

# API Documentation

## API Documentation

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## Contents

<b>Contents</b>	<b>1</b>
<b>1 Package voix</b>	<b>3</b>
1.1 Modules . . . . .	3
1.2 Variables . . . . .	3
<b>2 Module voix.client</b>	<b>4</b>
2.1 Variables . . . . .	4
2.2 Class Client . . . . .	4
2.2.1 Methods . . . . .	4
2.2.2 Properties . . . . .	6
<b>3 Module voix.connection</b>	<b>7</b>
3.1 Variables . . . . .	7
3.2 Class Connection . . . . .	7
3.2.1 Methods . . . . .	7
3.2.2 Properties . . . . .	8
3.2.3 Class Variables . . . . .	8
<b>4 Package voix.interface</b>	<b>9</b>
4.1 Modules . . . . .	9
4.2 Variables . . . . .	9
<b>5 Module voix.interface.cli</b>	<b>10</b>
5.1 Variables . . . . .	10
5.2 Class CLI . . . . .	10
5.2.1 Methods . . . . .	10
5.2.2 Properties . . . . .	11
<b>6 Module voix.interface.gui</b>	<b>12</b>
6.1 Variables . . . . .	12
6.2 Class GUI . . . . .	12
6.2.1 Methods . . . . .	12
6.2.2 Properties . . . . .	14
<b>7 Module voix.message_handler</b>	<b>16</b>
7.1 Variables . . . . .	16
7.2 Class MessageHandler . . . . .	16

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7.2.1	Methods . . . . .	16
7.2.2	Properties . . . . .	16
<b>8</b>	<b>Module voix.parser</b>	<b>17</b>
8.1	Variables . . . . .	17
8.2	Class Parser . . . . .	17
8.2.1	Methods . . . . .	17
8.2.2	Properties . . . . .	17
	<b>Index</b>	<b>18</b>

# 1 Package voix

## 1.1 Modules

- **client**: The main client object.  
(Section 2, p. 4)
- **connection** (Section 3, p. 7)
- **interface** (Section 4, p. 9)
  - **cli** (Section 5, p. 10)
  - **gui** (Section 6, p. 12)
- **message\_handler** (Section 7, p. 16)
- **parser** (Section 8, p. 17)

## 1.2 Variables

Name	Description
<code>--package--</code>	<b>Value:</b> None

## 2 Module `voix.client`

The main client object.

### 2.1 Variables

Name	Description
<code>--package--</code>	<b>Value:</b> <code>'voix'</code>

### 2.2 Class `Client`



Client object.

#### 2.2.1 Methods

**`--init--(self)`**

Initializes the client object

Overrides: `object.--init--`

**`register_update_callback(self, func)`**

**`set_host(self, data)`**

Sets the value of a given field.

Arguments:

- `'field'`:

The field to set the given `'value'`.

- `'value'`:

The value to set.

**set\_port**(*self*, *data*)

Sets the value of a given field.

Arguments:

- 'field':

The field to set the given 'value'.

- 'value':

The value to set.

**connect**(*self*, *data*)

Connects to the server if both hostname and username is set.

**pong**(*self*, *data*)**join\_channel**(*self*, *data*)**message**(*self*, *data*)

Client > Server:

'MSG #Lobby: Hello there!' (Public message in #Lobby. Sender is assigned on server side)

'MSG John: Hi John!' (Private message. Sender is assigned on server side)

Server > Client:

'MSG Mike #Lobby: Hello there!' (Public message in #Lobby. Sent to all clients in the room.)

'MSG Mike John: Hi John' (Private message)

Arguments:

- 'data':

Given the scenarios above, data is a list where 'data[0]' may be a nickname or a channel if 'data[1]' is None.

If 'data[1]' is not None, it can either be a channel or a nickname. In that case 'data[0]' will always be a nickname.

'data[2]' is always the message.

**talk**(*self*, *data*)

Client > Server:  
 'TALK John: Request'

Server > Client:  
 'TALK Mike John: Request' (Private message)

Arguments:  
 - 'data':  
 Given the scenarios above, data is a list where 'data[0]' is  
 always a nickname.  
 If 'data[1]' is not None, this will be the receiver of the  
 code message.  
 'data[2]' is always the code i.e. Request, Accept, Deny, End.

