

#\$+K!

MMedia for wxWindows

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isableButton("Up")

Introduction

The MMedia wxWindows extension is a wxWindows library which provides you a full set of multimedia classes including sound recording/playing, cd audio playing and video playing. The API is portable and can be used on any supported systems with the insurance the behaviour will be the same.

File structure

Introduction
topic0
browse00002
K Introduction
DisableButton("Up")

MMboard: a sample MMedia application

To be written.

Mboard: a sample MMedia application
mboard
browse00004
K MMboard a sample MMedia application
DisableButton("Up")

Class reference

These are the main Mmedia classes.

[wxCDAudio](#)

[wxCDAudioLinux](#)

[wxCDAudioWin](#)

[CDtoc](#)

[wxSoundStream](#)

[wxSoundFileStream](#)

[wxSoundFormatBase](#)

^Class reference

^Classref

^browse00005

^K Class reference

^DisableButton("Up")

Topic overviews

The following sections describe particular topics.

MMedia extension overview

Bugs

These are the known bugs.

{bmc bullet.bmp} No bugs

B
u
g
s
b
r
o
w
s
e
0
0
0
9
6
K
B
u
g
s
D
i
s
a
b
l
e
B
u
t
t
o
n
(
"Up")

Change log

Change log
topic2
rowse00097
Change log
isableButton("Up")

File structure

These are the files that comprise the mmedia library.

sndbase.h Header for wxSoundStream base class and wxSoundFormat base class.

sndbase.cpp Basic objects implementation.

sndfile.h wxSoundFileStream base class header.

sndfile.cpp wxSoundFileStream base class implementation.

sndpcm.h wxSoundFormatPcm class header.

sndpcm.cpp wxSoundFormatPcm class implementation.

sndcpcm.h wxSoundCodecPcm class header (PCM converter).

sndcpcm.cpp wxSoundCodecPcm class implementation (PCM converter).

sndulaw.h

sndulaw.cpp

sndg72x.h

sndg72x.cpp

sndoss.h

sndoss.cpp

sndesd.h

sndesd.cpp

sndwin.h

sndwin.cpp

cdbase.h

cdbase.cpp

cdunix.h

cdunix.cpp

File structure

topic1

browse00003

File structure

enableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `topic0')")

cdwin.h

cdwin.cpp

vidbase.h

vidbase.cpp

vidxanm.h

vidxanm.cpp

vidwin.h

vidwin.cpp

`wxCDAudio`

Derived from

`wxObject`

Data structures

```
typedef struct wxCDtime {
    wxUint8 track
};

typedef enum    PLAYING, PAUSED, STOPPED    CDstatus
```

`wxCDAudio`
`wxcdaudio`
`rowse00006`
`wxCDAudio`
`nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `classref)")`

\$#+K!**wxCDAudioLinux**

Derived from

wxCDAudio

Data structures

Members

wxCDAudioLinux::wxCDAudioLinux
wxCDAudioLinux::~wxCDAudioLinux
wxCDAudioLinux::Play
wxCDAudioLinux::Pause
wxCDAudioLinux::Resume
wxCDAudioLinux::GetStatus
wxCDAudioLinux::GetTime
wxCDAudioLinux::GetToc
wxCDAudioLinux::Ok
wxCDAudioLinux::OpenDevice

^w_xCDAudioLinux
^w_xcdaudiolinux
^b_{rowse}00007
^K_{wxCDAudioLinux}
^E_nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `classref)")

\$#+K! **wxCDAudioWin**

Derived from

wxCDAudio

Data structures

```
typedef struct CDAW\_Internal {  
    MCIDEVICEID dev\_id  
};
```

Members

wxCDAudioWin::wxCDAudioWin
wxCDAudioWin::~~wxCDAudioWin
wxCDAudioWin::Play
wxCDAudioWin::Pause
wxCDAudioWin::Resume
wxCDAudioWin::GetStatus
wxCDAudioWin::GetTime
wxCDAudioWin::GetToc
wxCDAudioWin::Ok
wxCDAudioWin::PrepareToc

^wxCDAudioWin
^wxcdaudiowin
^browse00018
^K wxCDAudioWin
^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `classref)")

\$#+K! **CDtoc**

Table of contents manager

Derived from

No base class

Data structures

Members

[CDtoc::CDtoc](#)

[CDtoc::GetTrackTime](#)

[CDtoc::GetTrackPos](#)

[CDtoc::GetTotalTime](#)

[wxCDAudio::wxCDAudio](#)

[wxCDAudio::~~wxCDAudio](#)

[wxCDAudio::Play](#)

[wxCDAudio::Pause](#)

[wxCDAudio::Resume](#)

[wxCDAudio::GetStatus](#)

[wxCDAudio::GetTime](#)

[wxCDAudio::GetToc](#)

[wxCDAudio::Ok](#)

^CDtoc

^cdtoc

^browse00029

^K CDtoc

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `classref)")

wxSoundStream

Base class for sound streams

Derived from

No base class

Include files

<wx/mmedia/sndbase.h>

Data structures

wxSoundStream errors

wxSOUND_NOERR

No error occurred

wxSOUND_IOERR

An input/output error occurred, it may concern either a driver or a file

wxSOUND_INVFRMT

The sound format passed to the function is invalid. Generally, it means that you passed out of range values to the codec stream or you don't pass the right sound format object to the right sound codec stream.

wxSOUND_INVDEV

Invalid device. Generally, it means that the sound stream didn't manage to open the device driver due to an invalid parameter or to the fact that sound is not supported on this computer.

wxSOUND_NOEXACT

No exact matching sound codec has been found for this sound format. It means that the sound driver didn't manage to setup the sound card with the specified values.

wxSOUND_NOCODEC

No matching codec has been found. Generally, it may happen when you call `wxSoundRouterStream::SetSoundFormat()`.

wxSOUND_MEMERR

Not enough memory.

