# wxErlang

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**March 26, 2018**

# 1 wxErlang User's Guide

The **wxErlang** application is an api for writing graphical user interfaces with wxWidgets.

## 1.1 wx the erlang binding of wxWidgets

The **wx** application is an erlang binding of **wxWidgets**. This document describes the erlang mapping to wxWidgets and it's implementation. It is not a complete users guide to wxWidgets. If you need that, you will have to read the wxWidgets documentation instead. **wx** tries to keep a one-to-one mapping with the original API so that the original documentation and examples shall be as easy as possible to use.

wxErlang examples and test suite can be found in the erlang src release. They can also provide some help on how to use the API.

This is currently a very brief introduction to **wx**. The application is still under development, which means the interface may change, and the test suite currently have a poor coverage ratio.

### 1.1.1 Contents


- *Introduction*
- *Multiple processes and memory handling*
- *Event Handling*
- *Acknowledgments*


### 1.1.2 Introduction

The original **wxWidgets** is an object-oriented (C++) API and that is reflected in the erlang mapping. In most cases each class in wxWidgets is represented as a module in erlang. This gives the **wx** application a huge interface, spread over several modules, and it all starts with the **wx** module. The **wx** module contains functions to create and destroy the GUI, i.e. `wx:new/0`, `wx:destroy/0`, and some other useful functions.

Objects or object references in **wx** should be seen as erlang processes rather than erlang terms. When you operate on them they can change state, e.g. they are not functional objects as erlang terms are. Each object has a type or rather a class, which is manipulated with the corresponding module or by sub-classes of that object. Type checking is done so that a module only operates on it's objects or inherited classes.

An object is created with **new** and destroyed with **destroy**. Most functions in the classes are named the same as their C++ counterpart, except that for convenience, in erlang they start with a lowercase letter and the first argument is the object reference. Optional arguments are last and expressed as tagged tuples in any order.

For example the **wxWindow** C++ class is implemented in the **wxWindow** erlang module and the member **wxWindow::CenterOnParent** is thus **wxWindow:centerOnParent**. The following C++ code:

```
wxWindow MyWin = new wxWindow();
MyWin.CenterOnParent(wxVERTICAL);
...
delete MyWin;
```

would in erlang look like:

```
MyWin = wxWindow:new(),
wxWindow:centerOnParent(MyWin, [{dir,?wxVERTICAL}]),
...
wxWindow:destroy(MyWin),
```

When you are reading wxWidgets documentation or the examples, you will notice that some of the most basic classes are missing in **wx**, they are directly mapped to corresponding erlang terms:

**wxPoint** is represented by {Xcoord,Ycoord}
**wxSize** is represented by {Width,Height}
**wxRect** is represented by {Xcoord,Ycoord,Width,Height}
**wxColour** is represented by {Red,Green,Blue[,Alpha]}
**wxPoint** is represented by {Xcoord,Ycoord}
**wxString** is represented by *unicode:charlist()*
**wxGBPosition** is represented by {Row,Column}
**wxGBSpan** is represented by {RowSpan,ColumnSPan}
**wxGridCellCoords** is represented by {Row,Column}

In the places where the erlang API differs from the original one it should be obvious from the erlang documentation which representation has been used. E.g. the C++ arrays and/or lists are sometimes represented as erlang lists and sometimes as tuples.

Colours are represented with {Red,Green,Blue[,Alpha]}, the Alpha value is optional when used as an argument to functions, but it will always be returned from **wx** functions.

Defines, enumerations and global variables exists in `wx.hrl` as defines. Most of these defines are constants but not all. Some are platform dependent and therefore the global variables must be instantiated during runtime. These will be acquired from the driver with a call, so not all defines can be used in matching statements. Class local enumerations will be prefixed with the class name and a underscore as in `ClassName_Enum`.

Additionally some global functions, i.e. non-class functions, exist in the `wx_misc` module.

**wxErlang** is implemented as a (threaded) driver and a rather direct interface to the C++ API, with the drawback that if the erlang programmer does an error, it might crash the emulator.

Since the driver is threaded it requires a **smp** enabled emulator, that provides a thread safe interface to the driver.

### 1.1.3 Multiple processes and memory handling

The intention is that each erlang application calls wx:new() once to setup it's GUI which creates an environment and a memory mapping. To be able to use **wx** from several processes in your application, you must share the environment. You can get the active environment with `wx:get_env/0` and set it in the new processes with `wx:set_env/1`. Two processes or applications which have both called wx:new() will not be able use each others objects.

```
wx:new(),
MyWin = wxFrame:new(wx:null(), 42, "Example", []),
Env = wx:get_env(),
spawn(fun() ->
         wx:set_env(Env),
         %% Here you can do wx calls from your helper process.
         ...
      end),
...
```

When `wx:destroy/0` is invoked or when all processes in the application have died, the memory is deleted and all windows created by that application are closed.

The **wx** application never cleans or garbage collects memory as long as the user application is alive. Most of the objects are deleted when a window is closed, or at least all the objects which have a parent argument that is non null. By using `wxCLASS:destroy/1` when possible you can avoid an increasing memory usage. This is especially important when **wxWidgets** assumes or recommends that you (or rather the C++ programmer) have allocated the object on the stack since that will never be done in the erlang binding. For example `wxDC` class or its sub-classes or `wxSizerFlags`.

Currently the dialogs show modal function freezes wxWidgets until the dialog is closed. That is intended but in erlang where you can have several GUI applications running at the same time it causes trouble. This will hopefully be fixed in future **wxWidgets** releases.

## 1.1.4 Event Handling

Event handling in **wx** differs most from the original API. You must specify every event you want to handle in **wxWidgets**, that is the same in the erlang binding but you can choose to receive the events as messages or handle them with callback **funs**.

Otherwise the event subscription is handled as **wxWidgets** dynamic event-handler connection. You subscribe to events of a certain type from objects with an **ID** or within a range of **ID**s. The callback **fun** is optional, if not supplied the event will be sent to the process that called **connect/2**. Thus, a handler is a callback **fun** or a process which will receive an event message.

Events are handled in order from bottom to top, in the widgets hierarchy, by the last subscribed handler first. Depending on if `wxEvent:skip()` is called the event will be handled by the other handler(s) afterwards. Most of the events have default event handler(s) installed.

Message events looks like *#wx{id=integer(), obj=wx:wxObject(), userData=term(), event=Rec* }. The **id** is the identifier of the object that received the event. The **obj** field contains the object that you used **connect** on. The **userData** field contains a user supplied term, this is an option to **connect**. And the **event** field contains a record with event type dependent information. The first element in the event record is always the type you subscribed to. For example if you subscribed to **key_up** events you will receive the `#wx{event=Event}` where **Event** will be a **wxKey** event record where `Event#wxKey.type = key_up`.

In **wxWidgets** the developer has to call `wxEvent:skip()` if he wants the event to be processed by other handlers. You can do the same in **wx** if you use callbacks. If you want the event as messages you just don't supply a callback and you can set the **skip** option in **connect** call to true or false, the default it is false. True means that you get the message but let the subsequent handlers also handle the event. If you want to change this behavior dynamically you must use callbacks and call `wxEvent:skip()`.

Callback event handling is done by using the optional callback **fun/2** when attaching the handler. The **fun(#wx{},wxObject()** must take two arguments where the first is the same as with message events described above and the second is an object reference to the actual event object. With the event object you can call `wxEvent:skip()` and access all the data. When using callbacks you must call `wxEvent:skip()` by yourself if you want any of the events to be forwarded to the following handlers. The actual event objects are deleted after the **fun** returns.

The callbacks are always invoked by another process and have exclusive usage of the GUI when invoked. This means that a callback **fun** can not use the process dictionary and should not make calls to other processes. Calls to another process inside a callback **fun** may cause a deadlock if the other process is waiting on completion of his call to the GUI.

## 1.1.5 Acknowledgments

Mats-Ola Persson wrote the initial **wxWidgets** binding as part of his master thesis. The current version is a total re-write but many ideas have been reused. The reason for the re-write was mostly due to the limited requirements he had been given by us.

Also thanks to the **wxWidgets** team that develops and supports it so we have something to use.

# 2 Reference Manual

The **wxErlang** application is an api for writing graphical user interfaces with wxWidgets.

# wx

Erlang module

A port of **wxWidgets**.

This is the base api of **wxWidgets**. This module contains functions for starting and stopping the wx-server, as well as other utility functions.

wxWidgets is object oriented, and not functional. Thus, in wxErlang a module represents a class, and the object created by this class has an own type, wxCLASS(). This module represents the base class, and all other wxMODULE's are sub-classes of this class.

Objects of a class are created with wxCLASS:new(...) and destroyed with wxCLASS:destroy(). Member functions are called with wxCLASS:member(Object, ...) instead of as in C++ Object.member(...).

Sub class modules inherit (non static) functions from their parents. The inherited functions are not documented in the sub-classes.

This erlang port of wxWidgets tries to be a one-to-one mapping with the original wxWidgets library. Some things are different though, as the optional arguments use property lists and can be in any order. The main difference is the event handling which is different from the original library. See *wxEvtHandler*.

The following classes are implemented directly as erlang types: wxPoint={x,y},wxSize={w,h},wxRect={x,y,w,h},wxColour={r,g,b [,a]}, wxString=*unicode:chardata()*, wxGBPosition={r,c},wxGBSpan={rs,cs},wxGridCellCoords={r,c}.

wxWidgets uses a process specific environment, which is created by *wx:new/0*. To be able to use the environment from other processes, call *get_env/0* to retrieve the environment and *set_env/1* to assign the environment in the other process.

Global (classless) functions are located in the wx_misc module.

## DATA TYPES

wx_colour() = {R::byte(), G::byte(), B::byte()} | *wx_colour4()*

wx_colour4() = {R::byte(), G::byte(), B::byte(), A::byte()}

wx_datetime() = {{Year::integer(), Month::integer(), Day::integer()}, {Hour::integer(), Minute::integer(), Second::integer()}}

In Local Timezone

wx_enum() = integer()

Constant defined in wx.hrl

wx_env() = #wx_env{}

Opaque process environment

wx_memory() = binary() | #wx_mem{}

Opaque memory reference

wx_object() = #wx_ref{}

Opaque object reference

wx_wxHtmlLinkInfo() = #wxHtmlLinkInfo{href=*unicode:chardata()*, target=*unicode:chardata()*}

wx_wxMouseState() = #wxMouseState{x=integer(), y=integer(), leftDown=boolean(), middleDown=boolean(), rightDown=boolean(), controlDown=boolean(), shiftDown=boolean(), altDown=boolean(), metaDown=boolean(), cmdDown=boolean()}

See #wxMouseState{} defined in wx.hrl

## Exports

```
parent_class(X1) -> term()
```

```
new() -> wx_object()
```

Starts a wx server.

```
new(Options::[Option]) -> wx_object()
```

Types:

**`Option = {debug, list() | atom()} | {silent_start, boolean()}`**

Starts a wx server. Option may be {debug, Level}, see debug/1. Or {silent_start, Bool}, which causes error messages at startup to be suppressed. The latter can be used as a silent test of whether wx is properly installed or not.

```
destroy() -> ok
```

Stops a wx server.

```
get_env() -> wx_env()
```

Gets this process's current wx environment. Can be sent to other processes to allow them use this process wx environment.

**See also:** *set_env/1*.

```
set_env(Wx_env::wx_env()) -> ok
```

Sets the process wx environment, allows this process to use another process wx environment.

```
null() -> wx_object()
```

Returns the null object

```
is_null(Wx_ref::wx_object()) -> boolean()
```

Returns true if object is null, false otherwise

```
equal(Wx_ref::wx_object(), X2::wx_object()) -> boolean()
```

Returns true if both arguments references the same object, false otherwise

```
getObjectType(Wx_ref::wx_object()) -> atom()
```

Returns the object type

```
typeCast(Old::wx_object(), NewType::atom()) -> wx_object()
```

Casts the object to class NewType. It is needed when using functions like wxWindow:findWindow/2, which returns a generic wxObject type.

```
batch(Fun::function()) -> term()
```

Batches all `wx` commands used in the fun. Improves performance of the command processing by grabbing the wxWidgets thread so that no event processing will be done before the complete batch of commands is invoked.

**See also:** *foldl/3*, *foldr/3*, *foreach/2*, *map/2*.

```
foreach(Fun::function(), List::list()) -> ok
```

Behaves like *lists:foreach/2* but batches wx commands. See *batch/1*.

```
map(Fun::function(), List::list()) -> list()
```

Behaves like *lists:map/2* but batches wx commands. See *batch/1*.

```
foldl(Fun::function(), Acc::term(), List::list()) -> term()
```

Behaves like *lists:foldl/3* but batches wx commands. See *batch/1*.

```
foldr(Fun::function(), Acc::term(), List::list()) -> term()
```

Behaves like *lists:foldr/3* but batches wx commands. See *batch/1*.

```
create_memory(Size::integer()) -> wx_memory()
```

Creates a memory area (of Size in bytes) which can be used by an external library (i.e. opengl). It is up to the client to keep a reference to this object so it does not get garbage collected by erlang while still in use by the external library.

This is far from erlang's intentional usage and can crash the erlang emulator. Use it carefully.

```
get_memory_bin(Wx_mem::wx_memory()) -> binary()
```

Returns the memory area as a binary.

```
retain_memory(Wx_mem::wx_memory()) -> ok
```

Saves the memory from deletion until release_memory/1 is called. If release_memory/1 is not called the memory will not be garbage collected.

```
release_memory(Wx_mem::wx_memory()) -> ok
```

```
debug(Debug::Level | [Level]) -> ok
```

Types:

**`Level = none | verbose | trace | driver | integer()`**

Sets debug level. If debug level is 'verbose' or 'trace' each call is printed on console. If Level is 'driver' each allocated object and deletion is printed on the console.

```
demo() -> ok | {error, atom()}
```

Starts a wxErlang demo if examples directory exists and is compiled

# wx_object

Erlang module

wx_object - Generic wx object behaviour

This is a behaviour module that can be used for "sub classing" wx objects. It works like a regular gen_server module and creates a server per object.

NOTE: Currently no form of inheritance is implemented.

The user module should export:

init(Args) should return
{wxObject, State} | {wxObject, State, Timeout} | ignore | {stop, Reason}

Asynchronous window event handling:
handle_event(#wx{}, State) should return
{noreply, State} | {noreply, State, Timeout} | {stop, Reason, State}

The user module can export the following callback functions:

handle_call(Msg, {From, Tag}, State) should return
{reply, Reply, State} | {reply, Reply, State, Timeout} | {noreply, State} | {noreply, State, Timeout} | {stop, Reason, Reply, State}

handle_cast(Msg, State) should return
{noreply, State} | {noreply, State, Timeout} | {stop, Reason, State}

If the above are not exported but called, the wx_object process will crash. The user module can also export:

Info is message e.g. {'EXIT', P, R}, {nodedown, N}, ...
handle_info(Info, State) should return , ...
{noreply, State} | {noreply, State, Timeout} | {stop, Reason, State}

If a message is sent to the wx_object process when handle_info is not exported, the message will be dropped and ignored.

When stop is returned in one of the functions above with Reason = normal | shutdown | Term, terminate(State) is called. It lets the user module clean up, it is always called when server terminates or when wx_object() in the driver is deleted. If the Parent process terminates the Module:terminate/2 function is called.
terminate(Reason, State)

Example:

```
-module(myDialog).
-export([new/2, show/1, destroy/1]).  %% API
-export([init/1, handle_call/3, handle_event/2,
         handle_info/2, code_change/3, terminate/2]).
         new/2, showModal/1, destroy/1]).  %% Callbacks

%% Client API
new(Parent, Msg) ->
   wx_object:start(?MODULE, [Parent,Id], []).

show(Dialog) ->
   wx_object:call(Dialog, show_modal).

destroy(Dialog) ->
   wx_object:call(Dialog, destroy).

%% Server Implementation ala gen_server
init([Parent, Str]) ->
   Dialog = wxDialog:new(Parent, 42, "Testing", []),
   ...
   wxDialog:connect(Dialog, command_button_clicked),
   {Dialog, MyState}.

handle_call(show, _From, State) ->
   wxDialog:show(State#state.win),
   {reply, ok, State};
...
handle_event(#wx{}, State) ->
   io:format("Users clicked button~n",[]),
   {noreply, State};
...
```

## Exports

`start(Name, Mod, Args, Options) -> wxWindow:wxWindow() | {error, term()}`

Types:

**`Name = {local, atom()}`**
**`Mod = atom()`**
**`Args = term()`**
**`Flag = trace | log | {logfile, string()} | statistics | debug`**
**`Options = [{timeout, timeout()} | {debug, [Flag]}]`**

Starts a generic wx_object server and invokes Mod:init(Args) in the new process.

`start_link(Mod, Args, Options) -> wxWindow:wxWindow() | {error, term()}`

Types:

**`Mod = atom()`**
**`Args = term()`**
**`Flag = trace | log | {logfile, string()} | statistics | debug`**
**`Options = [{timeout, timeout()} | {debug, [Flag]}]`**

Starts a generic wx_object server and invokes Mod:init(Args) in the new process.

`start_link(Name, Mod, Args, Options) -> wxWindow:wxWindow() | {error, term()}`

Types:

**Name = {local, atom()}**
**Mod = atom()**
**Args = term()**
**Flag = trace | log | {logfile, string()} | statistics | debug**
**Options = [{timeout, timeout()} | {debug, [Flag]}]**

Starts a generic wx_object server and invokes Mod:init(Args) in the new process.

`stop(Obj) -> ok`

Types:

**Obj = *wx:wx_object()* | atom() | pid()**

Stops a generic wx_object server with reason 'normal'. Invokes terminate(Reason,State) in the server. The call waits until the process is terminated. If the process does not exist, an exception is raised.

`stop(Obj, Reason, Timeout) -> ok`

Types:

**Obj = *wx:wx_object()* | atom() | pid()**
**Reason = term()**
**Timeout = timeout()**

Stops a generic wx_object server with the given Reason. Invokes terminate(Reason,State) in the server. The call waits until the process is terminated. If the call times out, or if the process does not exist, an exception is raised.

`call(Obj, Request) -> term()`

Types:

**Obj = *wx:wx_object()* | atom() | pid()**
**Request = term()**

Make a call to a wx_object server. The call waits until it gets a result. Invokes handle_call(Request, From, State) in the server

`call(Obj, Request, Timeout) -> term()`

Types:

**Obj = *wx:wx_object()* | atom() | pid()**
**Request = term()**
**Timeout = integer()**

Make a call to a wx_object server with a timeout. Invokes handle_call(Request, From, State) in server

`cast(Obj, Request) -> ok`

Types:

**Obj = *wx:wx_object()* | atom() | pid()**
**Request = term()**

Make a cast to a wx_object server. Invokes handle_cast(Request, State) in the server

`get_pid(Obj) -> pid()`

Types:

**Obj = *wx:wx_object()* | atom() | pid()**

Get the pid of the object handle.

```
set_pid(Obj, Pid::pid()) -> wx:wx_object()
```

Types:

**Obj = *wx:wx_object()* | atom() | pid()**

Sets the controlling process of the object handle.

```
reply(X1::{pid(), Tag::term()}, Reply::term()) -> pid()
```

Get the pid of the object handle.

# wxAcceleratorEntry

Erlang module

See external documentation: **wxAcceleratorEntry**.

## DATA TYPES

wxAcceleratorEntry()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxAcceleratorEntry()
```

Equivalent to *new([])*.

```
new(Options::[Option]) -> wxAcceleratorEntry()
```

Types:

**Option = {flags, integer()} | {keyCode, integer()} | {cmd, integer()} | {item, *wxMenuItem:wxMenuItem()*}**

See **external documentation**.
Also:
new(Entry) -> wxAcceleratorEntry() when
Entry::wxAcceleratorEntry().

```
getCommand(This) -> integer()
```

Types:

**This = *wxAcceleratorEntry()***

See **external documentation**.

```
getFlags(This) -> integer()
```

Types:

**This = *wxAcceleratorEntry()***

See **external documentation**.

```
getKeyCode(This) -> integer()
```

Types:

**This = *wxAcceleratorEntry()***

See **external documentation**.

```
set(This, Flags, KeyCode, Cmd) -> ok
```

Types:

**This = *wxAcceleratorEntry()***

**Flags = integer()**
**KeyCode = integer()**
**Cmd = integer()**

Equivalent to *set(This, Flags, KeyCode, Cmd, [])*.

`set(This, Flags, KeyCode, Cmd, Options::[Option]) -> ok`

Types:

**This = *wxAcceleratorEntry()***
**Flags = integer()**
**KeyCode = integer()**
**Cmd = integer()**
**Option = {item, *wxMenuItem:wxMenuItem()*}**

See **external documentation**.

`destroy(This::wxAcceleratorEntry()) -> ok`

Destroys this object, do not use object again

# wxAcceleratorTable

Erlang module

See external documentation: **wxAcceleratorTable**.

## DATA TYPES

wxAcceleratorTable()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxAcceleratorTable()
```

See **external documentation**.

```
new(N, Entries) -> wxAcceleratorTable()
```

Types:

**N = integer()**
**Entries = [*wxAcceleratorEntry:wxAcceleratorEntry()*]**

See **external documentation**.

```
ok(This) -> boolean()
```

Types:

**This = *wxAcceleratorTable()***

See **external documentation**.

```
destroy(This::wxAcceleratorTable()) -> ok
```

Destroys this object, do not use object again

# wxActivateEvent

Erlang module

See external documentation: **wxActivateEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**activate**, **activate_app**, **hibernate**

See also the message variant *#wxActivate{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxActivateEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getActive(This) -> boolean()
```

Types:

```
This = wxActivateEvent()
```

See **external documentation**.

# wxArtProvider

Erlang module

See external documentation: **wxArtProvider**.

## DATA TYPES

wxArtProvider()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getBitmap(Id) -> wxBitmap:wxBitmap()
```

Types:

**Id = *unicode:chardata()***

Equivalent to *getBitmap(Id, [])*.

```
getBitmap(Id, Options::[Option]) -> wxBitmap:wxBitmap()
```

Types:

**Id = *unicode:chardata()***

**Option = {client, *unicode:chardata()*} | {size, {W::integer(), H::integer()}}**

See **external documentation**.

```
getIcon(Id) -> wxIcon:wxIcon()
```

Types:

**Id = *unicode:chardata()***

Equivalent to *getIcon(Id, [])*.

```
getIcon(Id, Options::[Option]) -> wxIcon:wxIcon()
```

Types:

**Id = *unicode:chardata()***

**Option = {client, *unicode:chardata()*} | {size, {W::integer(), H::integer()}}**

See **external documentation**.

# wxAuiDockArt

Erlang module

See external documentation: **wxAuiDockArt**.

## DATA TYPES

wxAuiDockArt()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getColour(This, Id) -> wx:wx_colour4()`

Types:

**This = *wxAuiDockArt()***
**Id = integer()**

See **external documentation**.

`getFont(This, Id) -> wxFont:wxFont()`

Types:

**This = *wxAuiDockArt()***
**Id = integer()**

See **external documentation**.

`getMetric(This, Id) -> integer()`

Types:

**This = *wxAuiDockArt()***
**Id = integer()**

See **external documentation**.

`setColour(This, Id, Colour) -> ok`

Types:

**This = *wxAuiDockArt()***
**Id = integer()**
**Colour = *wx:wx_colour()***

See **external documentation**.

`setFont(This, Id, Font) -> ok`

Types:

**This = *wxAuiDockArt()***
**Id = integer()**
**Font = *wxFont:wxFont()***

See **external documentation**.

```
setMetric(This, Id, New_val) -> ok
```

Types:

**This = *wxAuiDockArt()***
**Id = integer()**
**New_val = integer()**

See **external documentation**.

# wxAuiManager

Erlang module

See external documentation: **wxAuiManager**.

This class is derived (and can use functions) from:
*wxEvtHandler*

## DATA TYPES

wxAuiManager()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxAuiManager()`

Equivalent to *new([])*.

`new(Options::[Option]) -> wxAuiManager()`

Types:

**`Option = {managed_wnd, wxWindow:wxWindow()} | {flags, integer()}`**

See **external documentation**.

`addPane(This, Window) -> boolean()`

Types:

**`This = wxAuiManager()`**
**`Window = wxWindow:wxWindow()`**

Equivalent to *addPane(This, Window, [])*.

`addPane(This, Window, Options::[Option]) -> boolean()`

Types:

**`This = wxAuiManager()`**
**`Window = wxWindow:wxWindow()`**
**`Option = {direction, integer()} | {caption, unicode:chardata()}`**

See **external documentation**.
Also:
addPane(This, Window, Pane_info) -> boolean() when
This::wxAuiManager(), Window::wxWindow:wxWindow(), Pane_info::wxAuiPaneInfo:wxAuiPaneInfo().

`addPane(This, Window, Pane_info, Drop_pos) -> boolean()`

Types:

**`This = wxAuiManager()`**
**`Window = wxWindow:wxWindow()`**

**Pane_info = *wxAuiPaneInfo:wxAuiPaneInfo()***
**Drop_pos = {X::integer(), Y::integer()}**

See **external documentation**.

`detachPane(This, Window) -> boolean()`

Types:

**This = *wxAuiManager()***
**Window = *wxWindow:wxWindow()***

See **external documentation**.

`getAllPanes(This) -> [wxAuiPaneInfo:wxAuiPaneInfo()]`

Types:

**This = *wxAuiManager()***

See **external documentation**.

`getArtProvider(This) -> wxAuiDockArt:wxAuiDockArt()`

Types:

**This = *wxAuiManager()***

See **external documentation**.

`getDockSizeConstraint(This) -> {Width_pct::number(), Height_pct::number()}`

Types:

**This = *wxAuiManager()***

See **external documentation**.

`getFlags(This) -> integer()`

Types:

**This = *wxAuiManager()***

See **external documentation**.

`getManagedWindow(This) -> wxWindow:wxWindow()`

Types:

**This = *wxAuiManager()***

See **external documentation**.

`getManager(Window) -> wxAuiManager()`

Types:

**Window = *wxWindow:wxWindow()***

See **external documentation**.

`getPane(This, Name) -> wxAuiPaneInfo:wxAuiPaneInfo()`

Types:

**This = *wxAuiManager()***

**Name = *unicode:chardata()***

See **external documentation**.
Also:
getPane(This, Window) -> wxAuiPaneInfo:wxAuiPaneInfo() when
This::wxAuiManager(), Window::wxWindow:wxWindow().

`hideHint(This) -> ok`

Types:

**This = *wxAuiManager()***

See **external documentation**.

`insertPane(This, Window, Insert_location) -> boolean()`

Types:

**This = *wxAuiManager()***
**Window = *wxWindow:wxWindow()***
**Insert_location = *wxAuiPaneInfo:wxAuiPaneInfo()***

Equivalent to *insertPane(This, Window, Insert_location, [])*.

`insertPane(This, Window, Insert_location, Options::[Option]) -> boolean()`

Types:

**This = *wxAuiManager()***
**Window = *wxWindow:wxWindow()***
**Insert_location = *wxAuiPaneInfo:wxAuiPaneInfo()***
**Option = {insert_level, integer()}**

See **external documentation**.

`loadPaneInfo(This, Pane_part, Pane) -> ok`

Types:

**This = *wxAuiManager()***
**Pane_part = *unicode:chardata()***
**Pane = *wxAuiPaneInfo:wxAuiPaneInfo()***

See **external documentation**.

`loadPerspective(This, Perspective) -> boolean()`

Types:

**This = *wxAuiManager()***
**Perspective = *unicode:chardata()***

Equivalent to *loadPerspective(This, Perspective, [])*.

`loadPerspective(This, Perspective, Options::[Option]) -> boolean()`

Types:

**This = *wxAuiManager()***
**Perspective = *unicode:chardata()***

**Option = {update, boolean()}**

See **external documentation**.

savePaneInfo(This, Pane) -> unicode:charlist()

Types:

**This = *wxAuiManager()***

**Pane = *wxAuiPaneInfo:wxAuiPaneInfo()***

See **external documentation**.

savePerspective(This) -> unicode:charlist()

Types:

**This = *wxAuiManager()***

See **external documentation**.

setArtProvider(This, Art_provider) -> ok

Types:

**This = *wxAuiManager()***

**Art_provider = *wxAuiDockArt:wxAuiDockArt()***

See **external documentation**.

setDockSizeConstraint(This, Width_pct, Height_pct) -> ok

Types:

**This = *wxAuiManager()***

**Width_pct = number()**

**Height_pct = number()**

See **external documentation**.

setFlags(This, Flags) -> ok

Types:

**This = *wxAuiManager()***

**Flags = integer()**

See **external documentation**.

setManagedWindow(This, Managed_wnd) -> ok

Types:

**This = *wxAuiManager()***

**Managed_wnd = *wxWindow:wxWindow()***

See **external documentation**.

showHint(This, Rect) -> ok

Types:

**This = *wxAuiManager()***

**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

See **external documentation**.

```
unInit(This) -> ok
```

Types:

**This = *wxAuiManager()***

See **external documentation**.

```
update(This) -> ok
```

Types:

**This = *wxAuiManager()***

See **external documentation**.

```
destroy(This::wxAuiManager()) -> ok
```

Destroys this object, do not use object again

# wxAuiManagerEvent

Erlang module

See external documentation: **wxAuiManagerEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**aui_pane_button**, **aui_pane_close**, **aui_pane_maximize**, **aui_pane_restore**, **aui_pane_activated**, **aui_render**, **aui_find_manager**

See also the message variant *#wxAuiManager{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxAuiManagerEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`setManager(This, Mgr) -> ok`

Types:

**This = *wxAuiManagerEvent()***
**Mgr = *wxAuiManager:wxAuiManager()***

See **external documentation**.

`getManager(This) -> wxAuiManager:wxAuiManager()`

Types:

**This = *wxAuiManagerEvent()***

See **external documentation**.