**accepted**(*self*, *data*)

**denied**(*self*, *data*)

**joined\_channel**(*self*, *data*)

**userlist**(*self*, *data*)

**close**(*self*)

Wrapper for the sockets close function.

### *Inherited from object*

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`,  
`__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

### 2.2.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

### 3 Module voix.connection

#### 3.1 Variables

Name	Description
<code>--package--</code>	<b>Value:</b> 'voix'

#### 3.2 Class Connection



##### 3.2.1 Methods

`--init--(self, client, type)`

`x.--init--(...)` initializes x; see `help(type(x))` for signature

Overrides: `object.--init--` extit(inherited documentation)

`connect(self, address)`

`send(self, data)`

`tcp_handler(self)`

`udp_in_handler(self)`

`udp_out_handler(self)`

`is_connected(self)`

`open_stream(self)`

Opens a UDP stream to the server, which redirects the traffic to the connected clients.

<b>close_stream</b> ( <i>self</i> )
-------------------------------------

Opens a UDP stream to the server, which redirects the traffic to the connected clients.
---

<b>close</b> ( <i>self</i> )
------------------------------

Wrapper for the sockets close function.
---

### *Inherited from object*

`--delattr--()`, `--format--()`, `--getattr--()`, `--hash--()`, `--new--()`, `--reduce--()`, `--reduce_ex--()`,  
`--repr--()`, `--setattr--()`, `--sizeof--()`, `--str--()`, `--subclasshook--()`

### 3.2.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>--class--</code>	

### 3.2.3 Class Variables

Name	Description
<code>types</code>	<b>Value:</b> <code>{ 'TCP': 1, 'UDP': 2 }</code>



## 4 Package voix.interface

### 4.1 Modules

- **cli** (*Section 5, p. 10*)
- **gui** (*Section 6, p. 12*)

### 4.2 Variables

Name	Description
--package--	Value: None

## 5 Module voix.interface.cli

### 5.1 Variables

Name	Description
<code>__package__</code>	<b>Value:</b> <code>'voix.interface'</code>

### 5.2 Class CLI



#### 5.2.1 Methods

**`__init__`**(*self*, *client*)

*x*.**`__init__`**(...) initializes *x*; see `help(type(x))` for signature

Overrides: `object.__init__`

**`update`**(*self*, *channel*=None, *userlist*=None)

**`write_message`**(*self*, *author*=None, *recipient*=None, *channel*=None, *message*=None)

Arguments:

- `'message'`:

```
talk_prompt(self, requester=None, responder=None, code=None)
```

Handles all ‘TALK’ related requests and responses.

Arguments:

- ‘message’:

[VoIP] ‘requester’ wish to have a conversation with you. Accept? (y/n)

[VoIP] Awaiting response from ‘responder’...

[VoIP] ‘responder’ has rejected your conversation request.

[VoIP] Your conversation with ‘responder’ has been terminated.

```
talk_timeout_timer(self)
```

```
main_loop(self)
```

### *Inherited from object*

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`,  
`__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

### 5.2.2 Properties

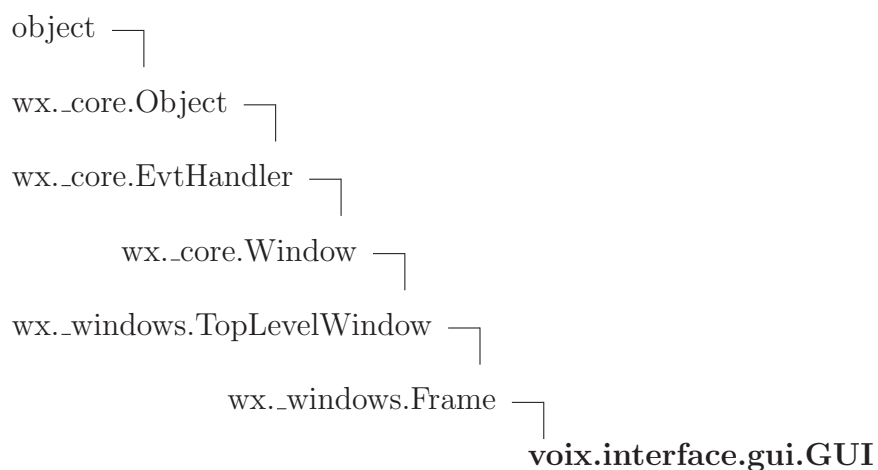
Name	Description
<i>Inherited from object</i>	
<code>__class__</code>	