C callback for wxSound event

When a sound event is generated, it may either call the internal sound event processor

`wxSoundStream`

`wxsoundstream`

`browse00043`

`K wxSoundStream`

`E nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `classref)")`

(which can be inherited) or call a C function. Its definition is:

```
typedef void (*wxSoundCallback)(wxSoundStream *stream, int evt,  
                                void *cdata);
```

The **stream** parameter represents the current wxSoundStream.

The **evt** parameter represents the sound event which is the cause of the calling. (See [wxSound events](#)).

The **cdata** parameter represents the user callback data which were specified when the user called [wxSoundStream::Register](#).

Note: There are two other ways to catch sound events: you can inherit the sound stream and redefine [wxSoundStream::OnSoundEvent](#), or you can reroute the events to another sound stream using [wxSoundStream::SetEventHandler](#).

wxSound streaming mode

The wxSoundStream object can work in three different modes. These modes are specified at the call to [wxSoundStream::StartProduction](#) and cannot be changed until you call [wxSoundStream::StopProduction](#).

The **wxSOUND_INPUT** mode is the recording mode. It generates **wxSOUND_INPUT** events and you cannot use [wxSoundStream::Write\(\)](#).

The **wxSOUND_OUTPUT** mode is the playing mode. It generates **wxSOUND_OUTPUT** events and you cannot use [wxSoundStream::Read\(\)](#).

The **wxSOUND_DUPLEX** mode activates the full duplex mode. The full duplex requires you to make synchronous call to [wxSoundStream::Read](#) and [wxSoundStream::Write](#). This means that you must be careful with realtime problems. Each time you call Read you must call Write.

wxSoundStream events

The sound events are generated when the sound driver (or the sound stream) completes a previous sound buffer. There are two possible sound events and two meanings.

The **wxSOUND_INPUT** event is generated when the sound stream has a new input buffer ready to be read. You know that you can read a buffer of the size [GetBestSize\(\)](#) without blocking.

The **wxSOUND_OUTPUT** event is generated when the sound stream has completed a previous buffer. This buffer has been sent to the sound driver and it is ready to process a new buffer. Consequently, [Write](#) will not block too.

Members

[wxSoundStream::wxSoundStream](#)
[wxSoundStream::~~wxSoundStream](#)
[wxSoundStream::Read](#)
[wxSoundStream::Write](#)
[wxSoundStream::GetBestSize](#)

wxSoundStream::SetSoundFormat
wxSoundStream::GetSoundFormat
wxSoundStream::SetCallback
wxSoundStream::StartProduction
wxSoundStream::StopProduction
wxSoundStream::SetEventHandler
wxSoundStream::GetError
wxSoundStream::GetLastAccess
wxSoundStream::QueueFilled
wxSoundStream::OnSoundEvent

`##+K!` **wxSoundFileStream**

Base class for file coders/decoders. This class is not constructor (it is an abstract class).

Derived from

[wxSoundStream](#)

Include file

wx/sndfile.h

Data structures

Members

[wxSoundFileStream::wxSoundFileStream](#)
[wxSoundFileStream::~~wxSoundFileStream](#)
[wxSoundFileStream::Play](#)
[wxSoundFileStream::Record](#)
[wxSoundFileStream::Stop](#)
[wxSoundFileStream::Pause](#)
[wxSoundFileStream::Resume](#)
[wxSoundFileStream::IsStopped](#)
[wxSoundFileStream::IsPaused](#)
[wxSoundFileStream::StartProduction](#)
[wxSoundFileStream::StopProduction](#)
[wxSoundFileStream::GetLength](#)
[wxSoundFileStream::GetPosition](#)
[wxSoundFileStream::SetPosition](#)
[wxSoundFileStream::Read](#)
[wxSoundFileStream::Write](#)
[wxSoundFileStream::SetSoundFormat](#)
[wxSoundFileStream::GetCodecName](#)
[wxSoundFileStream::CanRead](#)
[wxSoundFileStream::PrepareToPlay](#)
[wxSoundFileStream::PrepareToRecord](#)
[wxSoundFileStream::FinishRecording](#)
[wxSoundFileStream::RepositionStream](#)
[wxSoundFileStream::FinishPreparation](#)
[wxSoundFileStream::GetData](#)
[wxSoundFileStream::PutData](#)

`w` `xSoundFileStream`

`w` `xsoundfilestream`

`b` `rowse00059`

`K` `wxSoundFileStream`

`E` `nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `classref)")`

\$#+K! **wxSoundFormatBase**

Base class for sound format specification

Derived from

No base class

Data structures

```
typedef enum
    wxSOUND_NOFORMAT,
    wxSOUND_PCM,
    wxSOUND_ULAW,
    wxSOUND_G72X,
    wxSOUND_MSADPCM
    wxSoundFormatType
```

wxSoundFormatType: it specifies the format family of the sound data which will be passed to the stream.