`setPane(This, P) -> ok`

Types:

**This = *wxAuiManagerEvent()***
**P = *wxAuiPaneInfo:wxAuiPaneInfo()***

See **external documentation**.

`getPane(This) -> wxAuiPaneInfo:wxAuiPaneInfo()`

Types:

**This = *wxAuiManagerEvent()***

See **external documentation**.

```
setButton(This, B) -> ok
```

Types:

**This = *wxAuiManagerEvent()***
**B = integer()**

See **external documentation**.

```
getButton(This) -> integer()
```

Types:

**This = *wxAuiManagerEvent()***

See **external documentation**.

```
setDC(This, Pdc) -> ok
```

Types:

**This = *wxAuiManagerEvent()***
**Pdc = *wxDC:wxDC()***

See **external documentation**.

```
getDC(This) -> wxDC:wxDC()
```

Types:

**This = *wxAuiManagerEvent()***

See **external documentation**.

```
veto(This) -> ok
```

Types:

**This = *wxAuiManagerEvent()***

Equivalent to *veto(This, [])*.

```
veto(This, Options::[Option]) -> ok
```

Types:

**This = *wxAuiManagerEvent()***
**Option = {veto, boolean()}**

See **external documentation**.

```
getVeto(This) -> boolean()
```

Types:

**This = *wxAuiManagerEvent()***

See **external documentation**.

```
setCanVeto(This, Can_veto) -> ok
```

Types:

**This = *wxAuiManagerEvent()***
**Can_veto = boolean()**

See **external documentation**.

```
canVeto(This) -> boolean()
```

Types:

**`This = wxAuiManagerEvent()`**

See **external documentation**.

# wxAuiNotebook

Erlang module

See external documentation: **wxAuiNotebook**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxAuiNotebook()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxAuiNotebook()
```

See **external documentation**.

```
new(Parent) -> wxAuiNotebook()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxAuiNotebook()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
addPage(This, Page, Caption) -> boolean()
```

Types:

**This = *wxAuiNotebook()***

**Page = *wxWindow:wxWindow()***

**Caption = *unicode:chardata()***

Equivalent to *addPage(This, Page, Caption, [])*.

```
addPage(This, Page, Caption, Options::[Option]) -> boolean()
```

Types:

**This = *wxAuiNotebook()***

**Page = *wxWindow:wxWindow()***

**Caption = *unicode:chardata()***
**Option = {select, boolean()} | {bitmap, *wxBitmap:wxBitmap()*}**

See **external documentation**.

`create(This, Parent) -> boolean()`

Types:

**This = *wxAuiNotebook()***
**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

`create(This, Parent, Options::[Option]) -> boolean()`

Types:

**This = *wxAuiNotebook()***
**Parent = *wxWindow:wxWindow()***
**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`deletePage(This, Page) -> boolean()`

Types:

**This = *wxAuiNotebook()***
**Page = integer()**

See **external documentation**.

`getArtProvider(This) -> wxAuiTabArt:wxAuiTabArt()`

Types:

**This = *wxAuiNotebook()***

See **external documentation**.

`getPage(This, Page_idx) -> wxWindow:wxWindow()`

Types:

**This = *wxAuiNotebook()***
**Page_idx = integer()**

See **external documentation**.

`getPageBitmap(This, Page_idx) -> wxBitmap:wxBitmap()`

Types:

**This = *wxAuiNotebook()***
**Page_idx = integer()**

See **external documentation**.

`getPageCount(This) -> integer()`

Types:

**This = *wxAuiNotebook()***

See **external documentation**.

`getPageIndex(This, Page_wnd) -> integer()`

Types:

**This = *wxAuiNotebook()***

**Page_wnd = *wxWindow:wxWindow()***

See **external documentation**.

`getPageText(This, Page_idx) -> unicode:charlist()`

Types:

**This = *wxAuiNotebook()***

**Page_idx = integer()**

See **external documentation**.

`getSelection(This) -> integer()`

Types:

**This = *wxAuiNotebook()***

See **external documentation**.

`insertPage(This, Page_idx, Page, Caption) -> boolean()`

Types:

**This = *wxAuiNotebook()***

**Page_idx = integer()**

**Page = *wxWindow:wxWindow()***

**Caption = *unicode:chardata()***

Equivalent to *insertPage(This, Page_idx, Page, Caption, [])*.

`insertPage(This, Page_idx, Page, Caption, Options::[Option]) -> boolean()`

Types:

**This = *wxAuiNotebook()***

**Page_idx = integer()**

**Page = *wxWindow:wxWindow()***

**Caption = *unicode:chardata()***

**Option = {select, boolean()} | {bitmap, *wxBitmap:wxBitmap()*}**

See **external documentation**.

`removePage(This, Page) -> boolean()`

Types:

**This = *wxAuiNotebook()***

**Page = integer()**

See **external documentation**.

```
setArtProvider(This, Art) -> ok
```

Types:

**This = *wxAuiNotebook()***
**Art = *wxAuiTabArt:wxAuiTabArt()***

See **external documentation**.

```
setFont(This, Font) -> boolean()
```

Types:

**This = *wxAuiNotebook()***
**Font = *wxFont:wxFont()***

See **external documentation**.

```
setPageBitmap(This, Page, Bitmap) -> boolean()
```

Types:

**This = *wxAuiNotebook()***
**Page = integer()**
**Bitmap = *wxBitmap:wxBitmap()***

See **external documentation**.

```
setPageText(This, Page, Text) -> boolean()
```

Types:

**This = *wxAuiNotebook()***
**Page = integer()**
**Text = *unicode:chardata()***

See **external documentation**.

```
setSelection(This, New_page) -> integer()
```

Types:

**This = *wxAuiNotebook()***
**New_page = integer()**

See **external documentation**.

```
setTabCtrlHeight(This, Height) -> ok
```

Types:

**This = *wxAuiNotebook()***
**Height = integer()**

See **external documentation**.

```
setUniformBitmapSize(This, Size) -> ok
```

Types:

**This = *wxAuiNotebook()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
destroy(This::wxAuiNotebook()) -> ok
```

Destroys this object, do not use object again

# wxAuiNotebookEvent

Erlang module

See external documentation: **wxAuiNotebookEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_auinotebook_page_close**, **command_auinotebook_page_changed**, **command_auinotebook_page_changing**, **command_auinotebook_button**, **command_auinotebook_begin_drag**, **command_auinotebook_end_drag**, **command_auinotebook_drag_motion**, **command_auinotebook_allow_dnd**, **command_auinotebook_tab_middle_down**, **command_auinotebook_tab_middle_up**, **command_auinotebook_tab_right_down**, **command_auinotebook_tab_right_up**, **command_auinotebook_page_closed**, **command_auinotebook_drag_done**, **command_auinotebook_bg_dclick**

See also the message variant *#wxAuiNotebook{}* event record type.

This class is derived (and can use functions) from:
*wxNotifyEvent*
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxAuiNotebookEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
setSelection(This, S) -> ok
```

Types:

**This = *wxAuiNotebookEvent()***
**S = integer()**

See **external documentation**.

```
getSelection(This) -> integer()
```

Types:

**This = *wxAuiNotebookEvent()***

See **external documentation**.

```
setOldSelection(This, S) -> ok
```

Types:

**This = *wxAuiNotebookEvent()***
**S = integer()**

See **external documentation**.

```
getOldSelection(This) -> integer()
```

Types:

**This = *wxAuiNotebookEvent()***

See **external documentation**.

```
setDragSource(This, S) -> ok
```

Types:

**This = *wxAuiNotebookEvent()***

**S = *wxAuiNotebook:wxAuiNotebook()***

See **external documentation**.

```
getDragSource(This) -> wxAuiNotebook:wxAuiNotebook()
```

Types:

**This = *wxAuiNotebookEvent()***

See **external documentation**.

# wxAuiPaneInfo

Erlang module

See external documentation: **wxAuiPaneInfo**.

## DATA TYPES

wxAuiPaneInfo()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxAuiPaneInfo()
```

See **external documentation**.

```
new(C) -> wxAuiPaneInfo()
```

Types:

**C = *wxAuiPaneInfo()***

See **external documentation**.

```
bestSize(This, Size) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
bestSize(This, X, Y) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
bottom(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
bottomDockable(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *bottomDockable(This, [])*.

```
bottomDockable(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Option = {b, boolean()}**

See **external documentation**.

```
caption(This, C) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**C = *unicode:chardata()***

See **external documentation**.

```
captionVisible(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *captionVisible(This, [])*.

```
captionVisible(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Option = {visible, boolean()}**

See **external documentation**.

```
centre(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
centrePane(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
closeButton(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *closeButton(This, [])*.

```
closeButton(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Option = {visible, boolean()}**

See **external documentation**.

```
defaultPane(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
destroyOnClose(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *destroyOnClose(This, [])*.

```
destroyOnClose(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Option = {b, boolean()}**

See **external documentation**.

```
direction(This, Direction) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Direction = integer()**

See **external documentation**.

```
dock(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
dockable(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *dockable(This, [])*.

```
dockable(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Option = {b, boolean()}**

See **external documentation**.

```
fixed(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
float(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
floatable(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *floatable(This, [])*.

```
floatable(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Option = {b, boolean()}**

See **external documentation**.

```
floatingPosition(This, Pos) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Pos = {X::integer(), Y::integer()}**

See **external documentation**.

```
floatingPosition(This, X, Y) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**X = integer()**

**Y = integer()**

See **external documentation**.

```
floatingSize(This, Size) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
floatingSize(This, X, Y) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**X = integer()**

**Y = integer()**

See **external documentation**.

```
gripper(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *gripper(This, [])*.

```
gripper(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Option = {visible, boolean()}**

See **external documentation**.

```
gripperTop(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *gripperTop(This, [])*.

```
gripperTop(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Option = {attop, boolean()}**

See **external documentation**.

```
hasBorder(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
hasCaption(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
hasCloseButton(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
hasFlag(This, Flag) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

**Flag = integer()**

See **external documentation**.

```
hasGripper(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
hasGripperTop(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
hasMaximizeButton(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
hasMinimizeButton(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
hasPinButton(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
hide(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isBottomDockable(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isDocked(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isFixed(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isFloatable(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isFloating(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isLeftDockable(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isMovable(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isOk(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isResizable(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isRightDockable(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isShown(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isToolbar(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
isTopDockable(This) -> boolean()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
layer(This, Layer) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Layer = integer()**

See **external documentation**.

```
left(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
leftDockable(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *leftDockable(This, [])*.

```
leftDockable(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Option = {b, boolean()}**

See **external documentation**.

```
maxSize(This, Size) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
maxSize(This, X, Y) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**X = integer()**

**Y = integer()**

See **external documentation**.

```
maximizeButton(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *maximizeButton(This, [])*.

```
maximizeButton(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Option = {visible, boolean()}**

See **external documentation**.

```
minSize(This, Size) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
minSize(This, X, Y) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
minimizeButton(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *minimizeButton(This, [])*.

```
minimizeButton(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Option = {visible, boolean()}**

See **external documentation**.

```
movable(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *movable(This, [])*.

```
movable(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Option = {b, boolean()}**

See **external documentation**.

```
name(This, N) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**N = *unicode:chardata()***

See **external documentation**.

```
paneBorder(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *paneBorder(This, [])*.

```
paneBorder(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Option = {visible, boolean()}**

See **external documentation**.

```
pinButton(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *pinButton(This, [])*.

```
pinButton(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Option = {visible, boolean()}**

See **external documentation**.

```
position(This, Pos) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Pos = integer()**

See **external documentation**.

```
resizable(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *resizable(This, [])*.

```
resizable(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Option = {resizable, boolean()}**

See **external documentation**.

```
right(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
rightDockable(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *rightDockable(This, [])*.

```
rightDockable(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Option = {b, boolean()}**

See **external documentation**.

```
row(This, Row) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Row = integer()**

See **external documentation**.

```
safeSet(This, Source) -> ok
```

Types:

**This = *wxAuiPaneInfo()***
**Source = *wxAuiPaneInfo()***

See **external documentation**.

```
setFlag(This, Flag, Option_state) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***
**Flag = integer()**
**Option_state = boolean()**

See **external documentation**.

```
show(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *show(This, [])*.

```
show(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Option = {show, boolean()}**

See **external documentation**.

```
toolbarPane(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
top(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
topDockable(This) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

Equivalent to *topDockable(This, [])*.

```
topDockable(This, Options::[Option]) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**Option = {b, boolean()}**

See **external documentation**.

```
window(This, W) -> wxAuiPaneInfo()
```

Types:

**This = *wxAuiPaneInfo()***

**W = *wxWindow:wxWindow()***

See **external documentation**.

```
getWindow(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
getFrame(This) -> wxFrame:wxFrame()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
getDirection(This) -> integer()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
getLayer(This) -> integer()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
getRow(This) -> integer()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
getPosition(This) -> integer()
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
getFloatingPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
getFloatingSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxAuiPaneInfo()***

See **external documentation**.

```
destroy(This::wxAuiPaneInfo()) -> ok
```

Destroys this object, do not use object again

# wxAuiSimpleTabArt

Erlang module

See external documentation: **wxAuiSimpleTabArt**.

This class is derived (and can use functions) from:
*wxAuiTabArt*

## DATA TYPES

wxAuiSimpleTabArt()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxAuiSimpleTabArt()
```

See **external documentation**.

```
destroy(This::wxAuiSimpleTabArt()) -> ok
```

Destroys this object, do not use object again

# wxAuiTabArt

Erlang module

See external documentation: **wxAuiTabArt**.

## DATA TYPES

wxAuiTabArt()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`setFlags(This, Flags) -> ok`

Types:

**This = *wxAuiTabArt()***
**Flags = integer()**

See **external documentation**.

`setMeasuringFont(This, Font) -> ok`

Types:

**This = *wxAuiTabArt()***
**Font = *wxFont:wxFont()***

See **external documentation**.

`setNormalFont(This, Font) -> ok`

Types:

**This = *wxAuiTabArt()***
**Font = *wxFont:wxFont()***

See **external documentation**.

`setSelectedFont(This, Font) -> ok`

Types:

**This = *wxAuiTabArt()***
**Font = *wxFont:wxFont()***

See **external documentation**.

`setColour(This, Colour) -> ok`

Types:

**This = *wxAuiTabArt()***
**Colour = *wx:wx_colour()***

See **external documentation**.

```
setActiveColour(This, Colour) -> ok
```

Types:

**This = *wxAuiTabArt()***

**Colour = *wx:wx_colour()***

See **external documentation**.

# wxBitmapButton

Erlang module

See external documentation: **wxBitmapButton**.

This class is derived (and can use functions) from:
*wxButton*
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxBitmapButton()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxBitmapButton()
```

See **external documentation**.

```
new(Parent, Id, Bitmap) -> wxBitmapButton()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Bitmap = *wxBitmap:wxBitmap()***

Equivalent to *new(Parent, Id, Bitmap, [])*.

```
new(Parent, Id, Bitmap, Options::[Option]) -> wxBitmapButton()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Bitmap = *wxBitmap:wxBitmap()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id, Bitmap) -> boolean()
```

Types:

**This = *wxBitmapButton()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Bitmap = *wxBitmap:wxBitmap()***

Equivalent to *create(This, Parent, Id, Bitmap, [])*.

```
create(This, Parent, Id, Bitmap, Options::[Option]) -> boolean()
```

Types:

**This = *wxBitmapButton()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Bitmap = *wxBitmap:wxBitmap()***

**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getBitmapDisabled(This) -> wxBitmap:wxBitmap()
```

Types:

**This = *wxBitmapButton()***

See **external documentation**.

```
getBitmapFocus(This) -> wxBitmap:wxBitmap()
```

Types:

**This = *wxBitmapButton()***

See **external documentation**.

```
getBitmapLabel(This) -> wxBitmap:wxBitmap()
```

Types:

**This = *wxBitmapButton()***

See **external documentation**.

```
getBitmapSelected(This) -> wxBitmap:wxBitmap()
```

Types:

**This = *wxBitmapButton()***

See **external documentation**.

```
setBitmapDisabled(This, Disabled) -> ok
```

Types:

**This = *wxBitmapButton()***

**Disabled = *wxBitmap:wxBitmap()***

See **external documentation**.

```
setBitmapFocus(This, Focus) -> ok
```

Types:

**This = *wxBitmapButton()***

**Focus = *wxBitmap:wxBitmap()***

See **external documentation**.

```
setBitmapLabel(This, Bitmap) -> ok
```

Types:

**This = *wxBitmapButton()***
**Bitmap = *wxBitmap:wxBitmap()***

See **external documentation**.

```
setBitmapSelected(This, Sel) -> ok
```

Types:

**This = *wxBitmapButton()***
**Sel = *wxBitmap:wxBitmap()***

See **external documentation**.

```
destroy(This::wxBitmapButton()) -> ok
```

Destroys this object, do not use object again

# wxBitmapDataObject

Erlang module

See external documentation: **wxBitmapDataObject**.

This class is derived (and can use functions) from:
*wxDataObject*

## DATA TYPES

wxBitmapDataObject()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxBitmapDataObject()`

Equivalent to *new([])*.

`new(Options::[Option]) -> wxBitmapDataObject()`

Types:

**`Option = {bitmap, wxBitmap:wxBitmap()}`**

See **external documentation**.
Also:
new(Bitmap) -> wxBitmapDataObject() when
Bitmap::wxBitmap:wxBitmap().

`getBitmap(This) -> wxBitmap:wxBitmap()`

Types:

**`This = wxBitmapDataObject()`**

See **external documentation**.

`setBitmap(This, Bitmap) -> ok`

Types:

**`This = wxBitmapDataObject()`**
**`Bitmap = wxBitmap:wxBitmap()`**

See **external documentation**.

`destroy(This::wxBitmapDataObject()) -> ok`

Destroys this object, do not use object again

# wxBitmap

Erlang module

See external documentation: **wxBitmap**.

## DATA TYPES

wxBitmap()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxBitmap()`

See **external documentation**.

`new(Filename) -> wxBitmap()`

Types:

**Filename = *unicode:chardata()***

See **external documentation**.
Also:
new(Image) -> wxBitmap() when
Image::wxImage:wxImage().

Type = ?wxBITMAP_TYPE_INVALID | ?wxBITMAP_TYPE_BMP | ?wxBITMAP_TYPE_BMP_RESOURCE | ?wxBITMAP_TYPE_RESOURCE | ?wxBITMAP_TYPE_ICO | ?wxBITMAP_TYPE_ICO_RESOURCE | ?wxBITMAP_TYPE_CUR | ?wxBITMAP_TYPE_CUR_RESOURCE | ?wxBITMAP_TYPE_XBM | ?wxBITMAP_TYPE_XBM_DATA | ?wxBITMAP_TYPE_XPM | ?wxBITMAP_TYPE_XPM_DATA | ?wxBITMAP_TYPE_TIF | ?wxBITMAP_TYPE_TIF_RESOURCE | ?wxBITMAP_TYPE_GIF | ?wxBITMAP_TYPE_GIF_RESOURCE | ?wxBITMAP_TYPE_PNG | ?wxBITMAP_TYPE_PNG_RESOURCE | ?wxBITMAP_TYPE_JPEG | ?wxBITMAP_TYPE_JPEG_RESOURCE | ?wxBITMAP_TYPE_PNM | ?wxBITMAP_TYPE_PNM_RESOURCE | ?wxBITMAP_TYPE_PCX | ?wxBITMAP_TYPE_PCX_RESOURCE | ?wxBITMAP_TYPE_PICT | ?wxBITMAP_TYPE_PICT_RESOURCE | ?wxBITMAP_TYPE_ICON | ?wxBITMAP_TYPE_ICON_RESOURCE | ?wxBITMAP_TYPE_ANI | ?wxBITMAP_TYPE_IFF | ?wxBITMAP_TYPE_TGA | ?wxBITMAP_TYPE_MACCURSOR | ?wxBITMAP_TYPE_MACCURSOR_RESOURCE | ?wxBITMAP_TYPE_ANY

`new(Width, Height) -> wxBitmap()`

Types:

**Width = integer()**
**Height = integer()**

See **external documentation**.
Also:
new(Filename, [Option]) -> wxBitmap() when
Filename::unicode:chardata(),
Option :: {'type', wx:wx_enum()};
(Image, [Option]) -> wxBitmap() when

Image::wxImage:wxImage(),
Option :: {'depth', integer()}.

Type = ?wxBITMAP_TYPE_INVALID | ?wxBITMAP_TYPE_BMP | ?wxBITMAP_TYPE_BMP_RESOURCE | ?wxBITMAP_TYPE_RESOURCE | ?wxBITMAP_TYPE_ICO | ?wxBITMAP_TYPE_ICO_RESOURCE | ?wxBITMAP_TYPE_CUR | ?wxBITMAP_TYPE_CUR_RESOURCE | ?wxBITMAP_TYPE_XBM | ?wxBITMAP_TYPE_XBM_DATA | ?wxBITMAP_TYPE_XPM | ?wxBITMAP_TYPE_XPM_DATA | ?wxBITMAP_TYPE_TIF | ?wxBITMAP_TYPE_TIF_RESOURCE | ?wxBITMAP_TYPE_GIF | ?wxBITMAP_TYPE_GIF_RESOURCE | ?wxBITMAP_TYPE_PNG | ?wxBITMAP_TYPE_PNG_RESOURCE | ?wxBITMAP_TYPE_JPEG | ?wxBITMAP_TYPE_JPEG_RESOURCE | ?wxBITMAP_TYPE_PNM | ?wxBITMAP_TYPE_PNM_RESOURCE | ?wxBITMAP_TYPE_PCX | ?wxBITMAP_TYPE_PCX_RESOURCE | ?wxBITMAP_TYPE_PICT | ?wxBITMAP_TYPE_PICT_RESOURCE | ?wxBITMAP_TYPE_ICON | ?wxBITMAP_TYPE_ICON_RESOURCE | ?wxBITMAP_TYPE_ANI | ?wxBITMAP_TYPE_IFF | ?wxBITMAP_TYPE_TGA | ?wxBITMAP_TYPE_MACCURSOR | ?wxBITMAP_TYPE_MACCURSOR_RESOURCE | ?wxBITMAP_TYPE_ANY

```
new(Bits, Width, Height) -> wxBitmap()
```

Types:

**Bits = binary()**
**Width = integer()**
**Height = integer()**

See **external documentation**.
Also:
new(Width, Height, [Option]) -> wxBitmap() when
Width::integer(), Height::integer(),
Option :: {'depth', integer()}.

```
new(Bits, Width, Height, Options::[Option]) -> wxBitmap()
```

Types:

**Bits = binary()**
**Width = integer()**
**Height = integer()**
**Option = {depth, integer()}**

See **external documentation**.

```
convertToImage(This) -> wxImage:wxImage()
```

Types:

**This = *wxBitmap()***

See **external documentation**.

```
copyFromIcon(This, Icon) -> boolean()
```

Types:

**This = *wxBitmap()***
**Icon = *wxIcon:wxIcon()***

See **external documentation**.

```
create(This, Width, Height) -> boolean()
```

Types:

**This = *wxBitmap()***
**Width = integer()**
**Height = integer()**

Equivalent to *create(This, Width, Height, [])*.

```
create(This, Width, Height, Options::[Option]) -> boolean()
```

Types:

**This = *wxBitmap()***
**Width = integer()**
**Height = integer()**
**Option = {depth, integer()}**

See **external documentation**.

```
getDepth(This) -> integer()
```

Types:

**This = *wxBitmap()***

See **external documentation**.

```
getHeight(This) -> integer()
```

Types:

**This = *wxBitmap()***

See **external documentation**.

```
getPalette(This) -> wxPalette:wxPalette()
```

Types:

**This = *wxBitmap()***

See **external documentation**.

```
getMask(This) -> wxMask:wxMask()
```

Types:

**This = *wxBitmap()***

See **external documentation**.

```
getWidth(This) -> integer()
```

Types:

**This = *wxBitmap()***

See **external documentation**.

```
getSubBitmap(This, Rect) -> wxBitmap()
```

Types:

**This = *wxBitmap()***

**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

See **external documentation**.

`loadFile(This, Name) -> boolean()`

Types:

**This = *wxBitmap()***

**Name = *unicode:chardata()***

Equivalent to *loadFile(This, Name, [])*.

`loadFile(This, Name, Options::[Option]) -> boolean()`

Types:

**This = *wxBitmap()***

**Name = *unicode:chardata()***

**Option = {type, *wx:wx_enum()*}**

See **external documentation**.

Type = ?wxBITMAP_TYPE_INVALID | ?wxBITMAP_TYPE_BMP | ?wxBITMAP_TYPE_BMP_RESOURCE | ?wxBITMAP_TYPE_RESOURCE | ?wxBITMAP_TYPE_ICO | ?wxBITMAP_TYPE_ICO_RESOURCE | ?wxBITMAP_TYPE_CUR | ?wxBITMAP_TYPE_CUR_RESOURCE | ?wxBITMAP_TYPE_XBM | ?wxBITMAP_TYPE_XBM_DATA | ?wxBITMAP_TYPE_XPM | ?wxBITMAP_TYPE_XPM_DATA | ?wxBITMAP_TYPE_TIF | ?wxBITMAP_TYPE_TIF_RESOURCE | ?wxBITMAP_TYPE_GIF | ?wxBITMAP_TYPE_GIF_RESOURCE | ?wxBITMAP_TYPE_PNG | ?wxBITMAP_TYPE_PNG_RESOURCE | ?wxBITMAP_TYPE_JPEG | ?wxBITMAP_TYPE_JPEG_RESOURCE | ?wxBITMAP_TYPE_PNM | ?wxBITMAP_TYPE_PNM_RESOURCE | ?wxBITMAP_TYPE_PCX | ?wxBITMAP_TYPE_PCX_RESOURCE | ?wxBITMAP_TYPE_PICT | ?wxBITMAP_TYPE_PICT_RESOURCE | ?wxBITMAP_TYPE_ICON | ?wxBITMAP_TYPE_ICON_RESOURCE | ?wxBITMAP_TYPE_ANI | ?wxBITMAP_TYPE_IFF | ?wxBITMAP_TYPE_TGA | ?wxBITMAP_TYPE_MACCURSOR | ?wxBITMAP_TYPE_MACCURSOR_RESOURCE | ?wxBITMAP_TYPE_ANY

`ok(This) -> boolean()`

Types:

**This = *wxBitmap()***

See **external documentation**.

`saveFile(This, Name, Type) -> boolean()`

Types:

**This = *wxBitmap()***

**Name = *unicode:chardata()***

**Type = *wx:wx_enum()***

Equivalent to *saveFile(This, Name, Type, [])*.

`saveFile(This, Name, Type, Options::[Option]) -> boolean()`

Types:

**This = *wxBitmap()***

**Name = *unicode:chardata()***

**Type = *wx:wx_enum()***

**Option = {palette, *wxPalette:wxPalette()*}**

See **external documentation**.
Type = ?wxBITMAP_TYPE_INVALID | ?wxBITMAP_TYPE_BMP | ?wxBITMAP_TYPE_BMP_RESOURCE | ?wxBITMAP_TYPE_RESOURCE | ?wxBITMAP_TYPE_ICO | ?wxBITMAP_TYPE_ICO_RESOURCE | ?wxBITMAP_TYPE_CUR | ?wxBITMAP_TYPE_CUR_RESOURCE | ?wxBITMAP_TYPE_XBM | ?wxBITMAP_TYPE_XBM_DATA | ?wxBITMAP_TYPE_XPM | ?wxBITMAP_TYPE_XPM_DATA | ?wxBITMAP_TYPE_TIF | ?wxBITMAP_TYPE_TIF_RESOURCE | ?wxBITMAP_TYPE_GIF | ?wxBITMAP_TYPE_GIF_RESOURCE | ?wxBITMAP_TYPE_PNG | ?wxBITMAP_TYPE_PNG_RESOURCE | ?wxBITMAP_TYPE_JPEG | ?wxBITMAP_TYPE_JPEG_RESOURCE | ?wxBITMAP_TYPE_PNM | ?wxBITMAP_TYPE_PNM_RESOURCE | ?wxBITMAP_TYPE_PCX | ?wxBITMAP_TYPE_PCX_RESOURCE | ?wxBITMAP_TYPE_PICT | ?wxBITMAP_TYPE_PICT_RESOURCE | ?wxBITMAP_TYPE_ICON | ?wxBITMAP_TYPE_ICON_RESOURCE | ?wxBITMAP_TYPE_ANI | ?wxBITMAP_TYPE_IFF | ?wxBITMAP_TYPE_TGA | ?wxBITMAP_TYPE_MACCURSOR | ?wxBITMAP_TYPE_MACCURSOR_RESOURCE | ?wxBITMAP_TYPE_ANY

`setDepth(This, Depth) -> ok`

Types:

**This = *wxBitmap()***
**Depth = integer()**

See **external documentation**.

`setHeight(This, Height) -> ok`

Types:

**This = *wxBitmap()***
**Height = integer()**

See **external documentation**.

`setMask(This, Mask) -> ok`

Types:

**This = *wxBitmap()***
**Mask = *wxMask:wxMask()***

See **external documentation**.

`setPalette(This, Palette) -> ok`

Types:

**This = *wxBitmap()***
**Palette = *wxPalette:wxPalette()***

See **external documentation**.

`setWidth(This, Width) -> ok`

Types:

**This = *wxBitmap()***
**Width = integer()**

See **external documentation**.

```
destroy(This::wxBitmap()) -> ok
```

Destroys this object, do not use object again

# wxBoxSizer

Erlang module

See external documentation: **wxBoxSizer**.

This class is derived (and can use functions) from:
*wxSizer*

## DATA TYPES

wxBoxSizer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Orient) -> wxBoxSizer()
```

Types:

**Orient = integer()**

See **external documentation**.

```
getOrientation(This) -> integer()
```

Types:

**This = *wxBoxSizer()***

See **external documentation**.

```
destroy(This::wxBoxSizer()) -> ok
```

Destroys this object, do not use object again

# wxBrush

Erlang module

See external documentation: **wxBrush**.