## 6 Module voix.interface.gui

### 6.1 Variables

Name	Description
<code>--package--</code>	<b>Value:</b> <code>'voix.interface'</code>

### 6.2 Class GUI



#### 6.2.1 Methods

<b><code>--init--(self, parent, id, title)</code></b>
Initializes the GUI
Arguments:
- 'self':
- 'parent':
- 'id':
- 'title':
<b>Return Value</b>
EvtHandler
Overrides: <code>object.__init__</code>

*Inherited from `wx._windows.Frame`*

`Command()`, `Create()`, `CreateStatusBar()`, `CreateToolBar()`, `DoGiveHelp()`, `DoMenu-`

Updates(), GetClassDefaultAttributes(), GetMenuBar(), GetStatusBar(), GetStatusBarPane(), GetToolBar(), PopStatusText(), ProcessCommand(), PushStatusText(), SendSizeEvent(), SetMenuBar(), SetStatusBar(), SetStatusBarPane(), SetStatusText(), SetStatusWidths(), SetToolBar()

### ***Inherited from wx.\_windows.TopLevelWindow***

CenterOnScreen(), CentreOnScreen(), EnableCloseButton(), GetDefaultItem(), GetIcon(), GetTitle(), GetTmpDefaultItem(), Iconize(), IsActive(), IsAlwaysMaximized(), IsFullScreen(), IsIconized(), IsMaximized(), MacGetMetalAppearance(), MacGetTopLevelWindowRef(), MacGetUnifiedAppearance(), MacSetMetalAppearance(), Maximize(), RequestUserAttention(), Restore(), SetDefaultItem(), SetIcon(), SetIcons(), SetShape(), SetTitle(), SetTmpDefaultItem(), ShowFullScreen(), \_\_repr\_\_()

### ***Inherited from wx.\_core.Window***

AcceptsFocus(), AcceptsFocusFromKeyboard(), AddChild(), AdjustForLayoutDirection(), AssociateHandle(), CacheBestSize(), CanSetTransparent(), CaptureMouse(), Center(), CenterOnParent(), Centre(), CentreOnParent(), ClearBackground(), ClientToScreen(), ClientToScreenXY(), ClientToWindowSize(), Close(), ConvertDialogPointToPixels(), ConvertDialogSizeToPixels(), ConvertPixelPointToDialog(), ConvertPixelSizeToDialog(), DLG\_PNT(), DLG\_SZE(), Destroy(), DestroyChildren(), Disable(), DissociateHandle(), DragAcceptFiles(), Enable(), FindFocus(), FindWindowById(), FindWindowByLabel(), FindWindowByName(), Fit(), FitInside(), Freeze(), GetAcceleratorTable(), GetAdjustedBestSize(), GetAutoLayout(), GetBackgroundColour(), GetBackgroundStyle(), GetBestFittingSize(), GetBestSize(), GetBestSizeTuple(), GetBestVirtualSize(), GetBorder(), GetCapture(), GetCaret(), GetCharHeight(), GetCharWidth(), GetChildren(), GetClientAreaOrigin(), GetClientRect(), GetClientSize(), GetClientSizeTuple(), GetConstraints(), GetContainingSizer(), GetCursor(), GetDefaultAttributes(), GetDropTarget(), GetEffectiveMinSize(), GetEventHandler(), GetExtraStyle(), GetFont(), GetForegroundColour(), GetFullTextExtent(), GetGrandParent(), GetGtkWidget(), GetHandle(), GetHelpText(), GetHelpTextAtPoint(), GetId(), GetLabel(), GetLayoutDirection(), GetMaxHeight(), GetMaxSize(), GetMaxWidth(), GetMinHeight(), GetMinSize(), GetMinWidth(), GetName(), GetParent(), GetPosition(), GetPositionTuple(), GetRect(), GetScreenPosition(), GetScreenPositionTuple(), GetScreenRect(), GetScrollPos(), GetScrollRange(), GetScrollThumb(), GetSize(), GetSizeTuple(), GetSizer(), GetTextExtent(), GetThemeEnabled(), GetToolTip(), GetToolTipString(), GetTopLevelParent(), GetUpdateClientRect(), GetUpdateRegion(), GetValidator(), GetVirtualSize(), GetVirtualSizeTuple(), GetWindowBorderSize(), GetWindowStyle(), GetWindowStyleFlag(), GetWindowVariant(), HasCapture(), HasFlag(), HasMultiplePages(), HasScrollbar(), HasTransparentBackground(), Hide(), HitTest(), HitTestXY(), InheritAttributes(), InheritsBackgroundColour(), InitDialog(), InvalidateBestSize(), IsBeingDeleted(), IsDoubleBuffered(), IsEnabled(), IsExposed(), IsExposedPoint(), IsExposedRect(), IsFrozen(), IsRetained(), IsShown(), IsShownOnScreen(), IsTopLevel(), Layout(), LineDown(), LineUp(), Lower(), MakeModal(),