Members

[wxSoundFormatBase::wxSoundFormatBase](#)
[wxSoundFormatBase::~~wxSoundFormatBase](#)
[wxSoundFormatBase::GetType](#)
[wxSoundFormatBase::Clone](#)
[wxSoundFormatBase::GetTimeFromBytes](#)
[wxSoundFormatBase::GetBytesFromTime](#)
[wxSoundFormatBase::operator!=](#)

^wxSoundFormatBase
^wxsoundformatbase
^browse00086
^K wxSoundFormatBase
^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `classref)")

MMedia extension overview

To be written.


```
$#+K!wxCDAudioLinux::wxCDAudioLinux
wxCDAudioLinux()K
wxCDAudioLinux(const char* dev_name)K
```

```
wxCDAudioLinux::wxCDAudioLinux
wxcdaudiolinuxwxcdaudiolinux
browse00008
K wxCDAudioLinux wxCDAudioLinux
EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxcdaudiolinux')")
K wxCDAudioLinux
K wxCDAudioLinux
```

\$#+K!wxCDAudioLinux::~~wxCDAudioLinux

~wxCDAudioLinux()^K

wxCDAudioLinux::~~wxCDAudioLinux

wxcdaudiolinuxdtdor

rowse00009

K wxCDAudioLinux ~wxCDAudioLinux

EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiolinux')")

K ~wxCDAudioLinux

`wxCDAudioLinux::Play`

`bool Play(const wxCDtime& beg_time, const wxCDtime& end_time)`^K

^w`xCDAudioLinux::Play`
^w`xcdaudiolinuxplay`
^b`rowse00010`
^K`wxCDAudioLinux Play`
^E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiolinux')")`
^K`Play`


```
$#+K!wxCDAudioLinux::Pause
bool Pause()K
```

```
wxCDAudioLinux::Pause
wxcdaudiolinuxpause
browse00011
K wxCDAudioLinux Pause
EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiolinux')")
K Pause
```

```
$#+K!wxCDAudioLinux::Resume
bool Resume()K
```

```
wxCDAudioLinux::Resume
wxcdaudiolinuxresume
browse00012
K wxCDAudioLinux Resume
EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiolinux')")
K Resume
```

\$#+K!wxCDAudioLinux::GetStatus

CDstatus GetStatus()^K

^wxCDAudioLinux::GetStatus
^wxcdaudiolinuxgetstatus
^browse00013
^K wxCDAudioLinux GetStatus
^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiolinux')")
^K GetStatus

\$#+K!wxCDAudioLinux::GetTime
wxCDtime GetTime()^K

^wxCDAudioLinux::GetTime
^wxcdaudiolinuxgettime
^browse00014
^K wxCDAudioLinux GetTime
^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiolinux')")
^K GetTime

```
$#+K!wxCDAudioLinux::GetToc
CDtoc& GetToc()K
```

```
w_xCDAudioLinux::GetToc
w_xcdaudiolinuxgettoc
b_rowse00015
K wxCDAudioLinux GetToc
E_nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiolinux')")
K GetToc
```

\$#+KK!**wxCDAudioLinux::Ok**

bool Ok() const

wxCDAudioLinux::Ok
wxcdaudiolinuxok
browse00016
K wxCDAudioLinux Ok
K Ok
E nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxcdaudiolinux')")

wxCDAudioLinux::OpenDevice

void OpenDevice(const char* dev_name)

wxCDAudioLinux::OpenDevice
wxcdaudiolinuxopendevic
browse00017
K wxCDAudioLinux OpenDevice
E nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxcdaudiolinux')")
K OpenDevice

\$#+K! wxCDAudioWin::wxCDAudioWin

wxCDAudioWin()^K

wxCDAudioWin(const char* dev_name)^K

^wxCDAudioWin::wxCDAudioWin

^wxcdaudiowinxcdaudiowin

^browse00019

^K wxCDAudioWin wxCDAudioWin

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiowin')")

^K wxCDAudioWin

^K wxCDAudioWin

\$#+K!wxCDAudioWin::~~wxCDAudioWin

~wxCDAudioWin()^K

w_xCDAudioWin::~~wxCDAudioWin
w_xcdaudiowindtor
b_rowse00020
K wxCDAudioWin ~wxCDAudioWin
E_nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiowin')")
K ~wxCDAudioWin

`$#+K!wxCDAudioWin::Play`

`bool Play(const wxCDtime& beg_time, const wxCDtime& end_time)K`

`w_xCDAudioWin::Play`
`w_xcdaudiowinplay`
`browse00021`
`K wxCDAudioWin Play`
`EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiowin')")`
`K Play`

```
$#+K!wxCDAudioWin::Pause
bool Pause()K
```

```
w_xCDAudioWin::Pause
w_xcdaudiowinpause
browse00022
K wxCDAudioWin Pause
EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiowin')")
K Pause
```

```
$#+K!wxCDAudioWin::Resume
bool Resume()K
```

```
wxCDAudioWin::Resume
wxcdaudiowinresume
browse00023
K wxCDAudioWin Resume
EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiowin')")
K Resume
```

\$#+K!wxCDAudioWin::GetStatus
CDstatus GetStatus()^K

^wxCDAudioWin::GetStatus
^wxcdaudiowidgetstatus
^browse00024
^K wxCDAudioWin GetStatus
^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiowin')")
^K GetStatus

\$#+K!wxCDAudioWin::GetTime
wxCDtime GetTime()^K

^wxCDAudioWin::GetTime
^wxcdaudiowingetime
^browse00025
^K wxCDAudioWin GetTime
^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiowin')")
^K GetTime

\$#+K!wxCDAudioWin::GetToc

const CDtoc& GetToc()^K

^wxCDAudioWin::GetToc
^wxcdaudiowingettoc
^browse00026
^K wxCDAudioWin GetToc
^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxcdaudiowin')")
^K GetToc