## DATA TYPES

wxBrush()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxBrush()
```

See **external documentation**.

```
new(Colour) -> wxBrush()
```

Types:

**Colour = *wx:wx_colour()***

See **external documentation**.
Also:
new(StippleBitmap) -> wxBrush() when
StippleBitmap::wxBitmap:wxBitmap().

```
new(Colour, Options::[Option]) -> wxBrush()
```

Types:

**Colour = *wx:wx_colour()***
**Option = {style, integer()}**

See **external documentation**.

```
getColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxBrush()***

See **external documentation**.

```
getStipple(This) -> wxBitmap:wxBitmap()
```

Types:

**This = *wxBrush()***

See **external documentation**.

```
getStyle(This) -> integer()
```

Types:

**This = *wxBrush()***

See **external documentation**.

```
isHatch(This) -> boolean()
```

Types:

**This = *wxBrush()***

See **external documentation**.

```
isOk(This) -> boolean()
```

Types:

**This = *wxBrush()***

See **external documentation**.

```
setColour(This, Col) -> ok
```

Types:

**This = *wxBrush()***

**Col = *wx:wx_colour()***

See **external documentation**.

```
setColour(This, R, G, B) -> ok
```

Types:

**This = *wxBrush()***

**R = integer()**

**G = integer()**

**B = integer()**

See **external documentation**.

```
setStipple(This, Stipple) -> ok
```

Types:

**This = *wxBrush()***

**Stipple = *wxBitmap:wxBitmap()***

See **external documentation**.

```
setStyle(This, Style) -> ok
```

Types:

**This = *wxBrush()***

**Style = integer()**

See **external documentation**.

```
destroy(This::wxBrush()) -> ok
```

Destroys this object, do not use object again

# wxBufferedDC

Erlang module

See external documentation: **wxBufferedDC**.

This class is derived (and can use functions) from:
*wxMemoryDC*
*wxDC*

## DATA TYPES

wxBufferedDC()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxBufferedDC()`

See **external documentation**.

`new(Dc) -> wxBufferedDC()`

Types:

**Dc = *wxDC:wxDC()***

Equivalent to *new(Dc, [])*.

`new(Dc, Area) -> wxBufferedDC()`

Types:

**Dc = *wxDC:wxDC()***
**Area = {W::integer(), H::integer()}**

See **external documentation**.
Also:
new(Dc, [Option]) -> wxBufferedDC() when
Dc::wxDC:wxDC(),
Option :: {'buffer', wxBitmap:wxBitmap()}
| {'style', integer()}.

`new(Dc, Area, Options::[Option]) -> wxBufferedDC()`

Types:

**Dc = *wxDC:wxDC()***
**Area = {W::integer(), H::integer()}**
**Option = {style, integer()}**

See **external documentation**.

`init(This, Dc) -> ok`

Types:

**This = *wxBufferedDC()***
**Dc = *wxDC:wxDC()***

Equivalent to *init(This, Dc, [])*.

`init(This, Dc, Area) -> ok`

Types:

**This = *wxBufferedDC()***
**Dc = *wxDC:wxDC()***
**Area = {W::integer(), H::integer()}**

See **external documentation**.
Also:
init(This, Dc, [Option]) -> 'ok' when
This::wxBufferedDC(), Dc::wxDC:wxDC(),
Option :: {'buffer', wxBitmap:wxBitmap()}
| {'style', integer()}.

`init(This, Dc, Area, Options::[Option]) -> ok`

Types:

**This = *wxBufferedDC()***
**Dc = *wxDC:wxDC()***
**Area = {W::integer(), H::integer()}**
**Option = {style, integer()}**

See **external documentation**.

`destroy(This::wxBufferedDC()) -> ok`

Destroys this object, do not use object again

# wxBufferedPaintDC

Erlang module

See external documentation: **wxBufferedPaintDC**.

This class is derived (and can use functions) from:
*wxBufferedDC*
*wxMemoryDC*
*wxDC*

## DATA TYPES

wxBufferedPaintDC()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new(Window) -> wxBufferedPaintDC()`

Types:

**Window = *wxWindow:wxWindow()***

Equivalent to *new(Window, [])*.

`new(Window, Buffer) -> wxBufferedPaintDC()`

Types:

**Window = *wxWindow:wxWindow()***
**Buffer = *wxBitmap:wxBitmap()***

See **external documentation**.
Also:
new(Window, [Option]) -> wxBufferedPaintDC() when
Window::wxWindow:wxWindow(),
Option :: {'style', integer()}.

`new(Window, Buffer, Options::[Option]) -> wxBufferedPaintDC()`

Types:

**Window = *wxWindow:wxWindow()***
**Buffer = *wxBitmap:wxBitmap()***
**Option = {style, integer()}**

See **external documentation**.

`destroy(This::wxBufferedPaintDC()) -> ok`

Destroys this object, do not use object again

# wxButton

Erlang module

See external documentation: **wxButton**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxButton()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxButton()
```

See **external documentation**.

```
new(Parent, Id) -> wxButton()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxButton()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {label, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id) -> boolean()
```

Types:

**This = *wxButton()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

```
create(This, Parent, Id, Options::[Option]) -> boolean()
```

Types:

**This = *wxButton()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Option = {label, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getDefaultSize() -> {W::integer(), H::integer()}
```

See **external documentation**.

```
setDefault(This) -> ok
```

Types:

**This = *wxButton()***

See **external documentation**.

```
setLabel(This, Label) -> ok
```

Types:

**This = *wxButton()***

**Label = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxButton()) -> ok
```

Destroys this object, do not use object again

# wxCalendarCtrl

Erlang module

See external documentation: **wxCalendarCtrl**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxCalendarCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxCalendarCtrl()
```

See **external documentation**.

```
new(Parent, Id) -> wxCalendarCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxCalendarCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {date, *wx:wx_datetime()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
create(This, Parent, Id) -> boolean()
```

Types:

**This = *wxCalendarCtrl()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

```
create(This, Parent, Id, Options::[Option]) -> boolean()
```

Types:

**This = *wxCalendarCtrl()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {date, *wx:wx_datetime()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`setDate(This, Date) -> boolean()`

Types:

**This = *wxCalendarCtrl()***
**Date = *wx:wx_datetime()***

See **external documentation**.

`getDate(This) -> wx:wx_datetime()`

Types:

**This = *wxCalendarCtrl()***

See **external documentation**.

`enableYearChange(This) -> ok`

Types:

**This = *wxCalendarCtrl()***

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

Equivalent to *enableYearChange(This, [])*.

`enableYearChange(This, Options::[Option]) -> ok`

Types:

**This = *wxCalendarCtrl()***
**Option = {enable, boolean()}**

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

`enableMonthChange(This) -> ok`

Types:

**This = *wxCalendarCtrl()***

Equivalent to *enableMonthChange(This, [])*.

`enableMonthChange(This, Options::[Option]) -> ok`

Types:

**This = *wxCalendarCtrl()***
**Option = {enable, boolean()}**

See **external documentation**.

```
enableHolidayDisplay(This) -> ok
```

Types:

**This = *wxCalendarCtrl()***

Equivalent to *enableHolidayDisplay(This, [])*.

```
enableHolidayDisplay(This, Options::[Option]) -> ok
```

Types:

**This = *wxCalendarCtrl()***

**Option = {display, boolean()}**

See **external documentation**.

```
setHeaderColours(This, ColFg, ColBg) -> ok
```

Types:

**This = *wxCalendarCtrl()***

**ColFg = *wx:wx_colour()***

**ColBg = *wx:wx_colour()***

See **external documentation**.

```
getHeaderColourFg(This) -> wx:wx_colour4()
```

Types:

**This = *wxCalendarCtrl()***

See **external documentation**.

```
getHeaderColourBg(This) -> wx:wx_colour4()
```

Types:

**This = *wxCalendarCtrl()***

See **external documentation**.

```
setHighlightColours(This, ColFg, ColBg) -> ok
```

Types:

**This = *wxCalendarCtrl()***

**ColFg = *wx:wx_colour()***

**ColBg = *wx:wx_colour()***

See **external documentation**.

```
getHighlightColourFg(This) -> wx:wx_colour4()
```

Types:

**This = *wxCalendarCtrl()***

See **external documentation**.

```
getHighlightColourBg(This) -> wx:wx_colour4()
```

Types:

**This = *wxCalendarCtrl()***

See **external documentation**.

```
setHolidayColours(This, ColFg, ColBg) -> ok
```

Types:

**This = *wxCalendarCtrl()***
**ColFg = *wx:wx_colour()***
**ColBg = *wx:wx_colour()***

See **external documentation**.

```
getHolidayColourFg(This) -> wx:wx_colour4()
```

Types:

**This = *wxCalendarCtrl()***

See **external documentation**.

```
getHolidayColourBg(This) -> wx:wx_colour4()
```

Types:

**This = *wxCalendarCtrl()***

See **external documentation**.

```
getAttr(This, Day) -> wxCalendarDateAttr:wxCalendarDateAttr()
```

Types:

**This = *wxCalendarCtrl()***
**Day = integer()**

See **external documentation**.

```
setAttr(This, Day, Attr) -> ok
```

Types:

**This = *wxCalendarCtrl()***
**Day = integer()**
**Attr = *wxCalendarDateAttr:wxCalendarDateAttr()***

See **external documentation**.

```
setHoliday(This, Day) -> ok
```

Types:

**This = *wxCalendarCtrl()***
**Day = integer()**

See **external documentation**.

```
resetAttr(This, Day) -> ok
```

Types:

**This = *wxCalendarCtrl()***
**Day = integer()**

See **external documentation**.

```
hitTest(This, Pos) -> Result
```

Types:

**Result = {Res::*wx:wx_enum()*, Date::*wx:wx_datetime()*, Wd::*wx:wx_enum()*}**
**This = *wxCalendarCtrl()***
**Pos = {X::integer(), Y::integer()}**

See **external documentation**.
Wd = ?wxDateTime_Sun | ?wxDateTime_Mon | ?wxDateTime_Tue | ?wxDateTime_Wed | ?wxDateTime_Thu | ?wxDateTime_Fri | ?wxDateTime_Sat | ?wxDateTime_Inv_WeekDay
Res = ?wxCAL_HITTEST_NOWHERE | ?wxCAL_HITTEST_HEADER | ?wxCAL_HITTEST_DAY | ?wxCAL_HITTEST_INCMONTH | ?wxCAL_HITTEST_DECMONTH | ?wxCAL_HITTEST_SURROUNDING_WEEK

```
destroy(This::wxCalendarCtrl()) -> ok
```

Destroys this object, do not use object again

# wxCalendarDateAttr

Erlang module

See external documentation: **wxCalendarDateAttr**.

## DATA TYPES

wxCalendarDateAttr()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxCalendarDateAttr()`

See **external documentation**.

`new(Border) -> wxCalendarDateAttr()`

Types:

**Border = *wx:wx_enum()***

See **external documentation**.
Also:
new(ColText) -> wxCalendarDateAttr() when
ColText::wx:wx_colour().

Border = ?wxCAL_BORDER_NONE | ?wxCAL_BORDER_SQUARE | ?wxCAL_BORDER_ROUND

`new(Border, Options::[Option]) -> wxCalendarDateAttr()`

Types:

**Border = *wx:wx_enum()***
**Option = {colBorder, *wx:wx_colour()*}**

See **external documentation**.
Also:
new(ColText, [Option]) -> wxCalendarDateAttr() when
ColText::wx:wx_colour(),
Option :: {'colBack', wx:wx_colour()}
| {'colBorder', wx:wx_colour()}
| {'font', wxFont:wxFont()}
| {'border', wx:wx_enum()}.

Border = ?wxCAL_BORDER_NONE | ?wxCAL_BORDER_SQUARE | ?wxCAL_BORDER_ROUND

`setTextColour(This, ColText) -> ok`

Types:

**This = *wxCalendarDateAttr()***
**ColText = *wx:wx_colour()***

See **external documentation**.

```
setBackgroundColour(This, ColBack) -> ok
```

Types:

**This = *wxCalendarDateAttr()***
**ColBack = *wx:wx_colour()***

See **external documentation**.

```
setBorderColour(This, Col) -> ok
```

Types:

**This = *wxCalendarDateAttr()***
**Col = *wx:wx_colour()***

See **external documentation**.

```
setFont(This, Font) -> ok
```

Types:

**This = *wxCalendarDateAttr()***
**Font = *wxFont:wxFont()***

See **external documentation**.

```
setBorder(This, Border) -> ok
```

Types:

**This = *wxCalendarDateAttr()***
**Border = *wx:wx_enum()***

See **external documentation**.
Border = ?wxCAL_BORDER_NONE | ?wxCAL_BORDER_SQUARE | ?wxCAL_BORDER_ROUND

```
setHoliday(This, Holiday) -> ok
```

Types:

**This = *wxCalendarDateAttr()***
**Holiday = boolean()**

See **external documentation**.

```
hasTextColour(This) -> boolean()
```

Types:

**This = *wxCalendarDateAttr()***

See **external documentation**.

```
hasBackgroundColour(This) -> boolean()
```

Types:

**This = *wxCalendarDateAttr()***

See **external documentation**.

```
hasBorderColour(This) -> boolean()
```

Types:

**This = *wxCalendarDateAttr()***

See **external documentation**.

```
hasFont(This) -> boolean()
```

Types:

**This = *wxCalendarDateAttr()***

See **external documentation**.

```
hasBorder(This) -> boolean()
```

Types:

**This = *wxCalendarDateAttr()***

See **external documentation**.

```
isHoliday(This) -> boolean()
```

Types:

**This = *wxCalendarDateAttr()***

See **external documentation**.

```
getTextColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxCalendarDateAttr()***

See **external documentation**.

```
getBackgroundColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxCalendarDateAttr()***

See **external documentation**.

```
getBorderColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxCalendarDateAttr()***

See **external documentation**.

```
getFont(This) -> wxFont:wxFont()
```

Types:

**This = *wxCalendarDateAttr()***

See **external documentation**.

```
getBorder(This) -> wx:wx_enum()
```

Types:

**This = *wxCalendarDateAttr()***

See **external documentation**.
Res = ?wxCAL_BORDER_NONE | ?wxCAL_BORDER_SQUARE | ?wxCAL_BORDER_ROUND

```
destroy(This::wxCalendarDateAttr()) -> ok
```

Destroys this object, do not use object again

# wxCalendarEvent

Erlang module

See external documentation: **wxCalendarEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**calendar_sel_changed**, **calendar_day_changed**, **calendar_month_changed**, **calendar_year_changed**, **calendar_doubleclicked**, **calendar_weekday_clicked**

See also the message variant *#wxCalendar{}* event record type.

This class is derived (and can use functions) from:
*wxDateEvent*
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxCalendarEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getWeekDay(This) -> wx:wx_enum()`

Types:

**`This = wxCalendarEvent()`**

See **external documentation**.
Res = ?wxDateTime_Sun | ?wxDateTime_Mon | ?wxDateTime_Tue | ?wxDateTime_Wed | ?wxDateTime_Thu | ?wxDateTime_Fri | ?wxDateTime_Sat | ?wxDateTime_Inv_WeekDay

# wxCaret

Erlang module

See external documentation: **wxCaret**.

## DATA TYPES

wxCaret()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Window, Size) -> wxCaret()
```

Types:

**Window = *wxWindow:wxWindow()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
new(Window, Width, Height) -> wxCaret()
```

Types:

**Window = *wxWindow:wxWindow()***
**Width = integer()**
**Height = integer()**

See **external documentation**.

```
create(This, Window, Size) -> boolean()
```

Types:

**This = *wxCaret()***
**Window = *wxWindow:wxWindow()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
create(This, Window, Width, Height) -> boolean()
```

Types:

**This = *wxCaret()***
**Window = *wxWindow:wxWindow()***
**Width = integer()**
**Height = integer()**

See **external documentation**.

```
getBlinkTime() -> integer()
```

See **external documentation**.

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxCaret()***

See **external documentation**.

```
getSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxCaret()***

See **external documentation**.

```
getWindow(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxCaret()***

See **external documentation**.

```
hide(This) -> ok
```

Types:

**This = *wxCaret()***

See **external documentation**.

```
isOk(This) -> boolean()
```

Types:

**This = *wxCaret()***

See **external documentation**.

```
isVisible(This) -> boolean()
```

Types:

**This = *wxCaret()***

See **external documentation**.

```
move(This, Pt) -> ok
```

Types:

**This = *wxCaret()***

**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
move(This, X, Y) -> ok
```

Types:

**This = *wxCaret()***

**X = integer()**

**Y = integer()**

See **external documentation**.

```
setBlinkTime(Milliseconds) -> ok
```

Types:

**Milliseconds = integer()**

See **external documentation**.

```
setSize(This, Size) -> ok
```

Types:

**This = *wxCaret()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
setSize(This, Width, Height) -> ok
```

Types:

**This = *wxCaret()***
**Width = integer()**
**Height = integer()**

See **external documentation**.

```
show(This) -> ok
```

Types:

**This = *wxCaret()***

Equivalent to *show(This, [])*.

```
show(This, Options::[Option]) -> ok
```

Types:

**This = *wxCaret()***
**Option = {show, boolean()}**

See **external documentation**.

```
destroy(This::wxCaret()) -> ok
```

Destroys this object, do not use object again

# wxCheckBox

Erlang module

See external documentation: **wxCheckBox**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxCheckBox()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxCheckBox()`

See **external documentation**.

`new(Parent, Id, Label) -> wxCheckBox()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***

Equivalent to *new(Parent, Id, Label, [])*.

`new(Parent, Id, Label, Options::[Option]) -> wxCheckBox()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

`create(This, Parent, Id, Label) -> boolean()`

Types:

**This = *wxCheckBox()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***

Equivalent to *create(This, Parent, Id, Label, [])*.

```
create(This, Parent, Id, Label, Options::[Option]) -> boolean()
```

Types:

**This = *wxCheckBox()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Label = *unicode:chardata()***

**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getValue(This) -> boolean()
```

Types:

**This = *wxCheckBox()***

See **external documentation**.

```
get3StateValue(This) -> wx:wx_enum()
```

Types:

**This = *wxCheckBox()***

See **external documentation**.
Res = ?wxCHK_UNCHECKED | ?wxCHK_CHECKED | ?wxCHK_UNDETERMINED

```
is3rdStateAllowedForUser(This) -> boolean()
```

Types:

**This = *wxCheckBox()***

See **external documentation**.

```
is3State(This) -> boolean()
```

Types:

**This = *wxCheckBox()***

See **external documentation**.

```
isChecked(This) -> boolean()
```

Types:

**This = *wxCheckBox()***

See **external documentation**.

```
setValue(This, State) -> ok
```

Types:

**This = *wxCheckBox()***

**State = boolean()**

See **external documentation**.

```
set3StateValue(This, State) -> ok
```

Types:

**This = *wxCheckBox()***

**State = *wx:wx_enum()***

See **external documentation**.
State = ?wxCHK_UNCHECKED | ?wxCHK_CHECKED | ?wxCHK_UNDETERMINED

```
destroy(This::wxCheckBox()) -> ok
```

Destroys this object, do not use object again

# wxCheckListBox

Erlang module

See external documentation: **wxCheckListBox**.

This class is derived (and can use functions) from:
*wxListBox*
*wxControlWithItems*
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxCheckListBox()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxCheckListBox()
```

See **external documentation**.

```
new(Parent, Id) -> wxCheckListBox()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxCheckListBox()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {choices, [*unicode:chardata()*]} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
check(This, Index) -> ok
```

Types:

**This = *wxCheckListBox()***
**Index = integer()**

Equivalent to *check(This, Index, [])*.

```
check(This, Index, Options::[Option]) -> ok
```

Types:

**This = *wxCheckListBox()***
**Index = integer()**
**Option = {check, boolean()}**

See **external documentation**.

```
isChecked(This, Index) -> boolean()
```

Types:

**This = *wxCheckListBox()***
**Index = integer()**

See **external documentation**.

```
destroy(This::wxCheckListBox()) -> ok
```

Destroys this object, do not use object again

# wxChildFocusEvent

Erlang module

See external documentation: **wxChildFocusEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**child_focus**

See also the message variant *#wxChildFocus{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxChildFocusEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getWindow(This) -> wxWindow:wxWindow()
```

Types:

```
This = wxChildFocusEvent()
```

See **external documentation**.

# wxChoicebook

Erlang module

See external documentation: **wxChoicebook**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxChoicebook()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxChoicebook()
```

See **external documentation**.

```
new(Parent, Id) -> wxChoicebook()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxChoicebook()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
addPage(This, Page, Text) -> boolean()
```

Types:

**This = *wxChoicebook()***
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***

Equivalent to *addPage(This, Page, Text, [])*.

```
addPage(This, Page, Text, Options::[Option]) -> boolean()
```

Types:

**This = *wxChoicebook()***
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***
**Option = {bSelect, boolean()} | {imageId, integer()}**

See **external documentation**.

`advanceSelection(This) -> ok`

Types:

**This = *wxChoicebook()***

Equivalent to *advanceSelection(This, [])*.

`advanceSelection(This, Options::[Option]) -> ok`

Types:

**This = *wxChoicebook()***
**Option = {forward, boolean()}**

See **external documentation**.

`assignImageList(This, ImageList) -> ok`

Types:

**This = *wxChoicebook()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

`create(This, Parent, Id) -> boolean()`

Types:

**This = *wxChoicebook()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

`create(This, Parent, Id, Options::[Option]) -> boolean()`

Types:

**This = *wxChoicebook()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`deleteAllPages(This) -> boolean()`

Types:

**This = *wxChoicebook()***

See **external documentation**.

```
deletePage(This, N) -> boolean()
```

Types:

**This = *wxChoicebook()***

**N = integer()**

See **external documentation**.

```
removePage(This, N) -> boolean()
```

Types:

**This = *wxChoicebook()***

**N = integer()**

See **external documentation**.

```
getCurrentPage(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxChoicebook()***

See **external documentation**.

```
getImageList(This) -> wxImageList:wxImageList()
```

Types:

**This = *wxChoicebook()***

See **external documentation**.

```
getPage(This, N) -> wxWindow:wxWindow()
```

Types:

**This = *wxChoicebook()***

**N = integer()**

See **external documentation**.

```
getPageCount(This) -> integer()
```

Types:

**This = *wxChoicebook()***

See **external documentation**.

```
getPageImage(This, N) -> integer()
```

Types:

**This = *wxChoicebook()***

**N = integer()**

See **external documentation**.

```
getPageText(This, N) -> unicode:charlist()
```

Types:

**This = *wxChoicebook()***

**N = integer()**

See **external documentation**.

`getSelection(This) -> integer()`

Types:

**This = *wxChoicebook()***

See **external documentation**.

`hitTest(This, Pt) -> Result`

Types:

**Result = {Res::integer(), Flags::integer()}**
**This = *wxChoicebook()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

`insertPage(This, N, Page, Text) -> boolean()`

Types:

**This = *wxChoicebook()***
**N = integer()**
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***

Equivalent to *insertPage(This, N, Page, Text, [])*.

`insertPage(This, N, Page, Text, Options::[Option]) -> boolean()`

Types:

**This = *wxChoicebook()***
**N = integer()**
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***
**Option = {bSelect, boolean()} | {imageId, integer()}**

See **external documentation**.

`setImageList(This, ImageList) -> ok`

Types:

**This = *wxChoicebook()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

`setPageSize(This, Size) -> ok`

Types:

**This = *wxChoicebook()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
setPageImage(This, N, ImageId) -> boolean()
```

Types:

**This = *wxChoicebook()***
**N = integer()**
**ImageId = integer()**

See **external documentation**.

```
setPageText(This, N, StrText) -> boolean()
```

Types:

**This = *wxChoicebook()***
**N = integer()**
**StrText = *unicode:chardata()***

See **external documentation**.

```
setSelection(This, N) -> integer()
```

Types:

**This = *wxChoicebook()***
**N = integer()**

See **external documentation**.

```
changeSelection(This, N) -> integer()
```

Types:

**This = *wxChoicebook()***
**N = integer()**

See **external documentation**.

```
destroy(This::wxChoicebook()) -> ok
```

Destroys this object, do not use object again

# wxChoice

Erlang module

See external documentation: **wxChoice**.

This class is derived (and can use functions) from:
*wxControlWithItems*
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxChoice()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxChoice()
```

See **external documentation**.

```
new(Parent, Id) -> wxChoice()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxChoice()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {choices, [*unicode:chardata()*]} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id, Pos, Size, Choices) -> boolean()
```

Types:

**This = *wxChoice()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Pos = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**
**Choices = [*unicode:chardata()*]**

Equivalent to *create(This, Parent, Id, Pos, Size, Choices, [])*.

```
create(This, Parent, Id, Pos, Size, Choices, Options::[Option]) -> boolean()
```

Types:

**This = *wxChoice()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Pos = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**
**Choices = [*unicode:chardata()*]**
**Option = {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
delete(This, N) -> ok
```

Types:

**This = *wxChoice()***
**N = integer()**

See **external documentation**.

```
getColumns(This) -> integer()
```

Types:

**This = *wxChoice()***

See **external documentation**.

```
setColumns(This) -> ok
```

Types:

**This = *wxChoice()***

Equivalent to *setColumns(This, [])*.

```
setColumns(This, Options::[Option]) -> ok
```

Types:

**This = *wxChoice()***
**Option = {n, integer()}**

See **external documentation**.

```
destroy(This::wxChoice()) -> ok
```

Destroys this object, do not use object again

# wxClientDC

Erlang module

See external documentation: **wxClientDC**.

This class is derived (and can use functions) from:
*wxWindowDC*
*wxDC*

## DATA TYPES

wxClientDC()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxClientDC()
```

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

```
new(Win) -> wxClientDC()
```

Types:

**Win = *wxWindow:wxWindow()***

See **external documentation**.

```
destroy(This::wxClientDC()) -> ok
```

Destroys this object, do not use object again

# wxClipboard

Erlang module

See external documentation: **wxClipboard**.

## DATA TYPES

wxClipboard()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxClipboard()
```

See **external documentation**.

```
addData(This, Data) -> boolean()
```

Types:

**This = *wxClipboard()***
**Data = *wxDataObject:wxDataObject()***

See **external documentation**.

```
clear(This) -> ok
```

Types:

**This = *wxClipboard()***

See **external documentation**.

```
close(This) -> ok
```

Types:

**This = *wxClipboard()***

See **external documentation**.

```
flush(This) -> boolean()
```

Types:

**This = *wxClipboard()***

See **external documentation**.

```
getData(This, Data) -> boolean()
```

Types:

**This = *wxClipboard()***
**Data = *wxDataObject:wxDataObject()***

See **external documentation**.

```
isOpened(This) -> boolean()
```

Types:

**This = *wxClipboard()***

See **external documentation**.

```
open(This) -> boolean()
```

Types:

**This = *wxClipboard()***

See **external documentation**.

```
setData(This, Data) -> boolean()
```

Types:

**This = *wxClipboard()***

**Data = *wxDataObject:wxDataObject()***

See **external documentation**.

```
usePrimarySelection(This) -> ok
```

Types:

**This = *wxClipboard()***

Equivalent to *usePrimarySelection(This, [])*.

```
usePrimarySelection(This, Options::[Option]) -> ok
```

Types:

**This = *wxClipboard()***

**Option = {primary, boolean()}**

See **external documentation**.

```
isSupported(This, Format) -> boolean()
```

Types:

**This = *wxClipboard()***

**Format = *wx:wx_enum()***

See **external documentation**.

Format = ?wxDF_INVALID | ?wxDF_TEXT | ?wxDF_BITMAP | ?wxDF_METAFILE | ?wxDF_SYLK | ?wxDF_DIF | ?wxDF_TIFF | ?wxDF_OEMTEXT | ?wxDF_DIB | ?wxDF_PALETTE | ?wxDF_PENDATA | ?wxDF_RIFF | ?wxDF_WAVE | ?wxDF_UNICODETEXT | ?wxDF_ENHMETAFILE | ?wxDF_FILENAME | ?wxDF_LOCALE | ?wxDF_PRIVATE | ?wxDF_HTML | ?wxDF_MAX

```
get() -> wxClipboard()
```

See **external documentation**.

```
destroy(This::wxClipboard()) -> ok
```

Destroys this object, do not use object again

# wxClipboardTextEvent

Erlang module

See external documentation: **wxClipboardTextEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_text_copy**, **command_text_cut**, **command_text_paste**

See also the message variant *#wxClipboardText{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxClipboardTextEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxCloseEvent

Erlang module

See external documentation: **wxCloseEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**close_window**, **end_session**, **query_end_session**

See also the message variant *#wxClose{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxCloseEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
canVeto(This) -> boolean()
```

Types:

**This = *wxCloseEvent()***

See **external documentation**.

```
getLoggingOff(This) -> boolean()
```

Types:

**This = *wxCloseEvent()***

See **external documentation**.

```
setCanVeto(This, CanVeto) -> ok
```

Types:

**This = *wxCloseEvent()***
**CanVeto = boolean()**

See **external documentation**.

```
setLoggingOff(This, LogOff) -> ok
```

Types:

**This = *wxCloseEvent()***
**LogOff = boolean()**

See **external documentation**.

```
veto(This) -> ok
```

Types:

**This = *wxCloseEvent()***

Equivalent to *veto(This, [])*.

`veto(This, Options::[Option]) -> ok`

Types:

**This = *wxCloseEvent()***

**Option = {veto, boolean()}**

See **external documentation**.

# wxColourData

Erlang module

See external documentation: **wxColourData**.

## DATA TYPES

wxColourData()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxColourData()
```

See **external documentation**.

```
new(Data) -> wxColourData()
```

Types:

**Data = *wxColourData()***

See **external documentation**.

```
getChooseFull(This) -> boolean()
```

Types:

**This = *wxColourData()***

See **external documentation**.

```
getColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxColourData()***

See **external documentation**.