Move(), MoveAfterInTabOrder(), MoveBeforeInTabOrder(), MoveXY(), Navigate(), NewControlId(), NextControlId(), PageDown(), PageUp(), PopEventHandler(), PopupMenu(), PopupMenuXY(), PostCreate(), PrepareDC(), PrevControlId(), PushEventHandler(), Raise(), Refresh(), RefreshRect(), RegisterHotKey(), ReleaseMouse(), RemoveChild(), RemoveEventHandler(), Reparent(), ScreenToClient(), ScreenToClientXY(), ScrollLines(), ScrollPages(), ScrollWindow(), SetAcceleratorTable(), SetAutoLayout(), SetBackgroundColour(), SetBackgroundStyle(), SetBestFittingSize(), SetCaret(), SetClientRect(), SetClientSize(), SetClientSizeWH(), SetConstraints(), SetContainingSizer(), SetCursor(), SetDimensions(), SetDoubleBuffered(), SetDropTarget(), SetEventHandler(), SetExtraStyle(), SetFocus(), SetFocusFromKbd(), SetFont(), SetForegroundColour(), SetHelpText(), SetHelpTextForId(), SetId(), SetInitialSize(), SetLabel(), SetLayoutDirection(), SetMaxSize(), SetMinSize(), SetName(), SetOwnBackgroundColour(), SetOwnFont(), SetOwnForegroundColour(), SetPosition(), SetRect(), SetScrollPos(), SetScrollbar(), SetSize(), SetSizeHints(), SetSizeHintsSz(), SetSizeWH(), SetSizer(), SetSizerAndFit(), SetThemeEnabled(), SetToolTip(), SetToolTipString(), SetTransparent(), SetValidator(), SetVirtualSize(), SetVirtualSizeHints(), SetVirtualSizeHintsSz(), SetVirtualSizeWH(), SetWindowStyle(), SetWindowStyleFlag(), SetWindowVariant(), ShouldInheritColours(), Show(), Thaw(), ToggleWindowStyle(), TransferDataFromWindow(), TransferDataToWindow(), UnregisterHotKey(), Update(), UpdateWindowUI(), UseBgCol(), Validate(), WarpPointer(), WindowToClientSize()

#### *Inherited from wx.\_core.EvtHandler*

AddPendingEvent(), Bind(), Connect(), Disconnect(), GetEvtHandlerEnabled(), GetNextHandler(), GetPreviousHandler(), ProcessEvent(), ProcessPendingEvents(), SetEvtHandlerEnabled(), SetNextHandler(), SetPreviousHandler(), Unbind()

#### *Inherited from wx.\_core.Object*

GetClassName(), IsSameAs()