\$#+KK!wxCDAudioWin::Ok

bool Ok() const

w_xCDAudioWin::Ok
w_xcdaudiowinok
b_rowse00027
K wxCDAudioWin Ok
K Ok
EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `xcdaudiowin')")

`$#+K!wxCDAudioWin::PrepareToc`

`void PrepareToc()`^K

`w`xCDAudioWin::PrepareToc
`w`xcdaudiowinpreparetoc
`b`rowse00028
`K` wxCDAudioWin PrepareToc
`E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `xcdaudiowin')")
`K` PrepareToc

$\$#+K!$ **CDtoc::CDtoc**

CDtoc(**wxCDtime**& *tot_tm*, **wxCDtime*** *trks_tm*, **wxCDtime*** *trks_pos*)^K

C Dtoc::CDtoc
 c dtoccdtoc
 b rowse00030
 K CDtoc CDtoc
 E nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `cdtoc')")
 K CDtoc

`$#+KK!` **CDtoc::GetTrackTime**

wxCDtime GetTrackTime(wxUint8 *track*) const

Returns the length of the specified track track: track to get length

`C`Dtoc::GetTrackTime

`c`dtocgettracktime

`b`rowse00031

`K` CDtoc GetTrackTime

`K` GetTrackTime

`E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `cdtoc')")

`$#+KK!` **CDtoc::GetTrackPos**

wxCDtime GetTrackPos(wxUint8 *track*) const

Returns the position of the specified track *track*: track to get position

`CDtoc::GetTrackPos`

`cdtocgettrackpos`

`browse00032`

`K CDtoc GetTrackPos`

`K GetTrackPos`

`EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^ mmedia.hlp', `cdtoc')")`

\$#+KK!**CDtoc::GetTotalTime**

wxCDtime GetTotalTime() const

Returns the total time

^CDtoc::GetTotalTime

^cdtocgettotaltime

^browse00033

^K CDtoc GetTotalTime

^K GetTotalTime

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `cdtoc')")

```
$#+K!wxCDAudio::wxCDAudio
wxCDAudio()K
```

```
w_xCDAudio::wxCDAudio
w_xcdaudiowxcdaudio
b_rowse00034
K wxCDAudio wxCDAudio
E_nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `cdtoc')")
K wxCDAudio
```

\$#+K!wxCDAudio::~~wxCDAudio

~wxCDAudio()^K

^wxCDAudio::~~wxCDAudio

^wxcdaudiotor

^browse00035

^KwxCDAudio ~wxCDAudio

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `cdtoc')")

^K~wxCDAudio

\$#+K! **wxCDAudio::Play**

bool Play(const wxCDtime& *beg_play*, const wxCDtime& *end_play*)^K

Play audio at the specified position

bool Play(const wxCDtime& *beg_play*)^K

Play audio from the specified to the end of the CD audio

bool Play(wxUint8 *beg_track*, wxUint8 *end_track* = 0)^K

wxCDAudio::Play

wxcdaudioplay

browse00036

K wxCDAudio Play

EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `cdtoc')")

K Play

K Play

K Play

`$#+K!wxCDAudio::Pause`

`bool Pause()K`

Pause the audio playing

`wxCDAudio::Pause`

`wxcdaudiopause`

`browse00037`

`KwxCDAudio Pause`

`EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `cdtoc')")`

`KPause`

`$#+K!` **wxCDAudio::Resume**

bool Resume()^K

Resume a paused audio playing

^wxCDAudio::Resume

^wxcdaudioresume

^browse00038

^K wxCDAudio Resume

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `cdtoc')")

^K Resume

wxCDAudio::GetStatus

CDstatus GetStatus()

Get the current CD status

wxCDAudio::GetStatus

wxcdaudiogetstatus

rowse00039

wxCDAudio GetStatus

enableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `cdtoc')")

GetStatus

\$#+K! wxCDAudio::GetTime

wxCDtime GetTime()^K

Get the current playing time

^wxCDAudio::GetTime
^wxcdaudiogettime
^browse00040
^K wxCDAudio GetTime
^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `cdtoc')")
^K GetTime

wxCDAudio::GetToc

const CDtoc& GetToc()

Returns the table of contents

wxCDAudio::GetToc

wxcdaudiogettoc

rowse00041

wxCDAudio GetToc

enableButton("Up");ChangeButtonBinding("Up", "JumpId(`media.hlp', `cdtoc')")

GetToc

\$#+KK!**wxCDAudio::Ok**

bool Ok() const

CD ok

^wwxCDAudio::Ok

^wwxcdaudiook

^browse00042

^KwxCDAudio Ok

^KOk

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `cdtoc')")

`$#+K!wxSoundStream::wxSoundStream`

`wxSoundStream()`^K

Default constructor.

`wxSoundStream::wxSoundStream`
`wxsoundstreamwxsoundstream`
`rowse00044`
`K wxSoundStream wxSoundStream`
`E nableButton("Up");ChangeButtonBinding("Up", "JumpId(`media.hlp', `wxsoundstream')")`
`K wxSoundStream`

wxSoundStream::~wxSoundStream

~wxSoundStream()^K

Destructor. The destructor stops automatically all started production and destroys any temporary buffer.

^wxSoundStream::~wxSoundStream

^wxsoundstreamdtor

^browse00045

^K wxSoundStream ~wxSoundStream

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxsoundstream)")

^K ~wxSoundStream

wxSoundStream::Read

wxSoundStream& Read(void* *buffer*, wxUint32 *len*)^K

Reads *len* bytes from the sound stream. This call may block the user so use it carefully when you need to intensively refresh the GUI. You may be interested by sound events: see [wxSoundStream::OnSoundEvent](#).