```
getCustomColour(This, I) -> wx:wx_colour4()
```

Types:

**This = *wxColourData()***
**I = integer()**

See **external documentation**.

```
setChooseFull(This, Flag) -> ok
```

Types:

**This = *wxColourData()***
**Flag = boolean()**

See **external documentation**.

```
setColour(This, Colour) -> ok
```

Types:

**This = *wxColourData()***
**Colour = *wx:wx_colour()***

See **external documentation**.

```
setCustomColour(This, I, Colour) -> ok
```

Types:

**This = *wxColourData()***
**I = integer()**
**Colour = *wx:wx_colour()***

See **external documentation**.

```
destroy(This::wxColourData()) -> ok
```

Destroys this object, do not use object again

# wxColourDialog

Erlang module

See external documentation: **wxColourDialog**.

This class is derived (and can use functions) from:
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxColourDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxColourDialog()
```

See **external documentation**.

```
new(Parent) -> wxColourDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxColourDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Option = {data, *wxColourData:wxColourData()*}**

See **external documentation**.

```
create(This, Parent) -> boolean()
```

Types:

**This = *wxColourDialog()***
**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

```
create(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxColourDialog()***
**Parent = *wxWindow:wxWindow()***
**Option = {data, *wxColourData:wxColourData()*}**

See **external documentation**.

```
getColourData(This) -> wxColourData:wxColourData()
```

Types:

**`This = wxColourDialog()`**

See **external documentation**.

```
destroy(This::wxColourDialog()) -> ok
```

Destroys this object, do not use object again

# wxColourPickerCtrl

Erlang module

See external documentation: **wxColourPickerCtrl**.

This class is derived (and can use functions) from:
*wxPickerBase*
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxColourPickerCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxColourPickerCtrl()
```

See **external documentation**.

```
new(Parent, Id) -> wxColourPickerCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxColourPickerCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {col, *wx:wx_colour()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id) -> boolean()
```

Types:

**This = *wxColourPickerCtrl()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

```
create(This, Parent, Id, Options::[Option]) -> boolean()
```

Types:

**This = *wxColourPickerCtrl()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Option = {col, *wx:wx_colour()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxColourPickerCtrl()***

See **external documentation**.

```
setColour(This, Text) -> boolean()
```

Types:

**This = *wxColourPickerCtrl()***

**Text = *unicode:chardata()***

See **external documentation**.
Also:
setColour(This, Col) -> 'ok' when
This::wxColourPickerCtrl(), Col::wx:wx_colour().

```
destroy(This::wxColourPickerCtrl()) -> ok
```

Destroys this object, do not use object again

# wxColourPickerEvent

Erlang module

See external documentation: **wxColourPickerEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_colourpicker_changed**

See also the message variant *#wxColourPicker{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxColourPickerEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxColourPickerEvent()***

See **external documentation**.

# wxComboBox

Erlang module

See external documentation: **wxComboBox**.

This class is derived (and can use functions) from:
*wxControlWithItems*
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxComboBox()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxComboBox()`

See **external documentation**.

`new(Parent, Id) -> wxComboBox()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

`new(Parent, Id, Options::[Option]) -> wxComboBox()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {value, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {choices, [*unicode:chardata()*]} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

`create(This, Parent, Id, Value, Pos, Size, Choices) -> boolean()`

Types:

**This = *wxComboBox()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Value = *unicode:chardata()***
**Pos = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**

**Choices = [*unicode:chardata()*]**

Equivalent to *create(This, Parent, Id, Value, Pos, Size, Choices, [])*.

`create(This, Parent, Id, Value, Pos, Size, Choices, Options::[Option]) -> boolean()`

Types:

**This = *wxComboBox()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Value = *unicode:chardata()***
**Pos = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**
**Choices = [*unicode:chardata()*]**
**Option = {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

`canCopy(This) -> boolean()`

Types:

**This = *wxComboBox()***

See **external documentation**.

`canCut(This) -> boolean()`

Types:

**This = *wxComboBox()***

See **external documentation**.

`canPaste(This) -> boolean()`

Types:

**This = *wxComboBox()***

See **external documentation**.

`canRedo(This) -> boolean()`

Types:

**This = *wxComboBox()***

See **external documentation**.

`canUndo(This) -> boolean()`

Types:

**This = *wxComboBox()***

See **external documentation**.

`copy(This) -> ok`

Types:

**This = *wxComboBox()***

See **external documentation**.

`cut(This) -> ok`

Types:

**This = *wxComboBox()***

See **external documentation**.

`getInsertionPoint(This) -> integer()`

Types:

**This = *wxComboBox()***

See **external documentation**.

`getLastPosition(This) -> integer()`

Types:

**This = *wxComboBox()***

See **external documentation**.

`getValue(This) -> unicode:charlist()`

Types:

**This = *wxComboBox()***

See **external documentation**.

`paste(This) -> ok`

Types:

**This = *wxComboBox()***

See **external documentation**.

`redo(This) -> ok`

Types:

**This = *wxComboBox()***

See **external documentation**.

`replace(This, From, To, Value) -> ok`

Types:

**This = *wxComboBox()***
**From = integer()**
**To = integer()**
**Value = *unicode:chardata()***

See **external documentation**.

`remove(This, From, To) -> ok`

Types:

**This = *wxComboBox()***
**From = integer()**
**To = integer()**

See **external documentation**.

`setInsertionPoint(This, Pos) -> ok`

Types:

**This = *wxComboBox()***
**Pos = integer()**

See **external documentation**.

`setInsertionPointEnd(This) -> ok`

Types:

**This = *wxComboBox()***

See **external documentation**.

`setSelection(This, N) -> ok`

Types:

**This = *wxComboBox()***
**N = integer()**

See **external documentation**.

`setSelection(This, From, To) -> ok`

Types:

**This = *wxComboBox()***
**From = integer()**
**To = integer()**

See **external documentation**.

`setValue(This, Value) -> ok`

Types:

**This = *wxComboBox()***
**Value = *unicode:chardata()***

See **external documentation**.

`undo(This) -> ok`

Types:

**This = *wxComboBox()***

See **external documentation**.

`destroy(This::wxComboBox()) -> ok`

Destroys this object, do not use object again

# wxCommandEvent

Erlang module

See external documentation: **wxCommandEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_button_clicked**, **command_checkbox_clicked**, **command_choice_selected**, **command_listbox_selected**, **command_listbox_doubleclicked**, **command_text_updated**, **command_text_enter**, **command_menu_selected**, **command_slider_updated**, **command_radiobox_selected**, **command_radiobutton_selected**, **command_scrollbar_updated**, **command_vlbox_selected**, **command_combobox_selected**, **command_tool_rclicked**, **command_tool_enter**, **command_checklistbox_toggled**, **command_togglebutton_clicked**, **command_left_click**, **command_left_dclick**, **command_right_click**, **command_set_focus**, **command_kill_focus**, **command_enter**

See also the message variant *#wxCommand{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxCommandEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getClientData(This) -> term()`

Types:

**This = *wxCommandEvent()***

See **external documentation**.

`getExtraLong(This) -> integer()`

Types:

**This = *wxCommandEvent()***

See **external documentation**.

`getInt(This) -> integer()`

Types:

**This = *wxCommandEvent()***

See **external documentation**.

`getSelection(This) -> integer()`

Types:

**This = *wxCommandEvent()***

See **external documentation**.

```
getString(This) -> unicode:charlist()
```

Types:

**This = *wxCommandEvent()***

See **external documentation**.

```
isChecked(This) -> boolean()
```

Types:

**This = *wxCommandEvent()***

See **external documentation**.

```
isSelection(This) -> boolean()
```

Types:

**This = *wxCommandEvent()***

See **external documentation**.

```
setInt(This, I) -> ok
```

Types:

**This = *wxCommandEvent()***

**I = integer()**

See **external documentation**.

```
setString(This, S) -> ok
```

Types:

**This = *wxCommandEvent()***

**S = *unicode:chardata()***

See **external documentation**.

# wxContextMenuEvent

Erlang module

See external documentation: **wxContextMenuEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**context_menu**

See also the message variant *#wxContextMenu{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxContextMenuEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxContextMenuEvent()***

See **external documentation**.

```
setPosition(This, Pos) -> ok
```

Types:

**This = *wxContextMenuEvent()***
**Pos = {X::integer(), Y::integer()}**

See **external documentation**.

# wxControl

Erlang module

See external documentation: **wxControl**.

This class is derived (and can use functions) from:
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxControl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getLabel(This) -> unicode:charlist()
```

Types:

**This = *wxControl()***

See **external documentation**.

```
setLabel(This, Label) -> ok
```

Types:

**This = *wxControl()***
**Label = *unicode:chardata()***

See **external documentation**.

# wxControlWithItems

Erlang module

See external documentation: **wxControlWithItems**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxControlWithItems()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
append(This, Item) -> integer()
```

Types:

**This = *wxControlWithItems()***
**Item = *unicode:chardata()***

See **external documentation**.

```
append(This, Item, ClientData) -> integer()
```

Types:

**This = *wxControlWithItems()***
**Item = *unicode:chardata()***
**ClientData = term()**

See **external documentation**.

```
appendStrings(This, Strings) -> ok
```

Types:

**This = *wxControlWithItems()***
**Strings = [*unicode:chardata()*]**

See **external documentation**.

```
clear(This) -> ok
```

Types:

**This = *wxControlWithItems()***

See **external documentation**.

```
delete(This, N) -> ok
```

Types:

**This = *wxControlWithItems()***
**N = integer()**

See **external documentation**.

`findString(This, S) -> integer()`

Types:

**This = *wxControlWithItems()***
**S = *unicode:chardata()***

Equivalent to *findString(This, S, [])*.

`findString(This, S, Options::[Option]) -> integer()`

Types:

**This = *wxControlWithItems()***
**S = *unicode:chardata()***
**Option = {bCase, boolean()}**

See **external documentation**.

`getClientData(This, N) -> term()`

Types:

**This = *wxControlWithItems()***
**N = integer()**

See **external documentation**.

`setClientData(This, N, ClientData) -> ok`

Types:

**This = *wxControlWithItems()***
**N = integer()**
**ClientData = term()**

See **external documentation**.

`getCount(This) -> integer()`

Types:

**This = *wxControlWithItems()***

See **external documentation**.

`getSelection(This) -> integer()`

Types:

**This = *wxControlWithItems()***

See **external documentation**.

`getString(This, N) -> unicode:charlist()`

Types:

**This = *wxControlWithItems()***

**N = integer()**

See **external documentation**.

```
getStringSelection(This) -> unicode:charlist()
```

Types:

**This = *wxControlWithItems()***

See **external documentation**.

```
insert(This, Item, Pos) -> integer()
```

Types:

**This = *wxControlWithItems()***
**Item = *unicode:chardata()***
**Pos = integer()**

See **external documentation**.

```
insert(This, Item, Pos, ClientData) -> integer()
```

Types:

**This = *wxControlWithItems()***
**Item = *unicode:chardata()***
**Pos = integer()**
**ClientData = term()**

See **external documentation**.

```
isEmpty(This) -> boolean()
```

Types:

**This = *wxControlWithItems()***

See **external documentation**.

```
select(This, N) -> ok
```

Types:

**This = *wxControlWithItems()***
**N = integer()**

See **external documentation**.

```
setSelection(This, N) -> ok
```

Types:

**This = *wxControlWithItems()***
**N = integer()**

See **external documentation**.

```
setString(This, N, S) -> ok
```

Types:

**This = *wxControlWithItems()***

**N = integer()**
**S = *unicode:chardata()***

See **external documentation**.

`setStringSelection(This, S) -> boolean()`

Types:

**This = *wxControlWithItems()***
**S = *unicode:chardata()***

See **external documentation**.

# wxCursor

Erlang module

See external documentation: **wxCursor**.

This class is derived (and can use functions) from:
*wxBitmap*

## DATA TYPES

wxCursor()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxCursor()`

See **external documentation**.

`new(CursorId) -> wxCursor()`

Types:

**`CursorId = integer()`**

See **external documentation**.
Also:
new(Image) -> wxCursor() when
Image::wxImage:wxImage().

`new(Bits, Width, Height) -> wxCursor()`

Types:

**`Bits = binary()`**
**`Width = integer()`**
**`Height = integer()`**

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

Equivalent to *new(Bits, Width, Height, [])*.

`new(Bits, Width, Height, Options::[Option]) -> wxCursor()`

Types:

**`Bits = binary()`**
**`Width = integer()`**
**`Height = integer()`**
**`Option = {hotSpotX, integer()} | {hotSpotY, integer()}`**

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

```
ok(This) -> boolean()
```

Types:

**`This = wxCursor()`**

See **external documentation**.

```
destroy(This::wxCursor()) -> ok
```

Destroys this object, do not use object again

# wxDataObject

Erlang module

See external documentation: **wxDataObject**.

## DATA TYPES

wxDataObject()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxDateEvent

Erlang module

See external documentation: **wxDateEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**date_changed**

See also the message variant *#wxDate{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxDateEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getDate(This) -> wx:wx_datetime()
```

Types:

**This = *wxDateEvent()***

See **external documentation**.

# wxDatePickerCtrl

Erlang module

See external documentation: **wxDatePickerCtrl**.

This class is derived (and can use functions) from:
*wxPickerBase*
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxDatePickerCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxDatePickerCtrl()
```

See **external documentation**.

```
new(Parent, Id) -> wxDatePickerCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxDatePickerCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {date, *wx:wx_datetime()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getRange(This, Dt1, Dt2) -> boolean()
```

Types:

**This = *wxDatePickerCtrl()***
**Dt1 = *wx:wx_datetime()***
**Dt2 = *wx:wx_datetime()***

See **external documentation**.

```
getValue(This) -> wx:wx_datetime()
```

Types:

**This = *wxDatePickerCtrl()***

See **external documentation**.

```
setRange(This, Dt1, Dt2) -> ok
```

Types:

**This = *wxDatePickerCtrl()***
**Dt1 = *wx:wx_datetime()***
**Dt2 = *wx:wx_datetime()***

See **external documentation**.

```
setValue(This, Date) -> ok
```

Types:

**This = *wxDatePickerCtrl()***
**Date = *wx:wx_datetime()***

See **external documentation**.

```
destroy(This::wxDatePickerCtrl()) -> ok
```

Destroys this object, do not use object again

# wxDC

Erlang module

See external documentation: **wxDC**.

## DATA TYPES

wxDC()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
blit(This, DestPt, Sz, Source, SrcPt) -> boolean()
```

Types:

**This = *wxDC()***
**DestPt = {X::integer(), Y::integer()}**
**Sz = {W::integer(), H::integer()}**
**Source = *wxDC()***
**SrcPt = {X::integer(), Y::integer()}**

Equivalent to *blit(This, DestPt, Sz, Source, SrcPt, [])*.

```
blit(This, DestPt, Sz, Source, SrcPt, Options::[Option]) -> boolean()
```

Types:

**This = *wxDC()***
**DestPt = {X::integer(), Y::integer()}**
**Sz = {W::integer(), H::integer()}**
**Source = *wxDC()***
**SrcPt = {X::integer(), Y::integer()}**
**Option = {rop, *wx:wx_enum()*} | {useMask, boolean()} | {srcPtMask, {X::integer(), Y::integer()}}**

See **external documentation**.
Rop = integer

```
calcBoundingBox(This, X, Y) -> ok
```

Types:

**This = *wxDC()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
clear(This) -> ok
```

Types:

**This = *wxDC()***

See **external documentation**.

`computeScaleAndOrigin(This) -> ok`

Types:

**This = *wxDC()***

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

`crossHair(This, Pt) -> ok`

Types:

**This = *wxDC()***

**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

`destroyClippingRegion(This) -> ok`

Types:

**This = *wxDC()***

See **external documentation**.

`deviceToLogicalX(This, X) -> integer()`

Types:

**This = *wxDC()***

**X = integer()**

See **external documentation**.

`deviceToLogicalXRel(This, X) -> integer()`

Types:

**This = *wxDC()***

**X = integer()**

See **external documentation**.

`deviceToLogicalY(This, Y) -> integer()`

Types:

**This = *wxDC()***

**Y = integer()**

See **external documentation**.

`deviceToLogicalYRel(This, Y) -> integer()`

Types:

**This = *wxDC()***

**Y = integer()**

See **external documentation**.

`drawArc(This, Pt1, Pt2, Centre) -> ok`

Types:

**This = *wxDC()***
**Pt1 = {X::integer(), Y::integer()}**
**Pt2 = {X::integer(), Y::integer()}**
**Centre = {X::integer(), Y::integer()}**

See **external documentation**.

`drawBitmap(This, Bmp, Pt) -> ok`

Types:

**This = *wxDC()***
**Bmp = *wxBitmap:wxBitmap()***
**Pt = {X::integer(), Y::integer()}**

Equivalent to *drawBitmap(This, Bmp, Pt, [])*.

`drawBitmap(This, Bmp, Pt, Options::[Option]) -> ok`

Types:

**This = *wxDC()***
**Bmp = *wxBitmap:wxBitmap()***
**Pt = {X::integer(), Y::integer()}**
**Option = {useMask, boolean()}**

See **external documentation**.

`drawCheckMark(This, Rect) -> ok`

Types:

**This = *wxDC()***
**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

See **external documentation**.

`drawCircle(This, Pt, Radius) -> ok`

Types:

**This = *wxDC()***
**Pt = {X::integer(), Y::integer()}**
**Radius = integer()**

See **external documentation**.

`drawEllipse(This, Rect) -> ok`

Types:

**This = *wxDC()***
**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

See **external documentation**.

```
drawEllipse(This, Pt, Sz) -> ok
```

Types:

**This = *wxDC()***
**Pt = {X::integer(), Y::integer()}**
**Sz = {W::integer(), H::integer()}**

See **external documentation**.

```
drawEllipticArc(This, Pt, Sz, Sa, Ea) -> ok
```

Types:

**This = *wxDC()***
**Pt = {X::integer(), Y::integer()}**
**Sz = {W::integer(), H::integer()}**
**Sa = number()**
**Ea = number()**

See **external documentation**.

```
drawIcon(This, Icon, Pt) -> ok
```

Types:

**This = *wxDC()***
**Icon = *wxIcon:wxIcon()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
drawLabel(This, Text, Rect) -> ok
```

Types:

**This = *wxDC()***
**Text = *unicode:chardata()***
**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

Equivalent to *drawLabel(This, Text, Rect, [])*.

```
drawLabel(This, Text, Rect, Options::[Option]) -> ok
```

Types:

**This = *wxDC()***
**Text = *unicode:chardata()***
**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**
**Option = {alignment, integer()} | {indexAccel, integer()}**

See **external documentation**.

```
drawLine(This, Pt1, Pt2) -> ok
```

Types:

**This = *wxDC()***
**Pt1 = {X::integer(), Y::integer()}**
**Pt2 = {X::integer(), Y::integer()}**

See **external documentation**.

```
drawLines(This, Points) -> ok
```

Types:

**This = *wxDC()***
**Points = [{X::integer(), Y::integer()}]**

Equivalent to *drawLines(This, Points, [])*.

```
drawLines(This, Points, Options::[Option]) -> ok
```

Types:

**This = *wxDC()***
**Points = [{X::integer(), Y::integer()}]**
**Option = {xoffset, integer()} | {yoffset, integer()}**

See **external documentation**.

```
drawPolygon(This, Points) -> ok
```

Types:

**This = *wxDC()***
**Points = [{X::integer(), Y::integer()}]**

Equivalent to *drawPolygon(This, Points, [])*.

```
drawPolygon(This, Points, Options::[Option]) -> ok
```

Types:

**This = *wxDC()***
**Points = [{X::integer(), Y::integer()}]**
**Option = {xoffset, integer()} | {yoffset, integer()} | {fillStyle, *wx:wx_enum()*}**

See **external documentation**.
FillStyle = integer

```
drawPoint(This, Pt) -> ok
```

Types:

**This = *wxDC()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
drawRectangle(This, Rect) -> ok
```

Types:

**This = *wxDC()***
**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

See **external documentation**.

```
drawRectangle(This, Pt, Sz) -> ok
```

Types:

**This = *wxDC()***
**Pt = {X::integer(), Y::integer()}**
**Sz = {W::integer(), H::integer()}**

See **external documentation**.

```
drawRotatedText(This, Text, Pt, Angle) -> ok
```

Types:

**This = *wxDC()***
**Text = *unicode:chardata()***
**Pt = {X::integer(), Y::integer()}**
**Angle = number()**

See **external documentation**.

```
drawRoundedRectangle(This, R, Radius) -> ok
```

Types:

**This = *wxDC()***
**R = {X::integer(), Y::integer(), W::integer(), H::integer()}**
**Radius = number()**

See **external documentation**.

```
drawRoundedRectangle(This, Pt, Sz, Radius) -> ok
```

Types:

**This = *wxDC()***
**Pt = {X::integer(), Y::integer()}**
**Sz = {W::integer(), H::integer()}**
**Radius = number()**

See **external documentation**.

```
drawText(This, Text, Pt) -> ok
```

Types:

**This = *wxDC()***
**Text = *unicode:chardata()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
endDoc(This) -> ok
```

Types:

**This = *wxDC()***

See **external documentation**.

```
endPage(This) -> ok
```

Types:

**This = *wxDC()***

See **external documentation**.

```
floodFill(This, Pt, Col) -> boolean()
```

Types:

**This = *wxDC()***
**Pt = {X::integer(), Y::integer()}**
**Col = *wx:wx_colour()***

Equivalent to *floodFill(This, Pt, Col, [])*.

```
floodFill(This, Pt, Col, Options::[Option]) -> boolean()
```

Types:

**This = *wxDC()***
**Pt = {X::integer(), Y::integer()}**
**Col = *wx:wx_colour()***
**Option = {style, *wx:wx_enum()*}**

See **external documentation**.
Style = integer

```
getBackground(This) -> wxBrush:wxBrush()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
getBackgroundMode(This) -> integer()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
getBrush(This) -> wxBrush:wxBrush()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
getCharHeight(This) -> integer()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
getCharWidth(This) -> integer()
```

Types:

**This = *wxDC()***

See **external documentation**.

`getClippingBox(This) -> Result`

Types:

**Result = {X::integer(), Y::integer(), W::integer(), H::integer()}**

**This = *wxDC()***

See **external documentation**.

`getFont(This) -> wxFont:wxFont()`

Types:

**This = *wxDC()***

See **external documentation**.

`getLayoutDirection(This) -> wx:wx_enum()`

Types:

**This = *wxDC()***

See **external documentation**.

Res = ?wxLayout_Default | ?wxLayout_LeftToRight | ?wxLayout_RightToLeft

`getLogicalFunction(This) -> integer()`

Types:

**This = *wxDC()***

See **external documentation**.

`getMapMode(This) -> integer()`

Types:

**This = *wxDC()***

See **external documentation**.

`getMultiLineTextExtent(This, String) -> {W::integer(), H::integer()}`

Types:

**This = *wxDC()***

**String = *unicode:chardata()***

See **external documentation**.

`getMultiLineTextExtent(This, String, Options::[Option]) -> {Width::integer(), Height::integer(), HeightLine::integer()}`

Types:

**This = *wxDC()***

**String = *unicode:chardata()***

**Option = {font, *wxFont:wxFont()*}**

See **external documentation**.

```
getPartialTextExtents(This, Text) -> Result
```

Types:

**Result = {Res::boolean(), Widths::[integer()]}**
**This = *wxDC()***
**Text = *unicode:chardata()***

See **external documentation**.

```
getPen(This) -> wxPen:wxPen()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
getPixel(This, Pt) -> Result
```

Types:

**Result = {Res::boolean(), Col::*wx:wx_colour4()*}**
**This = *wxDC()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
getPPI(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxDC()***

See **external documentation**.

```
getSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxDC()***

See **external documentation**.

```
getSizeMM(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxDC()***

See **external documentation**.

```
getTextBackground(This) -> wx:wx_colour4()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
getTextExtent(This, String) -> {W::integer(), H::integer()}
```

Types:

**This = *wxDC()***
**String = *unicode:chardata()***

See **external documentation**.

```
getTextExtent(This, String, Options::[Option]) -> Result
```

Types:

**Result = {X::integer(), Y::integer(), Descent::integer(), ExternalLeading::integer()}**

**This = *wxDC()***

**String = *unicode:chardata()***

**Option = {theFont, *wxFont:wxFont()*}**

See **external documentation**.

```
getTextForeground(This) -> wx:wx_colour4()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
getUserScale(This) -> {X::number(), Y::number()}
```

Types:

**This = *wxDC()***

See **external documentation**.

```
gradientFillConcentric(This, Rect, InitialColour, DestColour) -> ok
```

Types:

**This = *wxDC()***

**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

**InitialColour = *wx:wx_colour()***

**DestColour = *wx:wx_colour()***

See **external documentation**.

```
gradientFillConcentric(This, Rect, InitialColour, DestColour, CircleCenter) -
> ok
```

Types:

**This = *wxDC()***

**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

**InitialColour = *wx:wx_colour()***

**DestColour = *wx:wx_colour()***

**CircleCenter = {X::integer(), Y::integer()}**

See **external documentation**.

```
gradientFillLinear(This, Rect, InitialColour, DestColour) -> ok
```

Types:

**This = *wxDC()***

**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

**InitialColour = *wx:wx_colour()***
**DestColour = *wx:wx_colour()***

Equivalent to *gradientFillLinear(This, Rect, InitialColour, DestColour, [])*.

```
gradientFillLinear(This, Rect, InitialColour, DestColour, Options::[Option])
-> ok
```

Types:

**This = *wxDC()***
**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**
**InitialColour = *wx:wx_colour()***
**DestColour = *wx:wx_colour()***
**Option = {nDirection, *wx:wx_enum()*}**

See **external documentation**.
NDirection = ?wxLEFT | ?wxRIGHT | ?wxUP | ?wxDOWN | ?wxTOP | ?wxBOTTOM | ?wxNORTH | ?wxSOUTH | ?wxWEST | ?wxEAST | ?wxALL

```
logicalToDeviceX(This, X) -> integer()
```

Types:

**This = *wxDC()***
**X = integer()**

See **external documentation**.

```
logicalToDeviceXRel(This, X) -> integer()
```

Types:

**This = *wxDC()***
**X = integer()**

See **external documentation**.

```
logicalToDeviceY(This, Y) -> integer()
```

Types:

**This = *wxDC()***
**Y = integer()**

See **external documentation**.

```
logicalToDeviceYRel(This, Y) -> integer()
```

Types:

**This = *wxDC()***
**Y = integer()**

See **external documentation**.

```
maxX(This) -> integer()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
maxY(This) -> integer()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
minX(This) -> integer()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
minY(This) -> integer()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
isOk(This) -> boolean()
```

Types:

**This = *wxDC()***

See **external documentation**.

```
resetBoundingBox(This) -> ok
```

Types:

**This = *wxDC()***

See **external documentation**.

```
setAxisOrientation(This, XLeftRight, YBottomUp) -> ok
```

Types:

**This = *wxDC()***
**XLeftRight = boolean()**
**YBottomUp = boolean()**

See **external documentation**.

```
setBackground(This, Brush) -> ok
```

Types:

**This = *wxDC()***
**Brush = *wxBrush:wxBrush()***

See **external documentation**.

```
setBackgroundMode(This, Mode) -> ok
```

Types:

**This = *wxDC()***

**Mode = integer()**

See **external documentation**.

`setBrush(This, Brush) -> ok`

Types:

**This = *wxDC()***

**Brush = *wxBrush:wxBrush()***

See **external documentation**.

`setClippingRegion(This, Region) -> ok`

Types:

**This = *wxDC()***

**Region = *wxRegion:wxRegion()***

See **external documentation**.

Also:

setClippingRegion(This, Rect) -> 'ok' when

This::wxDC(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}.

`setClippingRegion(This, Pt, Sz) -> ok`

Types:

**This = *wxDC()***

**Pt = {X::integer(), Y::integer()}**

**Sz = {W::integer(), H::integer()}**

See **external documentation**.

`setDeviceOrigin(This, X, Y) -> ok`

Types:

**This = *wxDC()***

**X = integer()**

**Y = integer()**

See **external documentation**.

`setFont(This, Font) -> ok`

Types:

**This = *wxDC()***

**Font = *wxFont:wxFont()***

See **external documentation**.

`setLayoutDirection(This, Dir) -> ok`

Types:

**This = *wxDC()***

**Dir = *wx:wx_enum()***

See **external documentation**.

Dir = ?wxLayout_Default | ?wxLayout_LeftToRight | ?wxLayout_RightToLeft

`setLogicalFunction(This, Function) -> ok`

Types:

**This = *wxDC()***
**Function = *wx:wx_enum()***

See **external documentation**.
Function = integer

`setMapMode(This, Mode) -> ok`

Types:

**This = *wxDC()***
**Mode = *wx:wx_enum()***

See **external documentation**.
Mode = integer

`setPalette(This, Palette) -> ok`

Types:

**This = *wxDC()***
**Palette = *wxPalette:wxPalette()***

See **external documentation**.

`setPen(This, Pen) -> ok`

Types:

**This = *wxDC()***
**Pen = *wxPen:wxPen()***

See **external documentation**.

`setTextBackground(This, Colour) -> ok`

Types:

**This = *wxDC()***
**Colour = *wx:wx_colour()***

See **external documentation**.

`setTextForeground(This, Colour) -> ok`

Types:

**This = *wxDC()***
**Colour = *wx:wx_colour()***

See **external documentation**.

`setUserScale(This, X, Y) -> ok`

Types:

**This = *wxDC()***

**X = number()**
**Y = number()**

See **external documentation**.