#### *Inherited from object*

\_\_delattr\_\_(), \_\_format\_\_(), \_\_getattr\_\_(), \_\_hash\_\_(), \_\_new\_\_(), \_\_reduce\_\_(), \_\_reduce\_ex\_\_(), \_\_setattr\_\_(), \_\_sizeof\_\_(), \_\_str\_\_(), \_\_subclasshook\_\_()

### 6.2.2 Properties

Name	Description
<i>Inherited from wx._windows.Frame</i>	
MenuBar, StatusBar, StatusBarPane, ToolBar, thisown	
<i>Inherited from wx._windows.TopLevelWindow</i>	
DefaultItem, Icon, Title, TmpDefaultItem	
<i>Inherited from wx._core.Window</i>	

*continued on next page*

Name	Description
	AcceleratorTable, AutoLayout, BackgroundColour, BackgroundStyle, BestSize, BestVirtualSize, Border, Caret, CharHeight, CharWidth, Children, ClientAreaOrigin, ClientRect, ClientSize, Constraints, ContainingSizer, Cursor, DefaultAttributes, DropTarget, EffectiveMinSize, Enabled, EventHandler, ExtraStyle, Font, ForegroundColour, GrandParent, GtkWidget, Handle, HelpText, Id, Label, LayoutDirection, MaxHeight, MaxSize, MaxWidth, MinHeight, MinSize, MinWidth, Name, Parent, Position, Rect, ScreenPosition, ScreenRect, Shown, Size, Sizer, ThemeEnabled, ToolTip, ToolTipString, TopLevel, TopLevelParent, UpdateClientRect, UpdateRegion, Validator, VirtualSize, WindowStyle, WindowStyleFlag, WindowVariant
	<i>Inherited from wx._core.EvtHandler</i> EvtHandlerEnabled, NextHandler, PreviousHandler
	<i>Inherited from wx._core.Object</i> ClassName
	<i>Inherited from object</i> __class__

## 7 Module `voix.message_handler`

### 7.1 Variables

Name	Description
<code>__package__</code>	<b>Value:</b> <code>None</code>

### 7.2 Class `MessageHandler`



#### 7.2.1 Methods

<b><code>__init__(self)</code></b>
SAP!
Overrides: <code>object.__init__</code>

<b><code>register_message_callback(self, func)</code></b>
author, recipient, channel, message

<b><code>register_talk_callback(self, func)</code></b>
requester, responder

#### *Inherited from `object`*

`__delattr__()`, `__format__()`, `__getattr__()`, `__hash__()`, `__new__()`, `__reduce__()`, `__reduce_ex__()`, `__repr__()`, `__setattr__()`, `__sizeof__()`, `__str__()`, `__subclasshook__()`

#### 7.2.2 Properties

Name	Description
<i>Inherited from <code>object</code></i>	
<code>__class__</code>	



## 8 Module voix.parser

### 8.1 Variables

Name	Description
<code>--package--</code>	<b>Value:</b> 'voix'

### 8.2 Class Parser

object └─  
          **voix.parser.Parser**

#### 8.2.1 Methods

**`--init--`**(*self*, *client*)

*x*.`--init--`(...) initializes *x*; see `help(type(x))` for signature

Overrides: `object.--init--` extit(inherited documentation)

**`parse`**(*self*, *data*)

Arguments:

- 'self':
- 'data':

#### *Inherited from object*

`--delattr--`(), `--format--`(), `--getattribute--`(), `--hash--`(), `--new--`(), `--reduce--`(), `--reduce_ex--`(),  
`--repr--`(), `--setattr--`(), `--sizeof--`(), `--str--`(), `--subclasshook--`()

#### 8.2.2 Properties

Name	Description
<i>Inherited from object</i>	
<code>--class--</code>	

## Index

- voix (*package*), 3
  - voix.client (*module*), 4–6
    - voix.client.Client (*class*), 4–6
  - voix.connection (*module*), 7–8
    - voix.connection.Connection (*class*), 7–8
  - voix.interface (*package*), 9
    - voix.interface.cli (*module*), 10–11
    - voix.interface.gui (*module*), 12–15
  - voix.message\_handler (*module*), 16
    - voix.message\_handler.MessageHandler (*class*), 16
  - voix.parser (*module*), 17
    - voix.parser.Parser (*class*), 17