It is better to use the size returned by [wxSoundStream::GetBestSize](#): this may improve performance or accuracy of the sound event system.

Parameters

len

len is expressed in bytes. If you need to do conversions between bytes and seconds use [wxSoundFormat](#). See [wxSoundFormatBase](#), [wxSoundStream::GetSoundFormat](#).

data

Data in *buffer* are coded using the sound format attached to this sound stream. The format is specified with [SetSoundFormat](#).

```
wxSoundStream::Read
wxsoundstreamread
browse00046
K wxSoundStream Read
E nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundstream'")
K Read
```

\$#+K! **wxSoundStream::Write**

wxSoundStream& Write(const void* *buffer*, wxUint32 *len*)^K

Writes *len* bytes to the sound stream. This call may block the user so use it carefully. You may be interested by sound events: see [wxSoundStream::OnSoundEvent](#).

It is better to use the size returned by [wxSoundStream::GetBestSize](#): this may improve performance or accuracy of the sound event system.

Parameters

len

This is expressed in bytes. If you need to do conversions between bytes and seconds use [wxSoundFormat](#). See [wxSoundFormatBase](#), [wxSoundStream::GetSoundFormat](#).

buffer

Data in *buffer* are coded using the sound format attached to this sound stream. The format is specified with [SetSoundFormat](#).

^wxSoundStream::Write

^wxsoundstreamwrite

^browse00047

^K wxSoundStream Write

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^ mmedia.hlp', `wxsoundstream'")")

^K Write

`$#+KKl wxSoundStream::GetBestSize`

`wxUint32 GetBestSize() const`

This function returns the best size for IO calls. The best size provides you a good alignment for data to be written (or read) to (or from) the sound stream. So, when, for example, a sound event is sent, you are sure the sound stream will not block for this buffer size.

```
w_xSoundStream::GetBestSize
w_xsoundstreamgetbestsize
b_rowse00048
K wxSoundStream GetBestSize
K GetBestSize
E nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxsoundstream')")
```

\$#+K! **wxSoundStream::SetSoundFormat**

bool SetSoundFormat(const wxSoundFormatBase& *format*)^K

SetSoundFormat is one of the key function of the wxSoundStream object. It specifies the sound format the user needs. SetSoundFormat tries to apply the format to the current sound stream (it can be a sound file or a sound driver). Then, either it manages to apply it and it returns **TRUE**, or it could not and it returns **FALSE**. In this case, you must check the error with wxSoundStream::GetError. See wxSoundStream errors section for more details.

Note

The **format** object can be destroyed after the call. The object does not need it.

Note

If the error is **wxSOUND_NOTEXACT**, the stream tries to find the best approaching format and setups it. You can check the format which it applied with wxSoundStream::GetSoundFormat.

WxSoundStream::SetSoundFormat

Wxsoundstreamsetsoundformat

Browse00049

K wxSoundStream SetSoundFormat

EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundstream')")

K SetSoundFormat

`$#+KKl wxSoundStream::GetSoundFormat`

`wxSoundFormatBase& GetSoundFormat() const`

It returns a reference to the current sound format of the stream represented by a `wxSoundFormatBase` object. This object *must not* be destroyed by anyone except the stream itself.

```
w_xSoundStream::GetSoundFormat
w_xsoundstreamgetsoundformat
b_rowse00050
K wxSoundStream GetSoundFormat
K GetSoundFormat
E nableButton("Up");ChangeButtonBinding("Up", "JumpId(^ mmedia.hlp', `wxsoundstream')")
```

^{S#+K!}**wxSoundStream::SetCallback**

void Register(int *evt*, **wxSoundCallback** *cbk*, void* *cdata*)^K

It installs a C callback for wxSoundStream events. The C callbacks are still useful to avoid hard inheritance. You can install only one callback per event. Each callback has its callback data.

^wxSoundStream::SetCallback

^wxsoundstreamregister

^browse00051

^K wxSoundStream SetCallback

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundstream')")

^K Register

`wxSoundStream::StartProduction`

`bool StartProduction(int evt)`^K

`StartProduction` starts the sound streaming. *evt* may be one of **`wxSOUND_INPUT`**, **`wxSOUND_OUTPUT`** or **`wxSOUND_DUPLEX`**. You cannot specify several flags at the same time. Starting the production may automatically in position of buffer underrun (only in the case you activated recording). Actually this may happen the sound IO queue is too short. It is also advised that you fill quickly enough the sound IO queue when the driver requests it (through a `wxSoundEvent`).

^w`wxSoundStream::StartProduction`

^w`wxsoundstreamstartproduction`

^b`rowse00052`

^K`wxSoundStream StartProduction`

^E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundstream')")`

^K`StartProduction`

`$#+K!wxSoundStream::StopProduction`

`bool StopProduction()`^K

I stops the async notifier and the sound streaming straightly.

^w`xSoundStream::StopProduction`
^w`xsoundstreamstopproduction`
^b`rowse00053`
^K`wxSoundStream StopProduction`
^E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundstream')")`
^K`StopProduction`

\$#+K! **wxSoundStream::SetEventHandler**

void SetEventHandler(wxSoundStream* *handler*)^K

Sets the event handler: if it is non-null, all events are routed to it.