`startDoc(This, Message) -> boolean()`

Types:

**This = *wxDC()***
**Message = *unicode:chardata()***

See **external documentation**.

`startPage(This) -> ok`

Types:

**This = *wxDC()***

See **external documentation**.

# wxDCOverlay

Erlang module

See external documentation: **wxDCOverlay**.

## DATA TYPES

wxDCOverlay()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Overlay, Dc) -> wxDCOverlay()
```

Types:

**Overlay = *wxOverlay:wxOverlay()***
**Dc = *wxWindowDC:wxWindowDC()***

See **external documentation**.

```
new(Overlay, Dc, X, Y, Width, Height) -> wxDCOverlay()
```

Types:

**Overlay = *wxOverlay:wxOverlay()***
**Dc = *wxWindowDC:wxWindowDC()***
**X = integer()**
**Y = integer()**
**Width = integer()**
**Height = integer()**

See **external documentation**.

```
clear(This) -> ok
```

Types:

**This = *wxDCOverlay()***

See **external documentation**.

```
destroy(This::wxDCOverlay()) -> ok
```

Destroys this object, do not use object again

# wxDialog

Erlang module

See external documentation: **wxDialog**.

This class is derived (and can use functions) from:
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxDialog()`

See **external documentation**.

`new(Parent, Id, Title) -> wxDialog()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***

Equivalent to *new(Parent, Id, Title, [])*.

`new(Parent, Id, Title, Options::[Option]) -> wxDialog()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`create(This, Parent, Id, Title) -> boolean()`

Types:

**This = *wxDialog()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***

Equivalent to *create(This, Parent, Id, Title, [])*.

```
create(This, Parent, Id, Title, Options::[Option]) -> boolean()
```

Types:

**This = *wxDialog()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Title = *unicode:chardata()***

**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
createButtonSizer(This, Flags) -> wxSizer:wxSizer()
```

Types:

**This = *wxDialog()***

**Flags = integer()**

See **external documentation**.

```
createStdDialogButtonSizer(This, Flags) ->
wxStdDialogButtonSizer:wxStdDialogButtonSizer()
```

Types:

**This = *wxDialog()***

**Flags = integer()**

See **external documentation**.

```
endModal(This, RetCode) -> ok
```

Types:

**This = *wxDialog()***

**RetCode = integer()**

See **external documentation**.

```
getAffirmativeId(This) -> integer()
```

Types:

**This = *wxDialog()***

See **external documentation**.

```
getReturnCode(This) -> integer()
```

Types:

**This = *wxDialog()***

See **external documentation**.

```
isModal(This) -> boolean()
```

Types:

**This = *wxDialog()***

See **external documentation**.

```
setAffirmativeId(This, AffirmativeId) -> ok
```

Types:

**This = *wxDialog()***
**AffirmativeId = integer()**

See **external documentation**.

```
setReturnCode(This, ReturnCode) -> ok
```

Types:

**This = *wxDialog()***
**ReturnCode = integer()**

See **external documentation**.

```
show(This) -> boolean()
```

Types:

**This = *wxDialog()***

Equivalent to *show(This, [])*.

```
show(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxDialog()***
**Option = {show, boolean()}**

See **external documentation**.

```
showModal(This) -> integer()
```

Types:

**This = *wxDialog()***

See **external documentation**.

```
destroy(This::wxDialog()) -> ok
```

Destroys this object, do not use object again

# wxDirDialog

Erlang module

See external documentation: **wxDirDialog**.

This class is derived (and can use functions) from:
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxDirDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Parent) -> wxDirDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxDirDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {title, *unicode:chardata()*} | {defaultPath, *unicode:chardata()*} | {style, integer()} | {pos, {X::integer(), Y::integer()}} | {sz, {W::integer(), H::integer()}}**

See **external documentation**.

```
getPath(This) -> unicode:charlist()
```

Types:

**This = *wxDirDialog()***

See **external documentation**.

```
getMessage(This) -> unicode:charlist()
```

Types:

**This = *wxDirDialog()***

See **external documentation**.

```
setMessage(This, Message) -> ok
```

Types:

**This = *wxDirDialog()***

**Message = *unicode:chardata()***

See **external documentation**.

`setPath(This, Path) -> ok`

Types:

**This = *wxDirDialog()***

**Path = *unicode:chardata()***

See **external documentation**.

`destroy(This::wxDirDialog()) -> ok`

Destroys this object, do not use object again

# wxDirPickerCtrl

Erlang module

See external documentation: **wxDirPickerCtrl**.

This class is derived (and can use functions) from:
*wxPickerBase*
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxDirPickerCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxDirPickerCtrl()
```

See **external documentation**.

```
new(Parent, Id) -> wxDirPickerCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxDirPickerCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {path, *unicode:chardata()*} | {message, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id) -> boolean()
```

Types:

**This = *wxDirPickerCtrl()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

```
create(This, Parent, Id, Options::[Option]) -> boolean()
```

Types:

**This = *wxDirPickerCtrl()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Option = {path, *unicode:chardata()*} | {message, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getPath(This) -> unicode:charlist()
```

Types:

**This = *wxDirPickerCtrl()***

See **external documentation**.

```
setPath(This, Str) -> ok
```

Types:

**This = *wxDirPickerCtrl()***

**Str = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxDirPickerCtrl()) -> ok
```

Destroys this object, do not use object again

# wxDisplayChangedEvent

Erlang module

See external documentation: **wxDisplayChangedEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**display_changed**

See also the message variant *#wxDisplayChanged{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxDisplayChangedEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxDropFilesEvent

Erlang module

See external documentation: **wxDropFilesEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**drop_files**

See also the message variant *#wxDropFiles{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxDropFilesEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxDropFilesEvent()***

See **external documentation**.

```
getNumberOfFiles(This) -> integer()
```

Types:

**This = *wxDropFilesEvent()***

See **external documentation**.

```
getFiles(This) -> [unicode:charlist()]
```

Types:

**This = *wxDropFilesEvent()***

See **external documentation**.

# wxEraseEvent

Erlang module

See external documentation: **wxEraseEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**erase_background**

See also the message variant *#wxErase{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxEraseEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getDC(This) -> wxDC:wxDC()
```

Types:

**This = *wxEraseEvent()***

See **external documentation**.

# wxEvent

Erlang module

See external documentation: **wxEvent**.

## DATA TYPES

wxEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getId(This) -> integer()
```

Types:

**This = *wxEvent()***

See **external documentation**.

```
getSkipped(This) -> boolean()
```

Types:

**This = *wxEvent()***

See **external documentation**.

```
getTimestamp(This) -> integer()
```

Types:

**This = *wxEvent()***

See **external documentation**.

```
isCommandEvent(This) -> boolean()
```

Types:

**This = *wxEvent()***

See **external documentation**.

```
resumePropagation(This, PropagationLevel) -> ok
```

Types:

**This = *wxEvent()***

**PropagationLevel = integer()**

See **external documentation**.

```
shouldPropagate(This) -> boolean()
```

Types:

**This = *wxEvent()***

See **external documentation**.

```
skip(This) -> ok
```

Types:

**This = *wxEvent()***

Equivalent to *skip(This, [])*.

```
skip(This, Options::[Option]) -> ok
```

Types:

**This = *wxEvent()***

**Option = {skip, boolean()}**

See **external documentation**.

```
stopPropagation(This) -> integer()
```

Types:

**This = *wxEvent()***

See **external documentation**.

# wxEvtHandler

Erlang module

The Event handler.

To get events from wxwidgets objects you subscribe to them by calling connect/[2-3]. Events are sent as messages, if no callback was supplied These messages will be *#wx{}* where EventRecord is a record that depends on the *event type*. The records are defined in: wx/include/wx.hrl.

If a callback was supplied to connect, the callback will be invoked (in another process) to handle the event. The callback should be of arity 2. fun(EventRecord::wx(), EventObject::wxObject()).

Beware that the callback will be in executed in new process each time.

**The orginal documentation**.

## DATA TYPES

event() = *wxActivate()* | *wxAuiManager()* | *wxAuiNotebook()* | *wxCalendar()* | *wxChildFocus()* | *wxClipboardText()* | *wxClose()* | *wxColourPicker()* | *wxCommand()* | *wxContextMenu()* | *wxDate()* | *wxDisplayChanged()* | *wxDropFiles()* | *wxErase()* | *wxFileDirPicker()* | *wxFocus()* | *wxFontPicker()* | *wxGrid()* | *wxHelp()* | *wxHtmlLink()* | *wxIconize()* | *wxIdle()* | *wxInitDialog()* | *wxJoystick()* | *wxKey()* | *wxList()* | *wxMaximize()* | *wxMenu()* | *wxMouse()* | *wxMouseCaptureChanged()* | *wxMouseCaptureLost()* | *wxMove()* | *wxNavigationKey()* | *wxNotebook()* | *wxPaint()* | *wxPaletteChanged()* | *wxQueryNewPalette()* | *wxSash()* | *wxScroll()* | *wxScrollWin()* | *wxSetCursor()* | *wxShow()* | *wxSize()* | *wxSpin()* | *wxSplitter()* | *wxStyledText()* | *wxSysColourChanged()* | *wxTaskBarIcon()* | *wxTree()* | *wxUpdateUI()* | *wxWindowCreate()* | *wxWindowDestroy()*

wx() = #wx{id=integer(), obj=*wx:wx_object()*, userData=term(), event=*event()*}

wxActivate() = #wxActivate{type=*wxActivateEventType()*, active=boolean()}

wxActivateEventType() = activate | activate_app | hibernate

wxAuiManager() = #wxAuiManager{type=*wxAuiManagerEventType()*, manager=*wxAuiManager:wxAuiManager()*, pane=*wxAuiPaneInfo:wxAuiPaneInfo()*, button=integer(), veto_flag=boolean(), canveto_flag=boolean(), dc=*wxDC:wxDC()*}

wxAuiManagerEventType() = aui_pane_button | aui_pane_close | aui_pane_maximize | aui_pane_restore | aui_pane_activated | aui_render | aui_find_manager

wxAuiNotebook() = #wxAuiNotebook{type=*wxAuiNotebookEventType()*, old_selection=integer(), selection=integer(), drag_source=*wxAuiNotebook:wxAuiNotebook()*}

wxAuiNotebookEventType() = command_auinotebook_page_close | command_auinotebook_page_changed | command_auinotebook_page_changing | command_auinotebook_button | command_auinotebook_begin_drag | command_auinotebook_end_drag | command_auinotebook_drag_motion | command_auinotebook_allow_dnd | command_auinotebook_tab_middle_down | command_auinotebook_tab_middle_up | command_auinotebook_tab_right_down | command_auinotebook_tab_right_up | command_auinotebook_page_closed | command_auinotebook_drag_done | command_auinotebook_bg_dclick

wxCalendar() = #wxCalendar{type=*wxCalendarEventType()*, wday=*wx:wx_enum()*, date=*wx:wx_datetime()*}

wxCalendarEventType() = calendar_sel_changed | calendar_day_changed | calendar_month_changed | calendar_year_changed | calendar_doubleclicked | calendar_weekday_clicked

wxChildFocus() = #wxChildFocus{type=*wxChildFocusEventType()*}

wxChildFocusEventType() = child_focus

wxClipboardText() = #wxClipboardText{type=*wxClipboardTextEventType()*}

wxClipboardTextEventType() = command_text_copy | command_text_cut | command_text_paste

wxClose() = #wxClose{type=*wxCloseEventType()*}

wxCloseEventType() = close_window | end_session | query_end_session

wxColourPicker() = #wxColourPicker{type=*wxColourPickerEventType()*, colour=*wx:wx_colour()*}

wxColourPickerEventType() = command_colourpicker_changed

wxCommand() = #wxCommand{type=*wxCommandEventType()*, cmdString=*unicode:chardata()*, commandInt=integer(), extraLong=integer()}

wxCommandEventType() = command_button_clicked | command_checkbox_clicked | command_choice_selected | command_listbox_selected | command_listbox_doubleclicked | command_text_updated | command_text_enter | command_menu_selected | command_slider_updated | command_radiobox_selected | command_radiobutton_selected | command_scrollbar_updated | command_vlbox_selected | command_combobox_selected | command_tool_rclicked | command_tool_enter | command_checklistbox_toggled | command_togglebutton_clicked | command_left_click | command_left_dclick | command_right_click | command_set_focus | command_kill_focus | command_enter

wxContextMenu() = #wxContextMenu{type=*wxContextMenuEventType()*, pos={X::integer(), Y::integer()}}

wxContextMenuEventType() = context_menu

wxDate() = #wxDate{type=*wxDateEventType()*, date=*wx:wx_datetime()*}

wxDateEventType() = date_changed

wxDisplayChanged() = #wxDisplayChanged{type=*wxDisplayChangedEventType()*}

wxDisplayChangedEventType() = display_changed

wxDropFiles() = #wxDropFiles{type=*wxDropFilesEventType()*, noFiles=integer(), pos={X::integer(), Y::integer()}, files=[*unicode:chardata()*]}

wxDropFilesEventType() = drop_files

wxErase() = #wxErase{type=*wxEraseEventType()*, dc=*wxDC:wxDC()*}

wxEraseEventType() = erase_background

wxEventType() = *wxActivateEventType()* | *wxAuiManagerEventType()* | *wxAuiNotebookEventType()* | *wxCalendarEventType()* | *wxChildFocusEventType()* | *wxClipboardTextEventType()* | *wxCloseEventType()* | *wxColourPickerEventType()* | *wxCommandEventType()* | *wxContextMenuEventType()* | *wxDateEventType()* | *wxDisplayChangedEventType()* | *wxDropFilesEventType()* | *wxEraseEventType()* | *wxFileDirPickerEventType()* | *wxFocusEventType()* | *wxFontPickerEventType()* | *wxGridEventType()* | *wxHelpEventType()* | *wxHtmlLinkEventType()* | *wxIconizeEventType()* | *wxIdleEventType()* | *wxInitDialogEventType()* | *wxJoystickEventType()* | *wxKeyEventType()* | *wxListEventType()* | *wxMaximizeEventType()* | *wxMenuEventType()*

| *wxMouseCaptureChangedEventType()* | *wxMouseCaptureLostEventType()* | *wxMouseEventType()* | *wxMoveEventType()* | *wxNavigationKeyEventType()* | *wxNotebookEventType()* | *wxPaintEventType()* | *wxPaletteChangedEventType()* | *wxQueryNewPaletteEventType()* | *wxSashEventType()* | *wxScrollEventType()* | *wxScrollWinEventType()* | *wxSetCursorEventType()* | *wxShowEventType()* | *wxSizeEventType()* | *wxSpinEventType()* | *wxSplitterEventType()* | *wxStyledTextEventType()* | *wxSysColourChangedEventType()* | *wxTaskBarIconEventType()* | *wxTreeEventType()* | *wxUpdateUIEventType()* | *wxWindowCreateEventType()* | *wxWindowDestroyEventType()*

wxEvtHandler() = *wx:wx_object()*

wxFileDirPicker() = #wxFileDirPicker{type=*wxFileDirPickerEventType()*, path=*unicode:chardata()*}

wxFileDirPickerEventType() = command_filepicker_changed | command_dirpicker_changed

wxFocus() = #wxFocus{type=*wxFocusEventType()*, win=*wxWindow:wxWindow()*}

wxFocusEventType() = set_focus | kill_focus

wxFontPicker() = #wxFontPicker{type=*wxFontPickerEventType()*, font=*wxFont:wxFont()*}

wxFontPickerEventType() = command_fontpicker_changed

wxGrid() = #wxGrid{type=*wxGridEventType()*, row=integer(), col=integer(), x=integer(), y=integer(), selecting=boolean(), control=boolean(), meta=boolean(), shift=boolean(), alt=boolean()}

wxGridEventType() = grid_cell_left_click | grid_cell_right_click | grid_cell_left_dclick | grid_cell_right_dclick | grid_label_left_click | grid_label_right_click | grid_label_left_dclick | grid_label_right_dclick | grid_row_size | grid_col_size | grid_range_select | grid_cell_change | grid_select_cell | grid_editor_shown | grid_editor_hidden | grid_editor_created | grid_cell_begin_drag

wxHelp() = #wxHelp{type=*wxHelpEventType()*}

wxHelpEventType() = help | detailed_help

wxHtmlLink() = #wxHtmlLink{type=*wxHtmlLinkEventType()*, linkInfo=*wx:wx_wxHtmlLinkInfo()*}

wxHtmlLinkEventType() = command_html_link_clicked

wxIconize() = #wxIconize{type=*wxIconizeEventType()*, iconized=boolean()}

wxIconizeEventType() = iconize

wxIdle() = #wxIdle{type=*wxIdleEventType()*}

wxIdleEventType() = idle

wxInitDialog() = #wxInitDialog{type=*wxInitDialogEventType()*}

wxInitDialogEventType() = init_dialog

wxJoystick() = #wxJoystick{type=*wxJoystickEventType()*, pos={X::integer(), Y::integer()}, zPosition=integer(), buttonChange=integer(), buttonState=integer(), joyStick=integer()}

wxJoystickEventType() = joy_button_down | joy_button_up | joy_move | joy_zmove

wxKey() = #wxKey{type=*wxKeyEventType()*, x=integer(), y=integer(), keyCode=integer(), controlDown=boolean(), shiftDown=boolean(), altDown=boolean(), metaDown=boolean(), scanCode=boolean(), uniChar=integer(), rawCode=integer(), rawFlags=integer()}

wxKeyEventType() = char | char_hook | key_down | key_up

wxList() = #wxList{type=*wxListEventType()*, code=integer(), oldItemIndex=integer(), itemIndex=integer(), col=integer(), pointDrag={X::integer(), Y::integer()}}

wxListEventType() = command_list_begin_drag | command_list_begin_rdrag | command_list_begin_label_edit | command_list_end_label_edit | command_list_delete_item | command_list_delete_all_items | command_list_key_down | command_list_insert_item | command_list_col_click | command_list_col_right_click | command_list_col_begin_drag | command_list_col_dragging | command_list_col_end_drag | command_list_item_selected | command_list_item_deselected | command_list_item_right_click | command_list_item_middle_click | command_list_item_activated | command_list_item_focused | command_list_cache_hint

wxMaximize() = #wxMaximize{type=*wxMaximizeEventType()*}

wxMaximizeEventType() = maximize

wxMenu() = #wxMenu{type=*wxMenuEventType()*, menuId=integer(), menu=*wxMenu:wxMenu()*}

wxMenuEventType() = menu_open | menu_close | menu_highlight

wxMouse() = #wxMouse{type=*wxMouseEventType()*, x=integer(), y=integer(), leftDown=boolean(), middleDown=boolean(), rightDown=boolean(), controlDown=boolean(), shiftDown=boolean(), altDown=boolean(), metaDown=boolean(), wheelRotation=integer(), wheelDelta=integer(), linesPerAction=integer()}

wxMouseCaptureChanged() = #wxMouseCaptureChanged{type=*wxMouseCaptureChangedEventType()*}

wxMouseCaptureChangedEventType() = mouse_capture_changed

wxMouseCaptureLost() = #wxMouseCaptureLost{type=*wxMouseCaptureLostEventType()*}

wxMouseCaptureLostEventType() = mouse_capture_lost

wxMouseEventType() = left_down | left_up | middle_down | middle_up | right_down | right_up | motion | enter_window | leave_window | left_dclick | middle_dclick | right_dclick | mousewheel

wxMove() = #wxMove{type=*wxMoveEventType()*, pos={X::integer(), Y::integer()}, rect={X::integer(), Y::integer(), W::integer(), H::integer()}}

wxMoveEventType() = move

wxNavigationKey() = #wxNavigationKey{type=*wxNavigationKeyEventType()*, flags=integer(), focus=*wxWindow:wxWindow()*}

wxNavigationKeyEventType() = navigation_key

wxNotebook() = #wxNotebook{type=*wxNotebookEventType()*, nSel=integer(), nOldSel=integer()}

wxNotebookEventType() = command_notebook_page_changed | command_notebook_page_changing

wxPaint() = #wxPaint{type=*wxPaintEventType()*}

wxPaintEventType() = paint

wxPaletteChanged() = #wxPaletteChanged{type=*wxPaletteChangedEventType()*}

wxPaletteChangedEventType() = palette_changed

wxQueryNewPalette() = #wxQueryNewPalette{type=*wxQueryNewPaletteEventType()*}

wxQueryNewPaletteEventType() = query_new_palette

wxSash() = #wxSash{type=*wxSashEventType()*, edge=*wx:wx_enum()*, dragRect={X::integer(), Y::integer(), W::integer(), H::integer()}, dragStatus=*wx:wx_enum()*}

wxSashEventType() = sash_dragged

wxScroll() = #wxScroll{type=*wxScrollEventType()*, commandInt=integer(), extraLong=integer()}

wxScrollEventType() = scroll_top | scroll_bottom | scroll_lineup | scroll_linedown | scroll_pageup | scroll_pagedown | scroll_thumbtrack | scroll_thumbrelease | scroll_changed

wxScrollWin() = #wxScrollWin{type=*wxScrollWinEventType()*, commandInt=integer(), extraLong=integer()}

wxScrollWinEventType() = scrollwin_top | scrollwin_bottom | scrollwin_lineup | scrollwin_linedown | scrollwin_pageup | scrollwin_pagedown | scrollwin_thumbtrack | scrollwin_thumbrelease

wxSetCursor() = #wxSetCursor{type=*wxSetCursorEventType()*, x=integer(), y=integer(), cursor=*wxCursor:wxCursor()*}

wxSetCursorEventType() = set_cursor

wxShow() = #wxShow{type=*wxShowEventType()*, show=boolean()}

wxShowEventType() = show

wxSize() = #wxSize{type=*wxSizeEventType()*, size={W::integer(), H::integer()}, rect={X::integer(), Y::integer(), W::integer(), H::integer()}}

wxSizeEventType() = size

wxSpin() = #wxSpin{type=*wxSpinEventType()*, commandInt=integer()}

wxSpinEventType() = command_spinctrl_updated | spin_up | spin_down | spin

wxSplitter() = #wxSplitter{type=*wxSplitterEventType()*}

wxSplitterEventType() = command_splitter_sash_pos_changed | command_splitter_sash_pos_changing | command_splitter_doubleclicked | command_splitter_unsplit

wxStyledText() = #wxStyledText{type=*wxStyledTextEventType()*, position=integer(), key=integer(), modifiers=integer(), modificationType=integer(), text=*unicode:chardata()*, length=integer(), linesAdded=integer(), line=integer(), foldLevelNow=integer(), foldLevelPrev=integer(), margin=integer(), message=integer(), wParam=integer(), lParam=integer(), listType=integer(), x=integer(), y=integer(), dragText=*unicode:chardata()*, dragAllowMove=boolean(), dragResult=*wx:wx_enum()*}

wxStyledTextEventType() = stc_change | stc_styleneeded | stc_charadded | stc_savepointreached | stc_savepointleft | stc_romodifyattempt | stc_key | stc_doubleclick | stc_updateui | stc_modified | stc_macrorecord | stc_marginclick

| stc_needshown | stc_painted | stc_userlistselection | stc_uridropped | stc_dwellstart | stc_dwellend | stc_start_drag | stc_drag_over | stc_do_drop | stc_zoom | stc_hotspot_click | stc_hotspot_dclick | stc_calltip_click | stc_autocomp_selection

wxSysColourChanged() = #wxSysColourChanged{type=*wxSysColourChangedEventType()*}

wxSysColourChangedEventType() = sys_colour_changed

wxTaskBarIcon() = #wxTaskBarIcon{type=*wxTaskBarIconEventType()*}

wxTaskBarIconEventType() = taskbar_move | taskbar_left_down | taskbar_left_up | taskbar_right_down | taskbar_right_up | taskbar_left_dclick | taskbar_right_dclick

wxTree() = #wxTree{type=*wxTreeEventType()*, item=integer(), itemOld=integer(), pointDrag={X::integer(), Y::integer()}}

wxTreeEventType() = command_tree_begin_drag | command_tree_begin_rdrag | command_tree_begin_label_edit | command_tree_end_label_edit | command_tree_delete_item | command_tree_get_info | command_tree_set_info | command_tree_item_expanded | command_tree_item_expanding | command_tree_item_collapsed | command_tree_item_collapsing | command_tree_sel_changed | command_tree_sel_changing | command_tree_key_down | command_tree_item_activated | command_tree_item_right_click | command_tree_item_middle_click | command_tree_end_drag | command_tree_state_image_click | command_tree_item_gettooltip | command_tree_item_menu

wxUpdateUI() = #wxUpdateUI{type=*wxUpdateUIEventType()*}

wxUpdateUIEventType() = update_ui

wxWindowCreate() = #wxWindowCreate{type=*wxWindowCreateEventType()*}

wxWindowCreateEventType() = create

wxWindowDestroy() = #wxWindowDestroy{type=*wxWindowDestroyEventType()*}

wxWindowDestroyEventType() = destroy

## Exports

`connect(This::wxEvtHandler(), EventType::wxEventType()) -> ok`

Equivalent to *connect(This, EventType, [])*

`connect(This::wxEvtHandler(), EventType::wxEventType(), Options::[Option]) -> ok`

Types:

**`Option = {id, integer()} | {lastId, integer()} | {skip, boolean()} | callback | {callback, function()} | {userData, term()}`**

This function subscribes the to events of EventType, in the range id, lastId. The events will be received as messages if no callback is supplied.

Options: {id, integer()}, The identifier (or first of the identifier range) to be associated with this event handler. Default ?wxID_ANY {lastId, integer()}, The second part of the identifier range. If used 'id' must be set as the starting identifier range. Default ?wxID_ANY {skip, boolean()}, If skip is true further event_handlers will be called. This is

not used if the 'callback' option is used. Default false. {callback, function()} Use a callback fun(EventRecord::wx(), EventObject::wxObject()) to process the event. Default not specfied i.e. a message will be delivered to the process calling this function. {userData, term()} An erlang term that will be sent with the event. Default: [].

```
disconnect(This::wxEvtHandler()) -> boolean()
```

Equivalent to *disconnect(This, null, [])* Can also have an optional callback Fun() as an additional last argument.

```
disconnect(This::wxEvtHandler(), EventType::wxEventType()) -> boolean()
```

Equivalent to *disconnect(This, EventType, [])*

```
disconnect(This::wxEvtHandler(), EventType::wxEventType(), Opts::[Option]) ->
boolean()
```

Types:

```
Option = {id, integer()} | {lastId, integer()} | {callback, function()}
```

See **external documentation** This function unsubscribes the process or callback fun from the event handler. EventType may be the atom 'null' to match any eventtype. Notice that the options skip and userdata is not used to match the eventhandler.

# wxFileDataObject

Erlang module

See external documentation: **wxFileDataObject**.

This class is derived (and can use functions) from:
*wxDataObject*

## DATA TYPES

wxFileDataObject()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxFileDataObject()
```

See **external documentation**.

```
addFile(This, Filename) -> ok
```

Types:

**This = *wxFileDataObject()***
**Filename = *unicode:chardata()***

See **external documentation**.

```
getFilenames(This) -> [unicode:charlist()]
```

Types:

**This = *wxFileDataObject()***

See **external documentation**.

```
destroy(This::wxFileDataObject()) -> ok
```

Destroys this object, do not use object again

# wxFileDialog

Erlang module

See external documentation: **wxFileDialog**.

This class is derived (and can use functions) from:
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxFileDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new(Parent) -> wxFileDialog()`

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

`new(Parent, Options::[Option]) -> wxFileDialog()`

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {message, *unicode:chardata()*} | {defaultDir, *unicode:chardata()*} | {defaultFile, *unicode:chardata()*} | {wildCard, *unicode:chardata()*} | {style, integer()} | {pos, {X::integer(), Y::integer()}} | {sz, {W::integer(), H::integer()}}**

See **external documentation**.

`getDirectory(This) -> unicode:charlist()`

Types:

**This = *wxFileDialog()***

See **external documentation**.

`getFilename(This) -> unicode:charlist()`

Types:

**This = *wxFileDialog()***

See **external documentation**.

`getFilenames(This) -> [unicode:charlist()]`

Types:

**This = *wxFileDialog()***

See **external documentation**.

`getFilterIndex(This) -> integer()`

Types:

**This = *wxFileDialog()***

See **external documentation**.

`getMessage(This) -> unicode:charlist()`

Types:

**This = *wxFileDialog()***

See **external documentation**.

`getPath(This) -> unicode:charlist()`

Types:

**This = *wxFileDialog()***

See **external documentation**.

`getPaths(This) -> [unicode:charlist()]`

Types:

**This = *wxFileDialog()***

See **external documentation**.

`getWildcard(This) -> unicode:charlist()`

Types:

**This = *wxFileDialog()***

See **external documentation**.

`setDirectory(This, Dir) -> ok`

Types:

**This = *wxFileDialog()***

**Dir = *unicode:chardata()***

See **external documentation**.

`setFilename(This, Name) -> ok`

Types:

**This = *wxFileDialog()***

**Name = *unicode:chardata()***

See **external documentation**.

`setFilterIndex(This, FilterIndex) -> ok`

Types:

**This = *wxFileDialog()***

**FilterIndex = integer()**

See **external documentation**.

```
setMessage(This, Message) -> ok
```

Types:

**This = *wxFileDialog()***
**Message = *unicode:chardata()***

See **external documentation**.

```
setPath(This, Path) -> ok
```

Types:

**This = *wxFileDialog()***
**Path = *unicode:chardata()***

See **external documentation**.

