw  
Pointer) -> OSStatus
```

```
func AudioFileComponentWriteBytes(AudioFileComponent, Bool, Int64,
UnsafeMutablePointer<UInt32>, UnsafeRawPointer) -> OSStatus

func AudioFileComponentWritePackets(AudioFileComponent, Bool, UInt32,
UnsafePointer<AudioStreamPacketDescription>?, Int64, UnsafeMutable
Pointer<UInt32>, UnsafeRawPointer) -> OSStatus

typealias AudioFileComponentReadBytesProc

typealias AudioFileComponentReadPacketDataProc

typealias AudioFileComponentReadPacketsProc

typealias AudioFileComponentWriteBytesProc

typealias AudioFileComponentWritePacketsProc
```

Checking the File Format

```
func AudioFileComponentFileDataIsThisFormat(AudioFileComponent, UInt32,
UnsafeRawPointer, UnsafeMutablePointer<UInt32>) -> OSStatus

func AudioFileComponentExtensionIsThisFormat(AudioFileComponent,
CFString, UnsafeMutablePointer<UInt32>) -> OSStatus

typealias AudioFileComponentExtensionIsThisFormatProc

typealias AudioFileComponentFileDataIsThisFormatProc

typealias GetPropertyFDF

typealias GetPropertyInfoFDF
```

See Also

Audio Files and Formats

- ⌵ Audio Format Services
Access information about audio formats and codecs.
- ⌵ Audio File Services
Read or write a variety of audio data to or from disk or a memory buffer.
- ⌵ Extended Audio File Services

Read and write compressed files and linear PCM audio files using a simplified interface.

☰ Audio File Stream Services

Parse streamed audio files as the data arrives on the user's computer.

☰ Core Audio File Format

Parse the structure of Core Audio files.