WxSoundStream::SetEventHandler
wxsoundstreamseteventhandler
browse00054
K wxSoundStream SetEventHandler
EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundstream')")
K SetEventHandler

wxSoundStream::GetError

wxSoundError GetError() const

It returns the last error which occurred.

wxSoundStream::GetError

wxsoundstreamgeterror

rowse00055

wxSoundStream GetError

GetError

enableButton("Up");ChangeButtonBinding("Up", "JumpId(^media.hlp', `wxsoundstream')")

`$#+KKl wxSoundStream::GetLastAccess`

`wxUint32 GetLastAccess() const`

It returns the number of bytes which were effectively written to/read from the sound stream.

`w_xSoundStream::GetLastAccess`
`w_xsoundstreamgetlastaccess`
`browse00056`
`K wxSoundStream GetLastAccess`
`K GetLastAccess`
`E nableButton("Up");ChangeButtonBinding("Up", "JumpId(^ mmedia.hlp', `wxsoundstream')")`

`wxSoundStream::QueueFilled`

`bool QueueFilled() const`

It returns whether the sound IO queue is full. When it is full, the next IO call will block until the IO queue has at least one empty entry.

`wxSoundStream::QueueFilled`
`wxsoundstreamqueuefilled`
`rowse00057`
`wxSoundStream QueueFilled`
`QueueFilled`
`nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxsoundstream')")`

`$#+K!` **wxSoundStream::OnSoundEvent**

void OnSoundEvent(int evt)^K

It is called by the wxSoundStream when a new sound event occurred.

^wxSoundStream::OnSoundEvent
^wxsoundstreamonsoundevent
^browse00058
^K wxSoundStream OnSoundEvent
^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wsoundstream')")
^K OnSoundEvent

wxSoundFileStream::wxSoundFileStream

wxSoundFileStream(wxInputStream& *stream*, wxSoundStream& *io_sound*)^K

It constructs a new file decoder object which will send audio data to the specified sound stream. The *stream* is the input stream to be decoded. The *io_sound* is the destination sound stream. Once it has been constructed, you cannot change any of the specified streams nor the direction of the stream.

You will have access to the playback functions.

wxSoundFileStream(wxOutputStream& *stream*, wxSoundStream& *io_sound*)^K

It constructs a new file coder object which will get data to be recorded from the specified sound stream. The *stream* is the output wxStream. The *io_sound* is the source sound stream of the audio data. Once it has been constructed, you cannot change any of the specified streams nor the direction of the stream.

^w xSoundFileStream::wxSoundFileStream

^w xsoundfilestreamwxsoundfilestream

^b rowse00060

^K wxSoundFileStream wxSoundFileStream

^E nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")

^K wxSoundFileStream

^K wxSoundFileStream

wxSoundFileStream::~wxSoundFileStream

~wxSoundFileStream()^K

It destroys the current sound file codec.

^wxSoundFileStream::~wxSoundFileStream

^wxsoundfilestreamdtor

^browse00061

^K wxSoundFileStream ~wxSoundFileStream

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wsoundfilestream')")

^K ~wxSoundFileStream

`$#+K!` **wxSoundFileStream::Play**

bool Play()^K

It starts playing the file. The playing begins, in background in nearly all cases, after the return of the function. The codec returns to a **stopped** state when it reaches the end of the file. On success, it returns TRUE.

`w`xSoundFileStream::Play
`w`xsoundfilestreamplay
`b`rowse00062
`K` wxSoundFileStream Play
`E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")
`K` Play

\$#+K! **wxSoundFileStream::Record**

bool Record(wxUint32 *time*)^K

It starts recording data from the sound stream and writing them to the output stream. You have to precise the recording length in parameter. This length is expressed in seconds. If you want to control the record length (using Stop), you can set it to wxSOUND_INFINITE_TIME.

On success, it returns TRUE.

wxSoundFileStream::Record

wxsoundfilestreamrecord

browse00063

K wxSoundFileStream Record

EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")

K Record

\$#+K! **wxSoundFileStream::Stop**

bool Stop()^K

It stops either recording or playing. Whatever happens (even unexpected errors), the stream is stopped when the function returns. When you are in recording mode, the file headers are updated and flushed if possible (ie: if the output stream is seekable).

On success, it returns TRUE.

wxSoundFileStream::Stop
wxsoundfilestreamstop
browse00064
K wxSoundFileStream Stop
EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wsoundfilestream')")
K Stop

\$#+K! **wxSoundFileStream::Pause**

bool Pause()^K

The file codec tries to pause the stream: it means that it stops audio production but keep the file pointer at the place.

If the file codec is already paused, it returns FALSE.

On success, it returns TRUE.

wxSoundFileStream::Pause
wxsoundfilestreampause
browse00065
K wxSoundFileStream Pause
EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wsoundfilestream')")
K Pause

`$#+K! wxSoundFileStream::Resume`

`bool Resume()`^K

When the file codec has been paused using [Pause](#), you could be interested in resuming it. This is the goal of this function.

`w` wxSoundFileStream::Resume
`w` wxsoundfilestreamresume
`b` rowse00066
`K` wxSoundFileStream Resume
`E` nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")
`K` Resume

`$#+KKl wxSoundFileStream::IsStopped`

`bool IsStopped() const`

It returns TRUE when the stream is stopped, in another case it returns FALSE.

```
w_xSoundFileStream::IsStopped
w_xsoundfilestreamisstopped
b_rowse00067
K wxSoundFileStream IsStopped
K IsStopped
E_nableButton("Up");ChangeButtonBinding("Up", "JumpId(^ mmedia.hlp', `wxsoundfilestream')")
```

`$#+KKl wxSoundFileStream::IsPaused`

`bool IsPaused() const`

It returns TRUE when the stream is paused, in another case it returns FALSE.