```
setWildcard(This, WildCard) -> ok
```

Types:

**This = *wxFileDialog()***
**WildCard = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxFileDialog()) -> ok
```

Destroys this object, do not use object again

# wxFileDirPickerEvent

Erlang module

See external documentation: **wxFileDirPickerEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_filepicker_changed**, **command_dirpicker_changed**

See also the message variant *#wxFileDirPicker{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxFileDirPickerEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getPath(This) -> unicode:charlist()
```

Types:

**This = *wxFileDirPickerEvent()***

See **external documentation**.

# wxFilePickerCtrl

Erlang module

See external documentation: **wxFilePickerCtrl**.

This class is derived (and can use functions) from:
*wxPickerBase*
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxFilePickerCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxFilePickerCtrl()
```

See **external documentation**.

```
new(Parent, Id) -> wxFilePickerCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxFilePickerCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {path, *unicode:chardata()*} | {message, *unicode:chardata()*} | {wildcard, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id) -> boolean()
```

Types:

**This = *wxFilePickerCtrl()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

```
create(This, Parent, Id, Options::[Option]) -> boolean()
```

Types:

**This = *wxFilePickerCtrl()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Option = {path, *unicode:chardata()*} | {message, *unicode:chardata()*} | {wildcard, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getPath(This) -> unicode:charlist()
```

Types:

**This = *wxFilePickerCtrl()***

See **external documentation**.

```
setPath(This, Str) -> ok
```

Types:

**This = *wxFilePickerCtrl()***

**Str = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxFilePickerCtrl()) -> ok
```

Destroys this object, do not use object again

# wxFindReplaceData

Erlang module

See external documentation: **wxFindReplaceData**.

## DATA TYPES

wxFindReplaceData()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxFindReplaceData()
```

See **external documentation**.

```
new(Flags) -> wxFindReplaceData()
```

Types:

**Flags = integer()**

See **external documentation**.

```
getFindString(This) -> unicode:charlist()
```

Types:

**This = *wxFindReplaceData()***

See **external documentation**.

```
getReplaceString(This) -> unicode:charlist()
```

Types:

**This = *wxFindReplaceData()***

See **external documentation**.

```
getFlags(This) -> integer()
```

Types:

**This = *wxFindReplaceData()***

See **external documentation**.

```
setFlags(This, Flags) -> ok
```

Types:

**This = *wxFindReplaceData()***
**Flags = integer()**

See **external documentation**.

```
setFindString(This, Str) -> ok
```

Types:

**This = *wxFindReplaceData()***
**Str = *unicode:chardata()***

See **external documentation**.

```
setReplaceString(This, Str) -> ok
```

Types:

**This = *wxFindReplaceData()***
**Str = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxFindReplaceData()) -> ok
```

Destroys this object, do not use object again

# wxFindReplaceDialog

Erlang module

See external documentation: **wxFindReplaceDialog**.

This class is derived (and can use functions) from:
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxFindReplaceDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxFindReplaceDialog()
```

See **external documentation**.

```
new(Parent, Data, Title) -> wxFindReplaceDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Data = *wxFindReplaceData:wxFindReplaceData()***
**Title = *unicode:chardata()***

Equivalent to *new(Parent, Data, Title, [])*.

```
new(Parent, Data, Title, Options::[Option]) -> wxFindReplaceDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Data = *wxFindReplaceData:wxFindReplaceData()***
**Title = *unicode:chardata()***
**Option = {style, integer()}**

See **external documentation**.

```
create(This, Parent, Data, Title) -> boolean()
```

Types:

**This = *wxFindReplaceDialog()***
**Parent = *wxWindow:wxWindow()***
**Data = *wxFindReplaceData:wxFindReplaceData()***
**Title = *unicode:chardata()***

Equivalent to *create(This, Parent, Data, Title, [])*.

```
create(This, Parent, Data, Title, Options::[Option]) -> boolean()
```

Types:

**This = *wxFindReplaceDialog()***
**Parent = *wxWindow:wxWindow()***
**Data = *wxFindReplaceData:wxFindReplaceData()***
**Title = *unicode:chardata()***
**Option = {style, integer()}**

See **external documentation**.

```
getData(This) -> wxFindReplaceData:wxFindReplaceData()
```

Types:

**This = *wxFindReplaceDialog()***

See **external documentation**.

```
destroy(This::wxFindReplaceDialog()) -> ok
```

Destroys this object, do not use object again

# wxFlexGridSizer

Erlang module

See external documentation: **wxFlexGridSizer**.

This class is derived (and can use functions) from:
*wxGridSizer*
*wxSizer*

## DATA TYPES

wxFlexGridSizer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Cols) -> wxFlexGridSizer()
```

Types:

**Cols = integer()**

Equivalent to *new(Cols, [])*.

```
new(Cols, Options::[Option]) -> wxFlexGridSizer()
```

Types:

**Cols = integer()**
**Option = {vgap, integer()} | {hgap, integer()}**

See **external documentation**.

```
new(Rows, Cols, Vgap, Hgap) -> wxFlexGridSizer()
```

Types:

**Rows = integer()**
**Cols = integer()**
**Vgap = integer()**
**Hgap = integer()**

See **external documentation**.

```
addGrowableCol(This, Idx) -> ok
```

Types:

**This = *wxFlexGridSizer()***
**Idx = integer()**

Equivalent to *addGrowableCol(This, Idx, [])*.

```
addGrowableCol(This, Idx, Options::[Option]) -> ok
```

Types:

**This = *wxFlexGridSizer()***
**Idx = integer()**
**Option = {proportion, integer()}**

See **external documentation**.

`addGrowableRow(This, Idx) -> ok`

Types:

**This = *wxFlexGridSizer()***
**Idx = integer()**

Equivalent to *addGrowableRow(This, Idx, [])*.

`addGrowableRow(This, Idx, Options::[Option]) -> ok`

Types:

**This = *wxFlexGridSizer()***
**Idx = integer()**
**Option = {proportion, integer()}**

See **external documentation**.

`getFlexibleDirection(This) -> integer()`

Types:

**This = *wxFlexGridSizer()***

See **external documentation**.

`getNonFlexibleGrowMode(This) -> wx:wx_enum()`

Types:

**This = *wxFlexGridSizer()***

See **external documentation**.
Res = ?wxFLEX_GROWMODE_NONE | ?wxFLEX_GROWMODE_SPECIFIED | ?wxFLEX_GROWMODE_ALL

`removeGrowableCol(This, Idx) -> ok`

Types:

**This = *wxFlexGridSizer()***
**Idx = integer()**

See **external documentation**.

`removeGrowableRow(This, Idx) -> ok`

Types:

**This = *wxFlexGridSizer()***
**Idx = integer()**

See **external documentation**.

`setFlexibleDirection(This, Direction) -> ok`

Types:

**This = *wxFlexGridSizer()***
**Direction = integer()**

See **external documentation**.

`setNonFlexibleGrowMode(This, Mode) -> ok`

Types:

**This = *wxFlexGridSizer()***
**Mode = *wx:wx_enum()***

See **external documentation**.
Mode = ?wxFLEX_GROWMODE_NONE | ?wxFLEX_GROWMODE_SPECIFIED | ?wxFLEX_GROWMODE_ALL

`destroy(This::wxFlexGridSizer()) -> ok`

Destroys this object, do not use object again

# wxFocusEvent

Erlang module

See external documentation: **wxFocusEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**set_focus**, **kill_focus**

See also the message variant *#wxFocus{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxFocusEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getWindow(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxFocusEvent()***

See **external documentation**.

# wxFontData

Erlang module

See external documentation: **wxFontData**.

## DATA TYPES

wxFontData()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxFontData()
```

See **external documentation**.

```
new(Data) -> wxFontData()
```

Types:

**Data = *wxFontData()***

See **external documentation**.

```
enableEffects(This, Flag) -> ok
```

Types:

**This = *wxFontData()***

**Flag = boolean()**

See **external documentation**.

```
getAllowSymbols(This) -> boolean()
```

Types:

**This = *wxFontData()***

See **external documentation**.

```
getColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxFontData()***

See **external documentation**.

```
getChosenFont(This) -> wxFont:wxFont()
```

Types:

**This = *wxFontData()***

See **external documentation**.

```
getEnableEffects(This) -> boolean()
```

Types:

**This = *wxFontData()***

See **external documentation**.

```
getInitialFont(This) -> wxFont:wxFont()
```

Types:

**This = *wxFontData()***

See **external documentation**.

```
getShowHelp(This) -> boolean()
```

Types:

**This = *wxFontData()***

See **external documentation**.

```
setAllowSymbols(This, Flag) -> ok
```

Types:

**This = *wxFontData()***
**Flag = boolean()**

See **external documentation**.

```
setChosenFont(This, Font) -> ok
```

Types:

**This = *wxFontData()***
**Font = *wxFont:wxFont()***

See **external documentation**.

```
setColour(This, Colour) -> ok
```

Types:

**This = *wxFontData()***
**Colour = *wx:wx_colour()***

See **external documentation**.

```
setInitialFont(This, Font) -> ok
```

Types:

**This = *wxFontData()***
**Font = *wxFont:wxFont()***

See **external documentation**.

```
setRange(This, MinRange, MaxRange) -> ok
```

Types:

**This = *wxFontData()***
**MinRange = integer()**

**MaxRange = integer()**

See **external documentation**.

`setShowHelp(This, Flag) -> ok`

Types:

**This = *wxFontData()***

**Flag = boolean()**

See **external documentation**.

`destroy(This::wxFontData()) -> ok`

Destroys this object, do not use object again

# wxFontDialog

Erlang module

See external documentation: **wxFontDialog**.

This class is derived (and can use functions) from:
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxFontDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxFontDialog()
```

See **external documentation**.

```
new(Parent, Data) -> wxFontDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Data = *wxFontData:wxFontData()***

See **external documentation**.

```
create(This, Parent, Data) -> boolean()
```

Types:

**This = *wxFontDialog()***
**Parent = *wxWindow:wxWindow()***
**Data = *wxFontData:wxFontData()***

See **external documentation**.

```
getFontData(This) -> wxFontData:wxFontData()
```

Types:

**This = *wxFontDialog()***

See **external documentation**.

```
destroy(This::wxFontDialog()) -> ok
```

Destroys this object, do not use object again

# wxFont

Erlang module

See external documentation: **wxFont**.

## DATA TYPES

wxFont()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxFont()`

See **external documentation**.

`new(Fontname) -> wxFont()`

Types:

**Fontname = *unicode:chardata()***

See **external documentation**.

`new(Size, Family, Style, Weight) -> wxFont()`

Types:

**Size = integer()**
**Family = *wx:wx_enum()***
**Style = *wx:wx_enum()***
**Weight = integer()**

Equivalent to *new(Size, Family, Style, Weight, [])*.

`new(Size, Family, Style, Weight, Options::[Option]) -> wxFont()`

Types:

**Size = integer()**
**Family = *wx:wx_enum()***
**Style = *wx:wx_enum()***
**Weight = integer()**
**Option = {underlined, boolean()} | {face, *unicode:chardata()*} | {encoding, *wx:wx_enum()*}**

See **external documentation**.

Encoding = ?wxFONTENCODING_SYSTEM | ?wxFONTENCODING_DEFAULT | ?wxFONTENCODING_ISO8859_1 | ?wxFONTENCODING_ISO8859_2 | ?wxFONTENCODING_ISO8859_3 | ?wxFONTENCODING_ISO8859_4 | ?wxFONTENCODING_ISO8859_5 | ?wxFONTENCODING_ISO8859_6 | ?wxFONTENCODING_ISO8859_7 | ?wxFONTENCODING_ISO8859_8 | ?wxFONTENCODING_ISO8859_9 | ?wxFONTENCODING_ISO8859_10 | ?wxFONTENCODING_ISO8859_11 | ?wxFONTENCODING_ISO8859_12 | ?wxFONTENCODING_ISO8859_13 | ?wxFONTENCODING_ISO8859_14 | ?wxFONTENCODING_ISO8859_15

| ?wxFONTENCODING_ISO8859_MAX | ?wxFONTENCODING_KOI8 | ?wxFONTENCODING_KOI8_U | ?wxFONTENCODING_ALTERNATIVE | ?wxFONTENCODING_BULGARIAN | ?wxFONTENCODING_CP437 | ?wxFONTENCODING_CP850 | ?wxFONTENCODING_CP852 | ?wxFONTENCODING_CP855 | ?wxFONTENCODING_CP866 | ?wxFONTENCODING_CP874 | ?wxFONTENCODING_CP932 | ?wxFONTENCODING_CP936 | ?wxFONTENCODING_CP949 | ?wxFONTENCODING_CP950 | ?wxFONTENCODING_CP1250 | ?wxFONTENCODING_CP1251 | ?wxFONTENCODING_CP1252 | ?wxFONTENCODING_CP1253 | ?wxFONTENCODING_CP1254 | ?wxFONTENCODING_CP1255 | ?wxFONTENCODING_CP1256 | ?wxFONTENCODING_CP1257 | ?wxFONTENCODING_CP12_MAX | ?wxFONTENCODING_UTF7 | ?wxFONTENCODING_UTF8 | ?wxFONTENCODING_EUC_JP | ?wxFONTENCODING_UTF16BE | ?wxFONTENCODING_UTF16LE | ?wxFONTENCODING_UTF32BE | ?wxFONTENCODING_UTF32LE | ?wxFONTENCODING_MACROMAN | ?wxFONTENCODING_MACJAPANESE | ?wxFONTENCODING_MACCHINESETRAD | ?wxFONTENCODING_MACKOREAN | ?wxFONTENCODING_MACARABIC | ?wxFONTENCODING_MACHEBREW | ?wxFONTENCODING_MACGREEK | ?wxFONTENCODING_MACCYRILLIC | ?wxFONTENCODING_MACDEVANAGARI | ?wxFONTENCODING_MACGURMUKHI | ?wxFONTENCODING_MACGUJARATI | ?wxFONTENCODING_MACORIYA | ?wxFONTENCODING_MACBENGALI | ?wxFONTENCODING_MACTAMIL | ?wxFONTENCODING_MACTELUGU | ?wxFONTENCODING_MACKANNADA | ?wxFONTENCODING_MACMALAJALAM | ?wxFONTENCODING_MACSINHALESE | ?wxFONTENCODING_MACBURMESE | ?wxFONTENCODING_MACKHMER | ?wxFONTENCODING_MACTHAI | ?wxFONTENCODING_MACLAOTIAN | ?wxFONTENCODING_MACGEORGIAN | ?wxFONTENCODING_MACARMENIAN | ?wxFONTENCODING_MACCHINESESIMP | ?wxFONTENCODING_MACTIBETAN | ?wxFONTENCODING_MACMONGOLIAN | ?wxFONTENCODING_MACETHIOPIC | ?wxFONTENCODING_MACCENTRALEUR | ?wxFONTENCODING_MACVIATNAMESE | ?wxFONTENCODING_MACARABICEXT | ?wxFONTENCODING_MACSYMBOL | ?wxFONTENCODING_MACDINGBATS | ?wxFONTENCODING_MACTURKISH | ?wxFONTENCODING_MACCROATIAN | ?wxFONTENCODING_MACICELANDIC | ?wxFONTENCODING_MACROMANIAN | ?wxFONTENCODING_MACCELTIC | ?wxFONTENCODING_MACGAELIC | ?wxFONTENCODING_MACKEYBOARD | ?wxFONTENCODING_MAX | ?wxFONTENCODING_MACMIN | ?wxFONTENCODING_MACMAX | ?wxFONTENCODING_UTF16 | ?wxFONTENCODING_UTF32 | ?wxFONTENCODING_UNICODE | ?wxFONTENCODING_GB2312 | ?wxFONTENCODING_BIG5 | ?wxFONTENCODING_SHIFT_JIS

Family = ?wxFONTFAMILY_DEFAULT | ?wxFONTFAMILY_DECORATIVE | ?wxFONTFAMILY_ROMAN | ?wxFONTFAMILY_SCRIPT | ?wxFONTFAMILY_SWISS | ?wxFONTFAMILY_MODERN | ?wxFONTFAMILY_TELETYPE | ?wxFONTFAMILY_MAX | ?wxFONTFAMILY_UNKNOWN

Style = ?wxFONTSTYLE_NORMAL | ?wxFONTSTYLE_ITALIC | ?wxFONTSTYLE_SLANT | ?wxFONTSTYLE_MAX

`isFixedWidth(This) -> boolean()`

Types:

**`This = wxFont()`**

See **external documentation**.

`getDefaultEncoding() -> wx:wx_enum()`

See **external documentation**.

Res = ?wxFONTENCODING_SYSTEM | ?wxFONTENCODING_DEFAULT | ?wxFONTENCODING_ISO8859_1 | ?wxFONTENCODING_ISO8859_2 | ?wxFONTENCODING_ISO8859_3 | ?wxFONTENCODING_ISO8859_4 | ?wxFONTENCODING_ISO8859_5 | ?wxFONTENCODING_ISO8859_6 | ?

wxFONTENCODING_ISO8859_7 | ?wxFONTENCODING_ISO8859_8 | ?wxFONTENCODING_ISO8859_9 | ?wxFONTENCODING_ISO8859_10 | ?wxFONTENCODING_ISO8859_11 | ?wxFONTENCODING_ISO8859_12 | ?wxFONTENCODING_ISO8859_13 | ?wxFONTENCODING_ISO8859_14 | ?wxFONTENCODING_ISO8859_15 | ?wxFONTENCODING_ISO8859_MAX | ?wxFONTENCODING_KOI8 | ?wxFONTENCODING_KOI8_U | ?wxFONTENCODING_ALTERNATIVE | ?wxFONTENCODING_BULGARIAN | ?wxFONTENCODING_CP437 | ?wxFONTENCODING_CP850 | ?wxFONTENCODING_CP852 | ?wxFONTENCODING_CP855 | ?wxFONTENCODING_CP866 | ?wxFONTENCODING_CP874 | ?wxFONTENCODING_CP932 | ?wxFONTENCODING_CP936 | ?wxFONTENCODING_CP949 | ?wxFONTENCODING_CP950 | ?wxFONTENCODING_CP1250 | ?wxFONTENCODING_CP1251 | ?wxFONTENCODING_CP1252 | ?wxFONTENCODING_CP1253 | ?wxFONTENCODING_CP1254 | ?wxFONTENCODING_CP1255 | ?wxFONTENCODING_CP1256 | ?wxFONTENCODING_CP1257 | ?wxFONTENCODING_CP12_MAX | ?wxFONTENCODING_UTF7 | ?wxFONTENCODING_UTF8 | ?wxFONTENCODING_EUC_JP | ?wxFONTENCODING_UTF16BE | ?wxFONTENCODING_UTF16LE | ?wxFONTENCODING_UTF32BE | ?wxFONTENCODING_UTF32LE | ?wxFONTENCODING_MACROMAN | ?wxFONTENCODING_MACJAPANESE | ?wxFONTENCODING_MACCHINESETRAD | ?wxFONTENCODING_MACKOREAN | ?wxFONTENCODING_MACARABIC | ?wxFONTENCODING_MACHEBREW | ?wxFONTENCODING_MACGREEK | ?wxFONTENCODING_MACCYRILLIC | ?wxFONTENCODING_MACDEVANAGARI | ?wxFONTENCODING_MACGURMUKHI | ?wxFONTENCODING_MACGUJARATI | ?wxFONTENCODING_MACORIYA | ?wxFONTENCODING_MACBENGALI | ?wxFONTENCODING_MACTAMIL | ?wxFONTENCODING_MACTELUGU | ?wxFONTENCODING_MACKANNADA | ?wxFONTENCODING_MACMALAJALAM | ?wxFONTENCODING_MACSINHALESE | ?wxFONTENCODING_MACBURMESE | ?wxFONTENCODING_MACKHMER | ?wxFONTENCODING_MACTHAI | ?wxFONTENCODING_MACLAOTIAN | ?wxFONTENCODING_MACGEORGIAN | ?wxFONTENCODING_MACARMENIAN | ?wxFONTENCODING_MACCHINESESIMP | ?wxFONTENCODING_MACTIBETAN | ?wxFONTENCODING_MACMONGOLIAN | ?wxFONTENCODING_MACETHIOPIC | ?wxFONTENCODING_MACCENTRALEUR | ?wxFONTENCODING_MACVIATNAMESE | ?wxFONTENCODING_MACARABICEXT | ?wxFONTENCODING_MACSYMBOL | ?wxFONTENCODING_MACDINGBATS | ?wxFONTENCODING_MACTURKISH | ?wxFONTENCODING_MACCROATIAN | ?wxFONTENCODING_MACICELANDIC | ?wxFONTENCODING_MACROMANIAN | ?wxFONTENCODING_MACCELTIC | ?wxFONTENCODING_MACGAELIC | ?wxFONTENCODING_MACKEYBOARD | ?wxFONTENCODING_MAX | ?wxFONTENCODING_MACMIN | ?wxFONTENCODING_MACMAX | ?wxFONTENCODING_UTF16 | ?wxFONTENCODING_UTF32 | ?wxFONTENCODING_UNICODE | ?wxFONTENCODING_GB2312 | ?wxFONTENCODING_BIG5 | ?wxFONTENCODING_SHIFT_JIS

```
getFaceName(This) -> unicode:charlist()
```

Types:

**This = *wxFont()***

See **external documentation**.

```
getFamily(This) -> wx:wx_enum()
```

Types:

**This = *wxFont()***

See **external documentation**.

Res = ?wxFONTFAMILY_DEFAULT | ?wxFONTFAMILY_DECORATIVE | ?wxFONTFAMILY_ROMAN | ?wxFONTFAMILY_SCRIPT | ?wxFONTFAMILY_SWISS | ?wxFONTFAMILY_MODERN | ?wxFONTFAMILY_TELETYPE | ?wxFONTFAMILY_MAX | ?wxFONTFAMILY_UNKNOWN

```
getNativeFontInfoDesc(This) -> unicode:charlist()
```

Types:

**This = *wxFont()***

See **external documentation**.

```
getNativeFontInfoUserDesc(This) -> unicode:charlist()
```

Types:

**This = *wxFont()***

See **external documentation**.

```
getPointSize(This) -> integer()
```

Types:

**This = *wxFont()***

See **external documentation**.

```
getStyle(This) -> wx:wx_enum()
```

Types:

**This = *wxFont()***

See **external documentation**.
Res = ?wxFONTSTYLE_NORMAL | ?wxFONTSTYLE_ITALIC | ?wxFONTSTYLE_SLANT | ?wxFONTSTYLE_MAX

```
getUnderlined(This) -> boolean()
```

Types:

**This = *wxFont()***

See **external documentation**.

```
getWeight(This) -> integer()
```

Types:

**This = *wxFont()***

See **external documentation**.

```
ok(This) -> boolean()
```

Types:

**This = *wxFont()***

See **external documentation**.

```
setDefaultEncoding(Encoding) -> ok
```

Types:

**Encoding = *wx:wx_enum()***

See **external documentation**.
Encoding = ?wxFONTENCODING_SYSTEM | ?wxFONTENCODING_DEFAULT | ?wxFONTENCODING_ISO8859_1 | ?wxFONTENCODING_ISO8859_2 | ?wxFONTENCODING_ISO8859_3 | ?wxFONTENCODING_ISO8859_4 | ?wxFONTENCODING_ISO8859_5 | ?wxFONTENCODING_ISO8859_6 | ?

wxFONTENCODING_ISO8859_7 | ?wxFONTENCODING_ISO8859_8 | ?wxFONTENCODING_ISO8859_9 | ?wxFONTENCODING_ISO8859_10 | ?wxFONTENCODING_ISO8859_11 | ?wxFONTENCODING_ISO8859_12 | ?wxFONTENCODING_ISO8859_13 | ?wxFONTENCODING_ISO8859_14 | ?wxFONTENCODING_ISO8859_15 | ?wxFONTENCODING_ISO8859_MAX | ?wxFONTENCODING_KOI8 | ?wxFONTENCODING_KOI8_U | ?wxFONTENCODING_ALTERNATIVE | ?wxFONTENCODING_BULGARIAN | ?wxFONTENCODING_CP437 | ?wxFONTENCODING_CP850 | ?wxFONTENCODING_CP852 | ?wxFONTENCODING_CP855 | ?wxFONTENCODING_CP866 | ?wxFONTENCODING_CP874 | ?wxFONTENCODING_CP932 | ?wxFONTENCODING_CP936 | ?wxFONTENCODING_CP949 | ?wxFONTENCODING_CP950 | ?wxFONTENCODING_CP1250 | ?wxFONTENCODING_CP1251 | ?wxFONTENCODING_CP1252 | ?wxFONTENCODING_CP1253 | ?wxFONTENCODING_CP1254 | ?wxFONTENCODING_CP1255 | ?wxFONTENCODING_CP1256 | ?wxFONTENCODING_CP1257 | ?wxFONTENCODING_CP12_MAX | ?wxFONTENCODING_UTF7 | ?wxFONTENCODING_UTF8 | ?wxFONTENCODING_EUC_JP | ?wxFONTENCODING_UTF16BE | ?wxFONTENCODING_UTF16LE | ?wxFONTENCODING_UTF32BE | ?wxFONTENCODING_UTF32LE | ?wxFONTENCODING_MACROMAN | ?wxFONTENCODING_MACJAPANESE | ?wxFONTENCODING_MACCHINESETRAD | ?wxFONTENCODING_MACKOREAN | ?wxFONTENCODING_MACARABIC | ?wxFONTENCODING_MACHEBREW | ?wxFONTENCODING_MACGREEK | ?wxFONTENCODING_MACCYRILLIC | ?wxFONTENCODING_MACDEVANAGARI | ?wxFONTENCODING_MACGURMUKHI | ?wxFONTENCODING_MACGUJARATI | ?wxFONTENCODING_MACORIYA | ?wxFONTENCODING_MACBENGALI | ?wxFONTENCODING_MACTAMIL | ?wxFONTENCODING_MACTELUGU | ?wxFONTENCODING_MACKANNADA | ?wxFONTENCODING_MACMALAJALAM | ?wxFONTENCODING_MACSINHALESE | ?wxFONTENCODING_MACBURMESE | ?wxFONTENCODING_MACKHMER | ?wxFONTENCODING_MACTHAI | ?wxFONTENCODING_MACLAOTIAN | ?wxFONTENCODING_MACGEORGIAN | ?wxFONTENCODING_MACARMENIAN | ?wxFONTENCODING_MACCHINESESIMP | ?wxFONTENCODING_MACTIBETAN | ?wxFONTENCODING_MACMONGOLIAN | ?wxFONTENCODING_MACETHIOPIC | ?wxFONTENCODING_MACCENTRALEUR | ?wxFONTENCODING_MACVIATNAMESE | ?wxFONTENCODING_MACARABICEXT | ?wxFONTENCODING_MACSYMBOL | ?wxFONTENCODING_MACDINGBATS | ?wxFONTENCODING_MACTURKISH | ?wxFONTENCODING_MACCROATIAN | ?wxFONTENCODING_MACICELANDIC | ?wxFONTENCODING_MACROMANIAN | ?wxFONTENCODING_MACCELTIC | ?wxFONTENCODING_MACGAELIC | ?wxFONTENCODING_MACKEYBOARD | ?wxFONTENCODING_MAX | ?wxFONTENCODING_MACMIN | ?wxFONTENCODING_MACMAX | ?wxFONTENCODING_UTF16 | ?wxFONTENCODING_UTF32 | ?wxFONTENCODING_UNICODE | ?wxFONTENCODING_GB2312 | ?wxFONTENCODING_BIG5 | ?wxFONTENCODING_SHIFT_JIS

`setFaceName(This, FaceName) -> boolean()`

Types:

**`This = wxFont()`**

**`FaceName = unicode:chardata()`**

See **external documentation**.

`setFamily(This, Family) -> ok`

Types:

**`This = wxFont()`**

**`Family = wx:wx_enum()`**

See **external documentation**.

Family = ?wxFONTFAMILY_DEFAULT | ?wxFONTFAMILY_DECORATIVE | ?wxFONTFAMILY_ROMAN | ?wxFONTFAMILY_SCRIPT | ?wxFONTFAMILY_SWISS | ?wxFONTFAMILY_MODERN | ?wxFONTFAMILY_TELETYPE | ?wxFONTFAMILY_MAX | ?wxFONTFAMILY_UNKNOWN

`setPointSize(This, PointSize) -> ok`

Types:

**This = *wxFont()***
**PointSize = integer()**

See **external documentation**.

`setStyle(This, Style) -> ok`

Types:

**This = *wxFont()***
**Style = *wx:wx_enum()***

See **external documentation**.
Style = ?wxFONTSTYLE_NORMAL | ?wxFONTSTYLE_ITALIC | ?wxFONTSTYLE_SLANT | ?wxFONTSTYLE_MAX

`setUnderlined(This, Underlined) -> ok`

Types:

**This = *wxFont()***
**Underlined = boolean()**

See **external documentation**.

`setWeight(This, Weight) -> ok`

Types:

**This = *wxFont()***
**Weight = integer()**

See **external documentation**.

`destroy(This::wxFont()) -> ok`

Destroys this object, do not use object again

# wxFontPickerCtrl

Erlang module

See external documentation: **wxFontPickerCtrl**.

This class is derived (and can use functions) from:
*wxPickerBase*
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxFontPickerCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxFontPickerCtrl()
```

See **external documentation**.