`w_xSoundFileStream::IsPaused`
`w_xsoundfilestreamispaused`
`browse00068`
`K wxSoundFileStream IsPaused`
`K IsPaused`
`E nableButton("Up");ChangeButtonBinding("Up", "JumpId(^ mmedia.hlp', `wxsoundfilestream')")`

wxSoundFileStream::StartProduction

bool StartProduction(int evt)^K

It is really not advised you call this function. From the wxSoundFileStream point of view it is an internal function. Internally, it is called after the file stream has been prepared to be played or to receive audio data and when it wants to start processing audio data.

^wxSoundFileStream::StartProduction
^wxsoundfilestreamstartproduction
^browse00069
^K wxSoundFileStream StartProduction
^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wsoundfilestream')")
^K StartProduction

`wxSoundFileStream::StopProduction`

`bool StopProduction()`^K

As for StartProduction, it is not advised for you to call this function. It is called by Stop when it needs to stop the audio data processing.

^w`wxSoundFileStream::StopProduction`
^w`wxsoundfilestreamstopproduction`
^b`rowse00070`
^K`wxSoundFileStream StopProduction`
^E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")`
^K`StopProduction`

`$#+K! wxSoundFileStream::GetLength`

`wxUInt32 GetLength()`^K

It returns the audio data length of the file stream. This length is expressed in bytes. If you need the length in seconds, you will need to use [GetSoundFormat](#) and [GetTimeFromBytes](#).

^w`xSoundFileStream::GetLength`
^w`xsoundfilestreamgetlength`
^b`rowse00071`
^K`wxSoundFileStream GetLength`
^E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wsoundfilestream')")`
^K`GetLength`

`$#+K! wxSoundFileStream::GetPosition`

`wxUInt32 GetPosition()`^K

It returns the current position in the soundfile stream. The position is expressed in bytes. If you need the length in seconds, you will need to use [GetSoundFormat](#) and [GetTimeFromBytes](#).

^w`xSoundFileStream::GetPosition`

^w`xsoundfilestreamgetposition`

^b`rowse00072`

^K`wxSoundFileStream GetPosition`

^E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")`

^K`GetPosition`

\$#+K! **wxSoundFileStream::SetPosition**

wxUInt32 SetPosition(wxUInt32 *new_position*)^K

It sets the current in the soundfile stream. The position *new_position* must be expressed in bytes. You can get a length/position in bytes from a time value using [GetSoundFormat](#) and [GetTimeFromBytes](#).

On success, it returns TRUE.

Warning

Some wxStream may not be capable to support this function as it may not support the seekable functionality. If this happens, it returns FALSE and leave the stream at the same position.

WxSoundFileStream::SetPosition

Wxsoundfilestreamsetposition

browse00073

K wxSoundFileStream SetPosition

EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")

K SetPosition

wxSoundFileStream::Read

wxSoundStream& Read(void* *buffer*, wxUInt32 *len*)^K

You can obtain the audio data encoded in the file using this function. But it must be considered as an internal function. Used carelessly, it may corrupt the current state of the stream. Data are returned using in the original file coding (You must use a sound format object to decode it).

^wwxSoundFileStream::Read

^wxsoundfilestreamread

^browse00074

^K wxSoundFileStream Read

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")

^K Read

\$#+K! **wxSoundFileStream::Write**

wxSoundStream& Write(**const void*** *buffer*, **wxUInt32** *len*)^K

You can put encoded audio data to the file using this function. But it must be considered as an internal function. Used carelessly, it may corrupt the current state of the stream. Data must be coded with the specified file coding (You must use a sound format object to do this).

wxSoundFileStream::Write

wxsoundfilestreamwrite

browse00075

K wxSoundFileStream Write

EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")

K Write

\$#+K! **wxSoundFileStream::SetSoundFormat**

bool SetSoundFormat(const wxSoundFormatBase& *format*)^K

WxSoundFileStream::SetSoundFormat
wxsoundfilestreamsetsoundformat
browse00076
K wxSoundFileStream SetSoundFormat
EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")
K SetSoundFormat

`$#+KKl wxSoundFileStream::GetCodecName`

`wxString GetCodecName() const`

This function returns the Codec name. This is useful for those who want to build a player (But also in some other case).

```
w_xSoundFileStream::GetCodecName
w_xsoundfilestreamgetcodecname
b_rowse00077
K wxSoundFileStream GetCodecName
K GetCodecName
E nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxsoundfilestream')")
```

`$#+K!wxSoundFileStream::CanRead`

`bool CanRead()`^K

You should use this function to test whether this file codec can read the stream you passed to it.

`w`xSoundFileStream::CanRead
`w`xsoundfilestreamcanread
`b`rowse00078
`K` wxSoundFileStream CanRead
`E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")
`K` CanRead

`wxSoundFileStream::PrepareToPlay`

`bool PrepareToPlay()`^K

It is called by `wxSoundFileStream` to prepare the specific file loader to prepare itself to play the file. Actually, this includes reading headers and setting the various parameters of the sound format. This should not be called by an external user but it should be implemented when you inherit `wxSoundFileStream` to build a new codec.

It must return when the file is identified and the parameters have been set. In all other cases, you must return `FALSE`.