```
new(Parent, Id) -> wxFontPickerCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxFontPickerCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {initial, *wxFont:wxFont()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id) -> boolean()
```

Types:

**This = *wxFontPickerCtrl()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

```
create(This, Parent, Id, Options::[Option]) -> boolean()
```

Types:

**This = *wxFontPickerCtrl()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Option = {initial, *wxFont:wxFont()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getSelectedFont(This) -> wxFont:wxFont()
```

Types:

**This = *wxFontPickerCtrl()***

See **external documentation**.

```
setSelectedFont(This, F) -> ok
```

Types:

**This = *wxFontPickerCtrl()***

**F = *wxFont:wxFont()***

See **external documentation**.

```
getMaxPointSize(This) -> integer()
```

Types:

**This = *wxFontPickerCtrl()***

See **external documentation**.

```
setMaxPointSize(This, Max) -> ok
```

Types:

**This = *wxFontPickerCtrl()***

**Max = integer()**

See **external documentation**.

```
destroy(This::wxFontPickerCtrl()) -> ok
```

Destroys this object, do not use object again

# wxFontPickerEvent

Erlang module

See external documentation: **wxFontPickerEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_fontpicker_changed**

See also the message variant *#wxFontPicker{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxFontPickerEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getFont(This) -> wxFont:wxFont()
```

Types:

```
This = wxFontPickerEvent()
```

See **external documentation**.

# wxFrame

Erlang module

See external documentation: **wxFrame**.

This class is derived (and can use functions) from:
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxFrame()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxFrame()`

See **external documentation**.

`new(Parent, Id, Title) -> wxFrame()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***

Equivalent to *new(Parent, Id, Title, [])*.

`new(Parent, Id, Title, Options::[Option]) -> wxFrame()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`create(This, Parent, Id, Title) -> boolean()`

Types:

**This = *wxFrame()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***

Equivalent to *create(This, Parent, Id, Title, [])*.

```
create(This, Parent, Id, Title, Options::[Option]) -> boolean()
```

Types:

**This = *wxFrame()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Title = *unicode:chardata()***

**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
createStatusBar(This) -> wxStatusBar:wxStatusBar()
```

Types:

**This = *wxFrame()***

Equivalent to *createStatusBar(This, [])*.

```
createStatusBar(This, Options::[Option]) -> wxStatusBar:wxStatusBar()
```

Types:

**This = *wxFrame()***

**Option = {number, integer()} | {style, integer()} | {id, integer()}**

See **external documentation**.

```
createToolBar(This) -> wxToolBar:wxToolBar()
```

Types:

**This = *wxFrame()***

Equivalent to *createToolBar(This, [])*.

```
createToolBar(This, Options::[Option]) -> wxToolBar:wxToolBar()
```

Types:

**This = *wxFrame()***

**Option = {style, integer()} | {id, integer()}**

See **external documentation**.

```
getClientAreaOrigin(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxFrame()***

See **external documentation**.

```
getMenuBar(This) -> wxMenuBar:wxMenuBar()
```

Types:

**This = *wxFrame()***

See **external documentation**.

```
getStatusBar(This) -> wxStatusBar:wxStatusBar()
```

Types:

**This = *wxFrame()***

See **external documentation**.

```
getStatusBarPane(This) -> integer()
```

Types:

**This = *wxFrame()***

See **external documentation**.

```
getToolBar(This) -> wxToolBar:wxToolBar()
```

Types:

**This = *wxFrame()***

See **external documentation**.

```
processCommand(This, Winid) -> boolean()
```

Types:

**This = *wxFrame()***
**Winid = integer()**

See **external documentation**.

```
sendSizeEvent(This) -> ok
```

Types:

**This = *wxFrame()***

See **external documentation**.

```
setMenuBar(This, Menubar) -> ok
```

Types:

**This = *wxFrame()***
**Menubar = *wxMenuBar:wxMenuBar()***

See **external documentation**.

```
setStatusBar(This, Statbar) -> ok
```

Types:

**This = *wxFrame()***
**Statbar = *wxStatusBar:wxStatusBar()***

See **external documentation**.

```
setStatusBarPane(This, N) -> ok
```

Types:

**This = *wxFrame()***
**N = integer()**

See **external documentation**.

```
setStatusText(This, Text) -> ok
```

Types:

**This = *wxFrame()***
**Text = *unicode:chardata()***

Equivalent to *setStatusText(This, Text, [])*.

```
setStatusText(This, Text, Options::[Option]) -> ok
```

Types:

**This = *wxFrame()***
**Text = *unicode:chardata()***
**Option = {number, integer()}**

See **external documentation**.

```
setStatusWidths(This, Widths_field) -> ok
```

Types:

**This = *wxFrame()***
**Widths_field = [integer()]**

See **external documentation**.

```
setToolBar(This, Toolbar) -> ok
```

Types:

**This = *wxFrame()***
**Toolbar = *wxToolBar:wxToolBar()***

See **external documentation**.

```
destroy(This::wxFrame()) -> ok
```

Destroys this object, do not use object again

# wxGauge

Erlang module

See external documentation: **wxGauge**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxGauge()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxGauge()
```

See **external documentation**.

```
new(Parent, Id, Range) -> wxGauge()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Range = integer()**

Equivalent to *new(Parent, Id, Range, [])*.

```
new(Parent, Id, Range, Options::[Option]) -> wxGauge()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Range = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id, Range) -> boolean()
```

Types:

**This = *wxGauge()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Range = integer()**

Equivalent to *create(This, Parent, Id, Range, [])*.

```
create(This, Parent, Id, Range, Options::[Option]) -> boolean()
```

Types:

**This = *wxGauge()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Range = integer()**

**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getRange(This) -> integer()
```

Types:

**This = *wxGauge()***

See **external documentation**.

```
getValue(This) -> integer()
```

Types:

**This = *wxGauge()***

See **external documentation**.

```
isVertical(This) -> boolean()
```

Types:

**This = *wxGauge()***

See **external documentation**.

```
setRange(This, R) -> ok
```

Types:

**This = *wxGauge()***

**R = integer()**

See **external documentation**.

```
setValue(This, Pos) -> ok
```

Types:

**This = *wxGauge()***

**Pos = integer()**

See **external documentation**.

```
pulse(This) -> ok
```

Types:

**This = *wxGauge()***

See **external documentation**.

```
destroy(This::wxGauge()) -> ok
```

Destroys this object, do not use object again

# wxGBSizerItem

Erlang module

See external documentation: **wxGBSizerItem**.

This class is derived (and can use functions) from:
*wxSizerItem*

## DATA TYPES

wxGBSizerItem()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxGenericDirCtrl

Erlang module

See external documentation: **wxGenericDirCtrl**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxGenericDirCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxGenericDirCtrl()
```

See **external documentation**.

```
new(Parent) -> wxGenericDirCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxGenericDirCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {dir, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {filter, *unicode:chardata()*} | {defaultFilter, integer()}**

See **external documentation**.

```
create(This, Parent) -> boolean()
```

Types:

**This = *wxGenericDirCtrl()***

**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

```
create(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxGenericDirCtrl()***

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {dir, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {filter, *unicode:chardata()*} | {defaultFilter, integer()}**

See **external documentation**.

`init(This) -> ok`

Types:

**This = *wxGenericDirCtrl()***

See **external documentation**.

`collapseTree(This) -> ok`

Types:

**This = *wxGenericDirCtrl()***

See **external documentation**.

`expandPath(This, Path) -> boolean()`

Types:

**This = *wxGenericDirCtrl()***

**Path = *unicode:chardata()***

See **external documentation**.

`getDefaultPath(This) -> unicode:charlist()`

Types:

**This = *wxGenericDirCtrl()***

See **external documentation**.

`getPath(This) -> unicode:charlist()`

Types:

**This = *wxGenericDirCtrl()***

See **external documentation**.

`getFilePath(This) -> unicode:charlist()`

Types:

**This = *wxGenericDirCtrl()***

See **external documentation**.

`getFilter(This) -> unicode:charlist()`

Types:

**This = *wxGenericDirCtrl()***

See **external documentation**.

```
getFilterIndex(This) -> integer()
```

Types:

**This = *wxGenericDirCtrl()***

See **external documentation**.

```
getRootId(This) -> integer()
```

Types:

**This = *wxGenericDirCtrl()***

See **external documentation**.

```
getTreeCtrl(This) -> wxTreeCtrl:wxTreeCtrl()
```

Types:

**This = *wxGenericDirCtrl()***

See **external documentation**.

```
reCreateTree(This) -> ok
```

Types:

**This = *wxGenericDirCtrl()***

See **external documentation**.

```
setDefaultPath(This, Path) -> ok
```

Types:

**This = *wxGenericDirCtrl()***
**Path = *unicode:chardata()***

See **external documentation**.

```
setFilter(This, Filter) -> ok
```

Types:

**This = *wxGenericDirCtrl()***
**Filter = *unicode:chardata()***

See **external documentation**.

```
setFilterIndex(This, N) -> ok
```

Types:

**This = *wxGenericDirCtrl()***
**N = integer()**

See **external documentation**.

```
setPath(This, Path) -> ok
```

Types:

**This = *wxGenericDirCtrl()***
**Path = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxGenericDirCtrl()) -> ok
```

Destroys this object, do not use object again

# wxGLCanvas

Erlang module

See external documentation: **wxGLCanvas**.

This class is derived (and can use functions) from:
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxGLCanvas()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new(Parent) -> wxGLCanvas()`

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

`new(Parent, Shared) -> wxGLCanvas()`

Types:

**Parent = *wxWindow:wxWindow()***

**Shared = *wx:wx_object() | wxGLCanvas()***

See **external documentation**.
Also:
new(Parent, [Option]) -> wxGLCanvas() when
Parent::wxWindow:wxWindow(),
Option :: {'id', integer()}
| {'pos', {X::integer(), Y::integer()}}
| {'size', {W::integer(), H::integer()}}
| {'style', integer()}
| {'name', unicode:chardata()}
| {'attribList', [integer()]}
| {'palette', wxPalette:wxPalette()}.

`new(Parent, Shared, Options::[Option]) -> wxGLCanvas()`

Types:

**Parent = *wxWindow:wxWindow()***

**Shared = *wx:wx_object() | wxGLCanvas()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {name, *unicode:chardata()*} | {attribList, [integer()]} | {palette, *wxPalette:wxPalette()*}**

See **external documentation**.

```
getContext(This) -> wx:wx_object()
```

Types:

**This = *wxGLCanvas()***

See **external documentation**.

```
setCurrent(This) -> ok
```

Types:

**This = *wxGLCanvas()***

See **external documentation**.

```
swapBuffers(This) -> ok
```

Types:

**This = *wxGLCanvas()***

See **external documentation**.

```
destroy(This::wxGLCanvas()) -> ok
```

Destroys this object, do not use object again

# wxGraphicsBrush

Erlang module

See external documentation: **wxGraphicsBrush**.

This class is derived (and can use functions) from:
*wxGraphicsObject*

## DATA TYPES

wxGraphicsBrush()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxGraphicsContext

Erlang module

See external documentation: **wxGraphicsContext**.

This class is derived (and can use functions) from:
*wxGraphicsObject*

## DATA TYPES

wxGraphicsContext()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
create() -> wxGraphicsContext()
```

See **external documentation**.

```
create(Dc) -> wxGraphicsContext()
```

Types:

**Dc = *wxWindowDC:wxWindowDC() | wxWindow:wxWindow()***

See **external documentation**.

```
createPen(This, Pen) -> wxGraphicsPen:wxGraphicsPen()
```

Types:

**This = *wxGraphicsContext()***
**Pen = *wxPen:wxPen()***

See **external documentation**.

```
createBrush(This, Brush) -> wxGraphicsBrush:wxGraphicsBrush()
```

Types:

**This = *wxGraphicsContext()***
**Brush = *wxBrush:wxBrush()***

See **external documentation**.

```
createRadialGradientBrush(This, Xo, Yo, Xc, Yc, Radius, OColor, CColor) ->
wxGraphicsBrush:wxGraphicsBrush()
```

Types:

**This = *wxGraphicsContext()***
**Xo = number()**
**Yo = number()**
**Xc = number()**
**Yc = number()**

**Radius = number()**
**OColor = *wx:wx_colour()***
**CColor = *wx:wx_colour()***

See **external documentation**.

`createLinearGradientBrush(This, X1, Y1, X2, Y2, C1, C2) -> wxGraphicsBrush:wxGraphicsBrush()`

Types:

**This = *wxGraphicsContext()***
**X1 = number()**
**Y1 = number()**
**X2 = number()**
**Y2 = number()**
**C1 = *wx:wx_colour()***
**C2 = *wx:wx_colour()***

See **external documentation**.

`createFont(This, Font) -> wxGraphicsFont:wxGraphicsFont()`

Types:

**This = *wxGraphicsContext()***
**Font = *wxFont:wxFont()***

Equivalent to *createFont(This, Font, [])*.

`createFont(This, Font, Options::[Option]) -> wxGraphicsFont:wxGraphicsFont()`

Types:

**This = *wxGraphicsContext()***
**Font = *wxFont:wxFont()***
**Option = {col, *wx:wx_colour()*}**

See **external documentation**.

`createMatrix(This) -> wxGraphicsMatrix:wxGraphicsMatrix()`

Types:

**This = *wxGraphicsContext()***

Equivalent to *createMatrix(This, [])*.

`createMatrix(This, Options::[Option]) -> wxGraphicsMatrix:wxGraphicsMatrix()`

Types:

**This = *wxGraphicsContext()***
**Option = {a, number()} | {b, number()} | {c, number()} | {d, number()} | {tx, number()} | {ty, number()}**

See **external documentation**.

```
createPath(This) -> wxGraphicsPath:wxGraphicsPath()
```

Types:

**This = *wxGraphicsContext()***

See **external documentation**.

```
clip(This, Region) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Region = *wxRegion:wxRegion()***

See **external documentation**.

```
clip(This, X, Y, W, H) -> ok
```

Types:

**This = *wxGraphicsContext()***
**X = number()**
**Y = number()**
**W = number()**
**H = number()**

See **external documentation**.

```
resetClip(This) -> ok
```

Types:

**This = *wxGraphicsContext()***

See **external documentation**.

```
drawBitmap(This, Bmp, X, Y, W, H) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Bmp = *wxBitmap:wxBitmap()***
**X = number()**
**Y = number()**
**W = number()**
**H = number()**

See **external documentation**.

```
drawEllipse(This, X, Y, W, H) -> ok
```

Types:

**This = *wxGraphicsContext()***
**X = number()**
**Y = number()**
**W = number()**
**H = number()**

See **external documentation**.

```
drawIcon(This, Icon, X, Y, W, H) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Icon = *wxIcon:wxIcon()***
**X = number()**
**Y = number()**
**W = number()**
**H = number()**

See **external documentation**.

```
drawLines(This, Points) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Points = [{X::float(), Y::float()}]**

Equivalent to *drawLines(This, Points, [])*.

```
drawLines(This, Points, Options::[Option]) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Points = [{X::float(), Y::float()}]**
**Option = {fillStyle, *wx:wx_enum()*}**

See **external documentation**.
FillStyle = integer

```
drawPath(This, Path) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Path = *wxGraphicsPath:wxGraphicsPath()***

Equivalent to *drawPath(This, Path, [])*.

```
drawPath(This, Path, Options::[Option]) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Path = *wxGraphicsPath:wxGraphicsPath()***
**Option = {fillStyle, *wx:wx_enum()*}**

See **external documentation**.
FillStyle = integer

```
drawRectangle(This, X, Y, W, H) -> ok
```

Types:

**This = *wxGraphicsContext()***
**X = number()**
**Y = number()**

**W = number()**
**H = number()**

See **external documentation**.

`drawRoundedRectangle(This, X, Y, W, H, Radius) -> ok`

Types:

**This = *wxGraphicsContext()***
**X = number()**
**Y = number()**
**W = number()**
**H = number()**
**Radius = number()**

See **external documentation**.

`drawText(This, Str, X, Y) -> ok`

Types:

**This = *wxGraphicsContext()***
**Str = *unicode:chardata()***
**X = number()**
**Y = number()**

See **external documentation**.

`drawText(This, Str, X, Y, Angle) -> ok`

Types:

**This = *wxGraphicsContext()***
**Str = *unicode:chardata()***
**X = number()**
**Y = number()**
**Angle = number()**

See **external documentation**.
Also:
drawText(This, Str, X, Y, BackgroundBrush) -> 'ok' when This::wxGraphicsContext(), Str::unicode:chardata(), X::number(), Y::number(), BackgroundBrush::wxGraphicsBrush:wxGraphicsBrush().

`drawText(This, Str, X, Y, Angle, BackgroundBrush) -> ok`

Types:

**This = *wxGraphicsContext()***
**Str = *unicode:chardata()***
**X = number()**
**Y = number()**
**Angle = number()**
**BackgroundBrush = *wxGraphicsBrush:wxGraphicsBrush()***

See **external documentation**.

```
fillPath(This, Path) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Path = *wxGraphicsPath:wxGraphicsPath()***

Equivalent to *fillPath(This, Path, [])*.

```
fillPath(This, Path, Options::[Option]) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Path = *wxGraphicsPath:wxGraphicsPath()***
**Option = {fillStyle, *wx:wx_enum()*}**

See **external documentation**.
FillStyle = integer

```
strokePath(This, Path) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Path = *wxGraphicsPath:wxGraphicsPath()***

See **external documentation**.

```
getPartialTextExtents(This, Text) -> [number()]
```

Types:

**This = *wxGraphicsContext()***
**Text = *unicode:chardata()***

See **external documentation**.

```
getTextExtent(This, Text) -> Result
```

Types:

**Result = {Width::number(), Height::number(), Descent::number(),**
**ExternalLeading::number()}**
**This = *wxGraphicsContext()***
**Text = *unicode:chardata()***

See **external documentation**.

```
rotate(This, Angle) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Angle = number()**

See **external documentation**.

```
scale(This, XScale, YScale) -> ok
```

Types:

**This = *wxGraphicsContext()***
**XScale = number()**
**YScale = number()**

See **external documentation**.

```
translate(This, Dx, Dy) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Dx = number()**
**Dy = number()**

See **external documentation**.

```
getTransform(This) -> wxGraphicsMatrix:wxGraphicsMatrix()
```

Types:

**This = *wxGraphicsContext()***

See **external documentation**.

```
setTransform(This, Matrix) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Matrix = *wxGraphicsMatrix:wxGraphicsMatrix()***

See **external documentation**.

```
concatTransform(This, Matrix) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Matrix = *wxGraphicsMatrix:wxGraphicsMatrix()***

See **external documentation**.

```
setBrush(This, Brush) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Brush = *wxGraphicsBrush:wxGraphicsBrush()* | *wxBrush:wxBrush()***

See **external documentation**.

```
setFont(This, Font) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Font = *wxGraphicsFont:wxGraphicsFont()***

See **external documentation**.

```
setFont(This, Font, Colour) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Font = *wxFont:wxFont()***
**Colour = *wx:wx_colour()***

See **external documentation**.

```
setPen(This, Pen) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Pen = *wxPen:wxPen()* | *wxGraphicsPen:wxGraphicsPen()***

See **external documentation**.

```
strokeLine(This, X1, Y1, X2, Y2) -> ok
```

Types:

**This = *wxGraphicsContext()***
**X1 = number()**
**Y1 = number()**
**X2 = number()**
**Y2 = number()**

See **external documentation**.

```
strokeLines(This, Points) -> ok
```

Types:

**This = *wxGraphicsContext()***
**Points = [{X::float(), Y::float()}]**

See **external documentation**.

```
destroy(This::wxGraphicsContext()) -> ok
```

Destroys this object, do not use object again

# wxGraphicsFont

Erlang module

See external documentation: **wxGraphicsFont**.

This class is derived (and can use functions) from:
*wxGraphicsObject*

## DATA TYPES

wxGraphicsFont()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxGraphicsMatrix

Erlang module

See external documentation: **wxGraphicsMatrix**.

This class is derived (and can use functions) from:
*wxGraphicsObject*

## DATA TYPES

wxGraphicsMatrix()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
concat(This, T) -> ok
```

Types:

**This = *wxGraphicsMatrix()***
**T = *wxGraphicsMatrix()***

See **external documentation**.

```
get(This) -> Result
```

Types:

**Result = {A::number(), B::number(), C::number(), D::number(), Tx::number(), Ty::number()}**
**This = *wxGraphicsMatrix()***

See **external documentation**.

```
invert(This) -> ok
```

Types:

**This = *wxGraphicsMatrix()***

See **external documentation**.

```
isEqual(This, T) -> boolean()
```

Types:

**This = *wxGraphicsMatrix()***
**T = *wxGraphicsMatrix()***

See **external documentation**.

```
isIdentity(This) -> boolean()
```

Types:

**This = *wxGraphicsMatrix()***

See **external documentation**.

```
rotate(This, Angle) -> ok
```

Types:

**This = *wxGraphicsMatrix()***
**Angle = number()**

See **external documentation**.

```
scale(This, XScale, YScale) -> ok
```

Types:

**This = *wxGraphicsMatrix()***
**XScale = number()**
**YScale = number()**

See **external documentation**.

```
translate(This, Dx, Dy) -> ok
```

Types:

**This = *wxGraphicsMatrix()***
**Dx = number()**
**Dy = number()**

See **external documentation**.

```
set(This) -> ok
```

Types:

**This = *wxGraphicsMatrix()***

Equivalent to *set(This, [])*.

```
set(This, Options::[Option]) -> ok
```

Types:

**This = *wxGraphicsMatrix()***
**Option = {a, number()} | {b, number()} | {c, number()} | {d, number()} | {tx, number()} | {ty, number()}**

See **external documentation**.

```
transformPoint(This) -> {X::number(), Y::number()}
```

Types:

**This = *wxGraphicsMatrix()***

See **external documentation**.

```
transformDistance(This) -> {Dx::number(), Dy::number()}
```

Types:

**This = *wxGraphicsMatrix()***

See **external documentation**.

# wxGraphicsObject

Erlang module

See external documentation: **wxGraphicsObject**.

## DATA TYPES

wxGraphicsObject()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getRenderer(This) -> wxGraphicsRenderer:wxGraphicsRenderer()
```

Types:

**This = *wxGraphicsObject()***

See **external documentation**.

```
isNull(This) -> boolean()
```

Types:

**This = *wxGraphicsObject()***

See **external documentation**.

```
destroy(This::wxGraphicsObject()) -> ok
```

Destroys this object, do not use object again

# wxGraphicsPath

Erlang module

See external documentation: **wxGraphicsPath**.

This class is derived (and can use functions) from:
*wxGraphicsObject*

## DATA TYPES

wxGraphicsPath()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
moveToPoint(This, P) -> ok
```

Types:

**This = *wxGraphicsPath()***
**P = {X::float(), Y::float()}**

See **external documentation**.

```
moveToPoint(This, X, Y) -> ok
```

Types:

**This = *wxGraphicsPath()***
**X = number()**
**Y = number()**

See **external documentation**.

```
addArc(This, C, R, StartAngle, EndAngle, Clockwise) -> ok
```

Types:

**This = *wxGraphicsPath()***
**C = {X::float(), Y::float()}**
**R = number()**
**StartAngle = number()**
**EndAngle = number()**
**Clockwise = boolean()**

See **external documentation**.

```
addArc(This, X, Y, R, StartAngle, EndAngle, Clockwise) -> ok
```

Types:

**This = *wxGraphicsPath()***
**X = number()**
**Y = number()**

**R = number()**
**StartAngle = number()**
**EndAngle = number()**
**Clockwise = boolean()**

See **external documentation**.

`addArcToPoint(This, X1, Y1, X2, Y2, R) -> ok`

Types:

**This = *wxGraphicsPath()***
**X1 = number()**
**Y1 = number()**
**X2 = number()**
**Y2 = number()**
**R = number()**

See **external documentation**.

`addCircle(This, X, Y, R) -> ok`

Types:

**This = *wxGraphicsPath()***
**X = number()**
**Y = number()**
**R = number()**

See **external documentation**.

`addCurveToPoint(This, C1, C2, E) -> ok`

Types:

**This = *wxGraphicsPath()***
**C1 = {X::float(), Y::float()}**
**C2 = {X::float(), Y::float()}**
**E = {X::float(), Y::float()}**

See **external documentation**.

`addCurveToPoint(This, Cx1, Cy1, Cx2, Cy2, X, Y) -> ok`

Types:

**This = *wxGraphicsPath()***
**Cx1 = number()**
**Cy1 = number()**
**Cx2 = number()**
**Cy2 = number()**
**X = number()**
**Y = number()**

See **external documentation**.

```
addEllipse(This, X, Y, W, H) -> ok
```

Types:

**This = *wxGraphicsPath()***
**X = number()**
**Y = number()**
**W = number()**
**H = number()**

See **external documentation**.

```
addLineToPoint(This, P) -> ok
```

Types:

**This = *wxGraphicsPath()***
**P = {X::float(), Y::float()}**

See **external documentation**.

```
addLineToPoint(This, X, Y) -> ok
```

Types:

**This = *wxGraphicsPath()***
**X = number()**
**Y = number()**

See **external documentation**.

```
addPath(This, Path) -> ok
```

Types:

**This = *wxGraphicsPath()***
**Path = *wxGraphicsPath()***

See **external documentation**.

```
addQuadCurveToPoint(This, Cx, Cy, X, Y) -> ok
```

Types:

**This = *wxGraphicsPath()***
**Cx = number()**
**Cy = number()**
**X = number()**
**Y = number()**

See **external documentation**.

```
addRectangle(This, X, Y, W, H) -> ok
```

Types:

**This = *wxGraphicsPath()***
**X = number()**
**Y = number()**
**W = number()**

**H = number()**

See **external documentation**.

`addRoundedRectangle(This, X, Y, W, H, Radius) -> ok`

Types:

**This = *wxGraphicsPath()***
**X = number()**
**Y = number()**
**W = number()**
**H = number()**
**Radius = number()**

See **external documentation**.

`closeSubpath(This) -> ok`

Types:

**This = *wxGraphicsPath()***

See **external documentation**.

`contains(This, C) -> boolean()`

Types:

**This = *wxGraphicsPath()***
**C = {X::float(), Y::float()}**

Equivalent to *contains(This, C, [])*.

`contains(This, X, Y) -> boolean()`

Types:

**This = *wxGraphicsPath()***
**X = number()**
**Y = number()**

See **external documentation**.
Also:
contains(This, C, [Option]) -> boolean() when
This::wxGraphicsPath(), C::{X::float(), Y::float()},
Option :: {'fillStyle', wx:wx_enum()}.

FillStyle = integer

`contains(This, X, Y, Options::[Option]) -> boolean()`

Types:

**This = *wxGraphicsPath()***
**X = number()**
**Y = number()**
**Option = {fillStyle, *wx:wx_enum()*}**

See **external documentation**.

FillStyle = integer

```
getBox(This) -> {X::float(), Y::float(), W::float(), H::float()}
```

Types:

**This = *wxGraphicsPath()***

See **external documentation**.

```
getCurrentPoint(This) -> {X::float(), Y::float()}
```

Types:

**This = *wxGraphicsPath()***

See **external documentation**.

```
transform(This, Matrix) -> ok
```

Types:

**This = *wxGraphicsPath()***

**Matrix = *wxGraphicsMatrix:wxGraphicsMatrix()***

See **external documentation**.

# wxGraphicsPen

Erlang module

See external documentation: **wxGraphicsPen**.

This class is derived (and can use functions) from:
*wxGraphicsObject*

## DATA TYPES

wxGraphicsPen()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxGraphicsRenderer

Erlang module

See external documentation: **wxGraphicsRenderer**.

## DATA TYPES

wxGraphicsRenderer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getDefaultRenderer() -> wxGraphicsRenderer()
```

See **external documentation**.

```
createContext(This, Dc) -> wxGraphicsContext:wxGraphicsContext()
```

Types:

**This = *wxGraphicsRenderer()***
**Dc = *wxWindowDC:wxWindowDC() | wxWindow:wxWindow()***

See **external documentation**.

```
createPen(This, Pen) -> wxGraphicsPen:wxGraphicsPen()
```

Types:

**This = *wxGraphicsRenderer()***
**Pen = *wxPen:wxPen()***

See **external documentation**.

```
createBrush(This, Brush) -> wxGraphicsBrush:wxGraphicsBrush()
```

Types:

**This = *wxGraphicsRenderer()***
**Brush = *wxBrush:wxBrush()***

See **external documentation**.

```
createLinearGradientBrush(This, X1, Y1, X2, Y2, C1, C2) ->
wxGraphicsBrush:wxGraphicsBrush()
```

Types:

**This = *wxGraphicsRenderer()***
**X1 = number()**
**Y1 = number()**
**X2 = number()**
**Y2 = number()**
**C1 = *wx:wx_colour()***

**C2 = *wx:wx_colour()***

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

`createRadialGradientBrush(This, Xo, Yo, Xc, Yc, Radius, OColor, CColor) -> wxGraphicsBrush:wxGraphicsBrush()`

Types:

**This = *wxGraphicsRenderer()***
**Xo = number()**
**Yo = number()**
**Xc = number()**
**Yc = number()**
**Radius = number()**
**OColor = *wx:wx_colour()***
**CColor = *wx:wx_colour()***

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

`createFont(This, Font) -> wxGraphicsFont:wxGraphicsFont()`

Types:

**This = *wxGraphicsRenderer()***
**Font = *wxFont:wxFont()***

Equivalent to *createFont(This, Font, [])*.

`createFont(This, Font, Options::[Option]) -> wxGraphicsFont:wxGraphicsFont()`

Types:

**This = *wxGraphicsRenderer()***
**Font = *wxFont:wxFont()***
**Option = {col, *wx:wx_colour()*}**

See **external documentation**.

`createMatrix(This) -> wxGraphicsMatrix:wxGraphicsMatrix()`

Types:

**This = *wxGraphicsRenderer()***

Equivalent to *createMatrix(This, [])*.

`createMatrix(This, Options::[Option]) -> wxGraphicsMatrix:wxGraphicsMatrix()`

Types:

**This = *wxGraphicsRenderer()***
**Option = {a, number()} | {b, number()} | {c, number()} | {d, number()} | {tx, number()} | {ty, number()}**

See **external documentation**.