^w`wxSoundFileStream::PrepareToPlay`

^w`wxsoundfilestreampreparetoplay`

^b`rowse00079`

^K`wxSoundFileStream PrepareToPlay`

^E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxsoundfilestream')")`

^K`PrepareToPlay`

$\$#+K!$ wxSoundFileStream::PrepareToRecord

bool PrepareToRecord(wxUint32 *time*)^K

^wxSoundFileStream::PrepareToRecord

^wxsoundfilestreampreparetorecord

^browse00080

^K wxSoundFileStream PrepareToRecord

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wsoundfilestream')")

^K PrepareToRecord

\$#+K!wxSoundFileStream::FinishRecording

bool FinishRecording()^K

^wxSoundFileStream::FinishRecording
^wxsoundfilestreamfinishrecording
^browse00081
^K wxSoundFileStream FinishRecording
^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^ mmedia.hlp', `wxsoundfilestream')")
^K FinishRecording

`wxSoundFileStream::RepositionStream`

`bool RepositionStream(wxUint32 position)`^K

This is called by `wxSoundFileStream::SetPosition` to seek the input stream to the right position. This must be overridden by the file codec class. The position is relative to the beginning of the samples. If it is impossible (as for a piped input stream), you must return `FALSE`.

^w`wxSoundFileStream::RepositionStream`

^w`wxsoundfilestreamrepositionstream`

^b`rowse00082`

^K`wxSoundFileStream RepositionStream`

^E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")`

^K`RepositionStream`

wxSoundFileStream::FinishPreparation

void FinishPreparation(wxUInt32 len)^K

This is an internal function but it must be called by the file codec class when the "playing" preparation is finished and you know the size of the stream. If it is an *infinite* stream, you should set this to wxSOUND_INFINITE_TIME.

^wwxSoundFileStream::FinishPreparation

^wwxsoundfilestreamfinishpreparation

^browse00083

^K wxSoundFileStream FinishPreparation

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^media.hlp', `wxsoundfilestream')")

^K FinishPreparation

wxSoundFileStream::GetData

wxUInt32 GetData(void* *buffer*, wxUInt32 *len*)^K

This is called by wxSoundFileStream when it needs to get new sound data to send to the device driver (or to a conversion codec). This must be eventually overridden by the file codec class. The default behaviour is simply to read from the input stream.

^wxSoundFileStream::GetData

^wxsoundfilestreamgetdata

^browse00084

^K wxSoundFileStream GetData

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxsoundfilestream')")

^K GetData

^{\$#+K!}**wxSoundFileStream::PutData**

wxUint32 PutData(const void* *buffer*, wxUint32 *len*)^K

This is called by wxSoundFileStream when it needs to put new sound data received from the device driver (or from a conversion codec). This must be eventually overridden by the file codec class. The default behaviour is simply to write to the input stream.

^wxSoundFileStream::PutData

^wxsoundfilestreamputdata

^browse00085

^K wxSoundFileStream PutData

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wxsoundfilestream')")

^K PutData

$\$#+K!$ wxSoundFormatBase::wxSoundFormatBase

wxSoundFormatBase()^K

w_x SoundFormatBase::wxSoundFormatBase
 w_x soundformatbasewxsoundformatbase
 $b_{rowse00087}$
 $K_{wxSoundFormatBase\ wxSoundFormatBase}$
 $E_{nableButton("Up");ChangeButtonBinding("Up", "JumpId(\`mmedia.hlp', \`wxsoundformatbase')")}$
 $K_{wxSoundFormatBase}$

^{\$#+K!}**wxSoundFormatBase::~wxSoundFormatBase**

~wxSoundFormatBase()^K

^wxSoundFormatBase::~wxSoundFormatBase

^wxsoundformatbasedtor

^browse00088

^K wxSoundFormatBase ~wxSoundFormatBase

^EnableButton("Up");ChangeButtonBinding("Up", "JumpId(`mmedia.hlp', `wsoundformatbase')")

^K ~wxSoundFormatBase

`$#+KK!` **wxSoundFormatBase::GetType**

wxSoundFormatType GetType() const

It returns a "standard" format type.

`w`xSoundFormatBase::GetType

`w`xsoundformatbasegettype

`b`rowse00089

`K` wxSoundFormatBase GetType

`K` GetType

`E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxsoundformatbase`)")

`$#+KKl wxSoundFormatBase::Clone`

`wxSoundFormatBase* Clone() const`

It clones the current format.

`w_xSoundFormatBase::Clone`

`w_xsoundformatbaseclone`

`browse00090`

`K wxSoundFormatBase Clone`

`K Clone`

`EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxsoundformatbase')")`

`$#+KK! wxSoundFormatBase::GetTimeFromBytes`
`wxUint32 GetTimeFromBytes(wxUint32 bytes) const`

`w`xSoundFormatBase::GetTimeFromBytes
`w`xsoundformatbasegettimefrombytes
`b`rowse00091
`K` wxSoundFormatBase GetTimeFromBytes
`K` GetTimeFromBytes
`E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxsoundformatbase`")

`$#+KKl wxSoundFormatBase::GetBytesFromTime`

`wxUint32 GetBytesFromTime(wxUint32 time) const`

`w_xSoundFormatBase::GetBytesFromTime`
`w_xsoundformatbasegetbytesfromtime`
`browse00092`
`K wxSoundFormatBase GetBytesFromTime`
`K GetBytesFromTime`

`EnableButton("Up");ChangeButtonBinding("Up", "JumpId(^ mmedia.hlp', `wxsoundformatbase`")`

`$#+KK!`
wxSoundFormatBase::operator!=

bool operator!=(const wxSoundFormatBase& *fmt2*) const

`w`xSoundFormatBase::operator!=
`w`xsoundformatbaseoperatorneq
`b`rowse00093
`K` wxSoundFormatBase operator!=
`K` operator, =
`E`nableButton("Up");ChangeButtonBinding("Up", "JumpId(^mmedia.hlp', `wxsoundformatbase`")