```
createPath(This) -> wxGraphicsPath:wxGraphicsPath()
```

Types:

**`This = wxGraphicsRenderer()`**

See **external documentation**.

# wxGridBagSizer

Erlang module

See external documentation: **wxGridBagSizer**.

This class is derived (and can use functions) from:
*wxFlexGridSizer*
*wxGridSizer*
*wxSizer*

## DATA TYPES

wxGridBagSizer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxGridBagSizer()
```

Equivalent to *new([])*.

```
new(Options::[Option]) -> wxGridBagSizer()
```

Types:

**Option = {vgap, integer()} | {hgap, integer()}**

See **external documentation**.

```
add(This, Item) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxGridBagSizer()***
**Item = *wxSizerItem:wxSizerItem() | wxGBSizerItem:wxGBSizerItem()***

See **external documentation**.

```
add(This, Width, Height) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxGridBagSizer()***
**Width = integer()**
**Height = integer()**

See **external documentation**.
Also:
add(This, Window, Pos) -> wxSizerItem:wxSizerItem() when
This::wxGridBagSizer(), Window::wxWindow:wxWindow() | wxSizer:wxSizer(), Pos::{R::integer(), C::integer()};
(This, Window, [Option]) -> wxSizerItem:wxSizerItem() when
This::wxGridBagSizer(), Window::wxWindow:wxWindow() | wxSizer:wxSizer(),
Option :: {'proportion', integer()}
| {'flag', integer()}

| {'border', integer()}
| {'userData', wx:wx_object()}.

```
add(This, Width, Height, Pos) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxGridBagSizer()***
**Width = integer()**
**Height = integer()**
**Pos = {R::integer(), C::integer()}**

See **external documentation**.
Also:
add(This, Width, Height, [Option]) -> wxSizerItem:wxSizerItem() when
This::wxGridBagSizer(), Width::integer(), Height::integer(),
Option :: {'proportion', integer()}
| {'flag', integer()}
| {'border', integer()}
| {'userData', wx:wx_object()};
(This, Window, Pos, [Option]) -> wxSizerItem:wxSizerItem() when
This::wxGridBagSizer(), Window::wxWindow:wxWindow() | wxSizer:wxSizer(), Pos::{R::integer(), C::integer()},
Option :: {'span', {RS::integer(), CS::integer()}}
| {'flag', integer()}
| {'border', integer()}
| {'userData', wx:wx_object()}.

```
add(This, Width, Height, Pos, Options::[Option]) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxGridBagSizer()***
**Width = integer()**
**Height = integer()**
**Pos = {R::integer(), C::integer()}**
**Option = {span, {RS::integer(), CS::integer()}} | {flag, integer()} | {border, integer()} | {userData, *wx:wx_object()*}**

See **external documentation**.

```
calcMin(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxGridBagSizer()***

See **external documentation**.

```
checkForIntersection(This, Item) -> boolean()
```

Types:

**This = *wxGridBagSizer()***
**Item = *wxGBSizerItem:wxGBSizerItem()***

Equivalent to *checkForIntersection(This, Item, [])*.

```
checkForIntersection(This, Pos, Span) -> boolean()
```

Types:

**This = *wxGridBagSizer()***
**Pos = {R::integer(), C::integer()}**
**Span = {RS::integer(), CS::integer()}**

See **external documentation**.
Also:
checkForIntersection(This, Item, [Option]) -> boolean() when
This::wxGridBagSizer(), Item::wxGBSizerItem:wxGBSizerItem(),
Option :: {'excludeItem', wxGBSizerItem:wxGBSizerItem()}.

```
checkForIntersection(This, Pos, Span, Options::[Option]) -> boolean()
```

Types:

**This = *wxGridBagSizer()***
**Pos = {R::integer(), C::integer()}**
**Span = {RS::integer(), CS::integer()}**
**Option = {excludeItem, *wxGBSizerItem:wxGBSizerItem()*}**

See **external documentation**.

```
findItem(This, Window) -> wxGBSizerItem:wxGBSizerItem()
```

Types:

**This = *wxGridBagSizer()***
**Window = *wxWindow:wxWindow()* | *wxSizer:wxSizer()***

See **external documentation**.

```
findItemAtPoint(This, Pt) -> wxGBSizerItem:wxGBSizerItem()
```

Types:

**This = *wxGridBagSizer()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
findItemAtPosition(This, Pos) -> wxGBSizerItem:wxGBSizerItem()
```

Types:

**This = *wxGridBagSizer()***
**Pos = {R::integer(), C::integer()}**

See **external documentation**.

```
findItemWithData(This, UserData) -> wxGBSizerItem:wxGBSizerItem()
```

Types:

**This = *wxGridBagSizer()***
**UserData = *wx:wx_object()***

See **external documentation**.

```
getCellSize(This, Row, Col) -> {W::integer(), H::integer()}
```

Types:

**This = *wxGridBagSizer()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

```
getEmptyCellSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxGridBagSizer()***

See **external documentation**.

```
getItemPosition(This, Index) -> {R::integer(), C::integer()}
```

Types:

**This = *wxGridBagSizer()***
**Index = integer()**

See **external documentation**.
Also:
getItemPosition(This, Window) -> {R::integer(), C::integer()} when
This::wxGridBagSizer(), Window::wxWindow:wxWindow() | wxSizer:wxSizer().

```
getItemSpan(This, Index) -> {RS::integer(), CS::integer()}
```

Types:

**This = *wxGridBagSizer()***
**Index = integer()**

See **external documentation**.
Also:
getItemSpan(This, Window) -> {RS::integer(), CS::integer()} when
This::wxGridBagSizer(), Window::wxWindow:wxWindow() | wxSizer:wxSizer().

```
setEmptyCellSize(This, Sz) -> ok
```

Types:

**This = *wxGridBagSizer()***
**Sz = {W::integer(), H::integer()}**

See **external documentation**.

```
setItemPosition(This, Index, Pos) -> boolean()
```

Types:

**This = *wxGridBagSizer()***
**Index = integer()**
**Pos = {R::integer(), C::integer()}**

See **external documentation**.
Also:
setItemPosition(This, Window, Pos) -> boolean() when

This::wxGridBagSizer(), Window::wxWindow:wxWindow() | wxSizer:wxSizer(), Pos::{R::integer(), C::integer()}.

`setItemSpan(This, Index, Span) -> boolean()`

Types:

**This = *wxGridBagSizer()***
**Index = integer()**
**Span = {RS::integer(), CS::integer()}**

See **external documentation**.
Also:
setItemSpan(This, Window, Span) -> boolean() when This::wxGridBagSizer(), Window::wxWindow:wxWindow() | wxSizer:wxSizer(), Span::{RS::integer(), CS::integer()}.

`destroy(This::wxGridBagSizer()) -> ok`

Destroys this object, do not use object again

# wxGridCellAttr

Erlang module

See external documentation: **wxGridCellAttr**.

## DATA TYPES

wxGridCellAttr()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`setTextColour(This, ColText) -> ok`

Types:

**This = *wxGridCellAttr()***
**ColText = *wx:wx_colour()***

See **external documentation**.

`setBackgroundColour(This, ColBack) -> ok`

Types:

**This = *wxGridCellAttr()***
**ColBack = *wx:wx_colour()***

See **external documentation**.

`setFont(This, Font) -> ok`

Types:

**This = *wxGridCellAttr()***
**Font = *wxFont:wxFont()***

See **external documentation**.

`setAlignment(This, HAlign, VAlign) -> ok`

Types:

**This = *wxGridCellAttr()***
**HAlign = integer()**
**VAlign = integer()**

See **external documentation**.

`setReadOnly(This) -> ok`

Types:

**This = *wxGridCellAttr()***

Equivalent to *setReadOnly(This, [])*.

```
setReadOnly(This, Options::[Option]) -> ok
```

Types:

**This = *wxGridCellAttr()***
**Option = {isReadOnly, boolean()}**

See **external documentation**.

```
setRenderer(This, Renderer) -> ok
```

Types:

**This = *wxGridCellAttr()***
**Renderer = *wxGridCellRenderer:wxGridCellRenderer()***

See **external documentation**.

```
setEditor(This, Editor) -> ok
```

Types:

**This = *wxGridCellAttr()***
**Editor = *wxGridCellEditor:wxGridCellEditor()***

See **external documentation**.

```
hasTextColour(This) -> boolean()
```

Types:

**This = *wxGridCellAttr()***

See **external documentation**.

```
hasBackgroundColour(This) -> boolean()
```

Types:

**This = *wxGridCellAttr()***

See **external documentation**.

```
hasFont(This) -> boolean()
```

Types:

**This = *wxGridCellAttr()***

See **external documentation**.

```
hasAlignment(This) -> boolean()
```

Types:

**This = *wxGridCellAttr()***

See **external documentation**.

```
hasRenderer(This) -> boolean()
```

Types:

**This = *wxGridCellAttr()***

See **external documentation**.

```
hasEditor(This) -> boolean()
```
Types:
**This = *wxGridCellAttr()***

See **external documentation**.

```
getTextColour(This) -> wx:wx_colour4()
```
Types:
**This = *wxGridCellAttr()***

See **external documentation**.

```
getBackgroundColour(This) -> wx:wx_colour4()
```
Types:
**This = *wxGridCellAttr()***

See **external documentation**.

```
getFont(This) -> wxFont:wxFont()
```
Types:
**This = *wxGridCellAttr()***

See **external documentation**.

```
getAlignment(This) -> {HAlign::integer(), VAlign::integer()}
```
Types:
**This = *wxGridCellAttr()***

See **external documentation**.

```
getRenderer(This, Grid, Row, Col) -> wxGridCellRenderer:wxGridCellRenderer()
```
Types:
**This = *wxGridCellAttr()***
**Grid = *wxGrid:wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

```
getEditor(This, Grid, Row, Col) -> wxGridCellEditor:wxGridCellEditor()
```
Types:
**This = *wxGridCellAttr()***
**Grid = *wxGrid:wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

```
isReadOnly(This) -> boolean()
```
Types:

**This = *wxGridCellAttr()***

See **external documentation**.

`setDefAttr(This, DefAttr) -> ok`

Types:

**This = *wxGridCellAttr()***

**DefAttr = *wxGridCellAttr()***

See **external documentation**.

# wxGridCellBoolEditor

Erlang module

See external documentation: **wxGridCellBoolEditor**.

This class is derived (and can use functions) from:
*wxGridCellEditor*

## DATA TYPES

wxGridCellBoolEditor()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxGridCellBoolEditor()`

See **external documentation**.

`isTrueValue(Value) -> boolean()`

Types:

**`Value = unicode:chardata()`**

See **external documentation**.

`useStringValues() -> ok`

Equivalent to *useStringValues([])*.

`useStringValues(Options::[Option]) -> ok`

Types:

**`Option = {valueTrue, unicode:chardata()} | {valueFalse, unicode:chardata()}`**

See **external documentation**.

`destroy(This::wxGridCellBoolEditor()) -> ok`

Destroys this object, do not use object again

# wxGridCellBoolRenderer

Erlang module

See external documentation: **wxGridCellBoolRenderer**.

This class is derived (and can use functions) from:
*wxGridCellRenderer*

## DATA TYPES

wxGridCellBoolRenderer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxGridCellBoolRenderer()
```

See **external documentation**.

```
destroy(This::wxGridCellBoolRenderer()) -> ok
```

Destroys this object, do not use object again

# wxGridCellChoiceEditor

Erlang module

See external documentation: **wxGridCellChoiceEditor**.

This class is derived (and can use functions) from:
*wxGridCellEditor*

## DATA TYPES

wxGridCellChoiceEditor()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Choices) -> wxGridCellChoiceEditor()
```

Types:

**Choices = [*unicode:chardata()*]**

Equivalent to *new(Choices, [])*.

```
new(Choices, Options::[Option]) -> wxGridCellChoiceEditor()
```

Types:

**Choices = [*unicode:chardata()*]**
**Option = {allowOthers, boolean()}**

See **external documentation**.

```
setParameters(This, Params) -> ok
```

Types:

**This = *wxGridCellChoiceEditor()***
**Params = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxGridCellChoiceEditor()) -> ok
```

Destroys this object, do not use object again

# wxGridCellEditor

Erlang module

See external documentation: **wxGridCellEditor**.

## DATA TYPES

wxGridCellEditor()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
create(This, Parent, Id, EvtHandler) -> ok
```

Types:

**This = *wxGridCellEditor()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**EvtHandler = *wxEvtHandler:wxEvtHandler()***

See **external documentation**.

```
isCreated(This) -> boolean()
```

Types:

**This = *wxGridCellEditor()***

See **external documentation**.

```
setSize(This, Rect) -> ok
```

Types:

**This = *wxGridCellEditor()***
**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

See **external documentation**.

```
show(This, Show) -> ok
```

Types:

**This = *wxGridCellEditor()***
**Show = boolean()**

Equivalent to *show(This, Show, [])*.

```
show(This, Show, Options::[Option]) -> ok
```

Types:

**This = *wxGridCellEditor()***
**Show = boolean()**
**Option = {attr, *wxGridCellAttr:wxGridCellAttr()*}**

See **external documentation**.

```
paintBackground(This, RectCell, Attr) -> ok
```

Types:

**This = *wxGridCellEditor()***
**RectCell = {X::integer(), Y::integer(), W::integer(), H::integer()}**
**Attr = *wxGridCellAttr:wxGridCellAttr()***

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

```
beginEdit(This, Row, Col, Grid) -> ok
```

Types:

**This = *wxGridCellEditor()***
**Row = integer()**
**Col = integer()**
**Grid = *wxGrid:wxGrid()***

See **external documentation**.

```
endEdit(This, Row, Col, Grid) -> boolean()
```

Types:

**This = *wxGridCellEditor()***
**Row = integer()**
**Col = integer()**
**Grid = *wxGrid:wxGrid()***

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

```
reset(This) -> ok
```

Types:

**This = *wxGridCellEditor()***

See **external documentation**.

```
startingKey(This, Event) -> ok
```

Types:

**This = *wxGridCellEditor()***
**Event = *wxKeyEvent:wxKeyEvent()***

See **external documentation**.

```
startingClick(This) -> ok
```

Types:

**This = *wxGridCellEditor()***

See **external documentation**.

```
handleReturn(This, Event) -> ok
```

Types:

**This = *wxGridCellEditor()***

**Event = *wxKeyEvent:wxKeyEvent()***

See **external documentation**.

# wxGridCellFloatEditor

Erlang module

See external documentation: **wxGridCellFloatEditor**.

This class is derived (and can use functions) from:
*wxGridCellEditor*

## DATA TYPES

wxGridCellFloatEditor()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxGridCellFloatEditor()`

Equivalent to *new([])*.

`new(Options::[Option]) -> wxGridCellFloatEditor()`

Types:

**`Option = {width, integer()} | {precision, integer()}`**

See **external documentation**.

`setParameters(This, Params) -> ok`

Types:

**`This = wxGridCellFloatEditor()`**
**`Params = unicode:chardata()`**

See **external documentation**.

`destroy(This::wxGridCellFloatEditor()) -> ok`

Destroys this object, do not use object again

# wxGridCellFloatRenderer

Erlang module

See external documentation: **wxGridCellFloatRenderer**.

This class is derived (and can use functions) from:
*wxGridCellStringRenderer*
*wxGridCellRenderer*

## DATA TYPES

wxGridCellFloatRenderer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxGridCellFloatRenderer()
```

Equivalent to *new([])*.

```
new(Options::[Option]) -> wxGridCellFloatRenderer()
```

Types:

**Option = {width, integer()} | {precision, integer()}**

See **external documentation**.

```
getPrecision(This) -> integer()
```

Types:

**This = *wxGridCellFloatRenderer()***

See **external documentation**.

```
getWidth(This) -> integer()
```

Types:

**This = *wxGridCellFloatRenderer()***

See **external documentation**.

```
setParameters(This, Params) -> ok
```

Types:

**This = *wxGridCellFloatRenderer()***
**Params = *unicode:chardata()***

See **external documentation**.

```
setPrecision(This, Precision) -> ok
```

Types:

**This = *wxGridCellFloatRenderer()***

**Precision = integer()**

See **external documentation**.

`setWidth(This, Width) -> ok`

Types:

**This = *wxGridCellFloatRenderer()***

**Width = integer()**

See **external documentation**.

`destroy(This::wxGridCellFloatRenderer()) -> ok`

Destroys this object, do not use object again

# wxGridCellNumberEditor

Erlang module

See external documentation: **wxGridCellNumberEditor**.

This class is derived (and can use functions) from:
*wxGridCellTextEditor*
*wxGridCellEditor*

## DATA TYPES

wxGridCellNumberEditor()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxGridCellNumberEditor()
```

Equivalent to *new([])*.

```
new(Options::[Option]) -> wxGridCellNumberEditor()
```

Types:

**Option = {min, integer()} | {max, integer()}**

See **external documentation**.

```
getValue(This) -> unicode:charlist()
```

Types:

**This = *wxGridCellNumberEditor()***

See **external documentation**.

```
setParameters(This, Params) -> ok
```

Types:

**This = *wxGridCellNumberEditor()***
**Params = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxGridCellNumberEditor()) -> ok
```

Destroys this object, do not use object again

# wxGridCellNumberRenderer

Erlang module

See external documentation: **wxGridCellNumberRenderer**.

This class is derived (and can use functions) from:
*wxGridCellStringRenderer*
*wxGridCellRenderer*

## DATA TYPES

wxGridCellNumberRenderer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxGridCellNumberRenderer()
```

See **external documentation**.

```
destroy(This::wxGridCellNumberRenderer()) -> ok
```

Destroys this object, do not use object again

# wxGridCellRenderer

Erlang module

See external documentation: **wxGridCellRenderer**.

## DATA TYPES

wxGridCellRenderer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
draw(This, Grid, Attr, Dc, Rect, Row, Col, IsSelected) -> ok
```

Types:

**This = *wxGridCellRenderer()***
**Grid = *wxGrid:wxGrid()***
**Attr = *wxGridCellAttr:wxGridCellAttr()***
**Dc = *wxDC:wxDC()***
**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**
**Row = integer()**
**Col = integer()**
**IsSelected = boolean()**

See **external documentation**.

```
getBestSize(This, Grid, Attr, Dc, Row, Col) -> {W::integer(), H::integer()}
```

Types:

**This = *wxGridCellRenderer()***
**Grid = *wxGrid:wxGrid()***
**Attr = *wxGridCellAttr:wxGridCellAttr()***
**Dc = *wxDC:wxDC()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

# wxGridCellStringRenderer

Erlang module

See external documentation: **wxGridCellStringRenderer**.

This class is derived (and can use functions) from:
*wxGridCellRenderer*

## DATA TYPES

wxGridCellStringRenderer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxGridCellStringRenderer()
```

See **external documentation**.

```
destroy(This::wxGridCellStringRenderer()) -> ok
```

Destroys this object, do not use object again

# wxGridCellTextEditor

Erlang module

See external documentation: **wxGridCellTextEditor**.

This class is derived (and can use functions) from:
*wxGridCellEditor*

## DATA TYPES

wxGridCellTextEditor()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxGridCellTextEditor()
```

See **external documentation**.

```
setParameters(This, Params) -> ok
```

Types:

**This = *wxGridCellTextEditor()***
**Params = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxGridCellTextEditor()) -> ok
```

Destroys this object, do not use object again

# wxGrid

Erlang module

See external documentation: **wxGrid**.

This class is derived (and can use functions) from:
*wxScrolledWindow*
*wxPanel*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxGrid()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxGrid()
```

See **external documentation**.

```
new(Parent, Id) -> wxGrid()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, X, Y) -> wxGrid()
```

Types:

**Parent = *wxWindow:wxWindow()***
**X = integer()**
**Y = integer()**

See **external documentation**.
Also:
new(Parent, Id, [Option]) -> wxGrid() when
Parent::wxWindow:wxWindow(), Id::integer(),
Option :: {'pos', {X::integer(), Y::integer()}}
| {'size', {W::integer(), H::integer()}}
| {'style', integer()}.

```
new(Parent, X, Y, Options::[Option]) -> wxGrid()
```

Types:

**Parent = *wxWindow:wxWindow()***
**X = integer()**

**Y = integer()**
**Option = {w, integer()} | {h, integer()} | {style, integer()}**

See **external documentation**.

`appendCols(This) -> boolean()`

Types:

**This = *wxGrid()***

Equivalent to *appendCols(This, [])*.

`appendCols(This, Options::[Option]) -> boolean()`

Types:

**This = *wxGrid()***
**Option = {numCols, integer()} | {updateLabels, boolean()}**

See **external documentation**.

`appendRows(This) -> boolean()`

Types:

**This = *wxGrid()***

Equivalent to *appendRows(This, [])*.

`appendRows(This, Options::[Option]) -> boolean()`

Types:

**This = *wxGrid()***
**Option = {numRows, integer()} | {updateLabels, boolean()}**

See **external documentation**.

`autoSize(This) -> ok`

Types:

**This = *wxGrid()***

See **external documentation**.

`autoSizeColumn(This, Col) -> ok`

Types:

**This = *wxGrid()***
**Col = integer()**

Equivalent to *autoSizeColumn(This, Col, [])*.

`autoSizeColumn(This, Col, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***
**Col = integer()**
**Option = {setAsMin, boolean()}**

See **external documentation**.

```
autoSizeColumns(This) -> ok
```

Types:

**This = *wxGrid()***

Equivalent to *autoSizeColumns(This, [])*.

```
autoSizeColumns(This, Options::[Option]) -> ok
```

Types:

**This = *wxGrid()***
**Option = {setAsMin, boolean()}**

See **external documentation**.

```
autoSizeRow(This, Row) -> ok
```

Types:

**This = *wxGrid()***
**Row = integer()**

Equivalent to *autoSizeRow(This, Row, [])*.

```
autoSizeRow(This, Row, Options::[Option]) -> ok
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Option = {setAsMin, boolean()}**

See **external documentation**.

```
autoSizeRows(This) -> ok
```

Types:

**This = *wxGrid()***

Equivalent to *autoSizeRows(This, [])*.

```
autoSizeRows(This, Options::[Option]) -> ok
```

Types:

**This = *wxGrid()***
**Option = {setAsMin, boolean()}**

See **external documentation**.

```
beginBatch(This) -> ok
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
blockToDeviceRect(This, TopLeft, BottomRight) -> {X::integer(), Y::integer(),
W::integer(), H::integer()}
```

Types:

**This = *wxGrid()***
**TopLeft = {R::integer(), C::integer()}**
**BottomRight = {R::integer(), C::integer()}**

See **external documentation**.

```
canDragColSize(This) -> boolean()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
canDragRowSize(This) -> boolean()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
canDragGridSize(This) -> boolean()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
canEnableCellControl(This) -> boolean()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
cellToRect(This, Coords) -> {X::integer(), Y::integer(), W::integer(),
H::integer()}
```

Types:

**This = *wxGrid()***
**Coords = {R::integer(), C::integer()}**

See **external documentation**.

```
cellToRect(This, Row, Col) -> {X::integer(), Y::integer(), W::integer(),
H::integer()}
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

```
clearGrid(This) -> ok
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
clearSelection(This) -> ok
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
createGrid(This, NumRows, NumCols) -> boolean()
```

Types:

**This = *wxGrid()***
**NumRows = integer()**
**NumCols = integer()**

Equivalent to *createGrid(This, NumRows, NumCols, [])*.

```
createGrid(This, NumRows, NumCols, Options::[Option]) -> boolean()
```

Types:

**This = *wxGrid()***
**NumRows = integer()**
**NumCols = integer()**
**Option = {selmode, *wx:wx_enum()*}**

See **external documentation**.
Selmode = ?wxGrid_wxGridSelectCells | ?wxGrid_wxGridSelectRows | ?wxGrid_wxGridSelectColumns

```
deleteCols(This) -> boolean()
```

Types:

**This = *wxGrid()***

Equivalent to *deleteCols(This, [])*.

```
deleteCols(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxGrid()***
**Option = {pos, integer()} | {numCols, integer()} | {updateLabels, boolean()}**

See **external documentation**.

```
deleteRows(This) -> boolean()
```

Types:

**This = *wxGrid()***

Equivalent to *deleteRows(This, [])*.

```
deleteRows(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxGrid()***

**Option = {pos, integer()} | {numRows, integer()} | {updateLabels, boolean()}**

See **external documentation**.

`disableCellEditControl(This) -> ok`

Types:

**This = *wxGrid()***

See **external documentation**.

`disableDragColSize(This) -> ok`

Types:

**This = *wxGrid()***

See **external documentation**.

`disableDragGridSize(This) -> ok`

Types:

**This = *wxGrid()***

See **external documentation**.

`disableDragRowSize(This) -> ok`

Types:

**This = *wxGrid()***

See **external documentation**.

`enableCellEditControl(This) -> ok`

Types:

**This = *wxGrid()***

Equivalent to *enableCellEditControl(This, [])*.

`enableCellEditControl(This, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***

**Option = {enable, boolean()}**

See **external documentation**.

`enableDragColSize(This) -> ok`

Types:

**This = *wxGrid()***

Equivalent to *enableDragColSize(This, [])*.

`enableDragColSize(This, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***

**Option = {enable, boolean()}**

See **external documentation**.

`enableDragGridSize(This) -> ok`

Types:

**This = *wxGrid()***

Equivalent to *enableDragGridSize(This, [])*.

`enableDragGridSize(This, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***

**Option = {enable, boolean()}**

See **external documentation**.

`enableDragRowSize(This) -> ok`

Types:

**This = *wxGrid()***

Equivalent to *enableDragRowSize(This, [])*.

`enableDragRowSize(This, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***

**Option = {enable, boolean()}**

See **external documentation**.

`enableEditing(This, Edit) -> ok`

Types:

**This = *wxGrid()***

**Edit = boolean()**

See **external documentation**.

`enableGridLines(This) -> ok`

Types:

**This = *wxGrid()***

Equivalent to *enableGridLines(This, [])*.

`enableGridLines(This, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***

**Option = {enable, boolean()}**

See **external documentation**.

```
endBatch(This) -> ok
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
fit(This) -> ok
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
forceRefresh(This) -> ok
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getBatchCount(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getCellAlignment(This, Row, Col) -> {Horiz::integer(), Vert::integer()}
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

```
getCellBackgroundColour(This, Row, Col) -> wx:wx_colour4()
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

```
getCellEditor(This, Row, Col) -> wxGridCellEditor:wxGridCellEditor()
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

```
getCellFont(This, Row, Col) -> wxFont:wxFont()
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

`getCellRenderer(This, Row, Col) -> wxGridCellRenderer:wxGridCellRenderer()`

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

`getCellTextColour(This, Row, Col) -> wx:wx_colour4()`

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

`getCellValue(This, Coords) -> unicode:charlist()`

Types:

**This = *wxGrid()***
**Coords = {R::integer(), C::integer()}**

See **external documentation**.

`getCellValue(This, Row, Col) -> unicode:charlist()`

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

`getColLabelAlignment(This) -> {Horiz::integer(), Vert::integer()}`

Types:

**This = *wxGrid()***

See **external documentation**.

`getColLabelSize(This) -> integer()`

Types:

**This = *wxGrid()***

See **external documentation**.

```
getColLabelValue(This, Col) -> unicode:charlist()
```

Types:

**This = *wxGrid()***

**Col = integer()**

See **external documentation**.

```
getColMinimalAcceptableWidth(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getDefaultCellAlignment(This) -> {Horiz::integer(), Vert::integer()}
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getDefaultCellBackgroundColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getDefaultCellFont(This) -> wxFont:wxFont()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getDefaultCellTextColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getDefaultColLabelSize(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getDefaultColSize(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getDefaultEditor(This) -> wxGridCellEditor:wxGridCellEditor()
```

Types:

**This = *wxGrid()***

See **external documentation**.

`getDefaultEditorForCell(This, C) -> wxGridCellEditor:wxGridCellEditor()`

Types:

**This = *wxGrid()***

**C = {R::integer(), C::integer()}**

See **external documentation**.

`getDefaultEditorForCell(This, Row, Col) -> wxGridCellEditor:wxGridCellEditor()`

Types:

**This = *wxGrid()***

**Row = integer()**

**Col = integer()**

See **external documentation**.

`getDefaultEditorForType(This, TypeName) -> wxGridCellEditor:wxGridCellEditor()`

Types:

**This = *wxGrid()***

**TypeName = *unicode:chardata()***

See **external documentation**.

`getDefaultRenderer(This) -> wxGridCellRenderer:wxGridCellRenderer()`

Types:

**This = *wxGrid()***

See **external documentation**.

`getDefaultRendererForCell(This, Row, Col) -> wxGridCellRenderer:wxGridCellRenderer()`

Types:

**This = *wxGrid()***

**Row = integer()**

**Col = integer()**

See **external documentation**.

`getDefaultRendererForType(This, TypeName) -> wxGridCellRenderer:wxGridCellRenderer()`

Types:

**This = *wxGrid()***

**TypeName = *unicode:chardata()***

See **external documentation**.

```
getDefaultRowLabelSize(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getDefaultRowSize(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getGridCursorCol(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getGridCursorRow(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getGridLineColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
gridLinesEnabled(This) -> boolean()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getLabelBackgroundColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getLabelFont(This) -> wxFont:wxFont()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getLabelTextColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getNumberCols(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getNumberRows(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getOrCreateCellAttr(This, Row, Col) -> wxGridCellAttr:wxGridCellAttr()
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

```
getRowMinimalAcceptableHeight(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getRowLabelAlignment(This) -> {Horiz::integer(), Vert::integer()}
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getRowLabelSize(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getRowLabelValue(This, Row) -> unicode:charlist()
```

Types:

**This = *wxGrid()***
**Row = integer()**

See **external documentation**.

```
getRowSize(This, Row) -> integer()
```

Types:

**This = *wxGrid()***

**Row = integer()**

See **external documentation**.

```
getScrollLineX(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getScrollLineY(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getSelectedCells(This) -> [{R::integer(), C::integer()}]
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getSelectedCols(This) -> [integer()]
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getSelectedRows(This) -> [integer()]
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getSelectionBackground(This) -> wx:wx_colour4()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getSelectionBlockTopLeft(This) -> [{R::integer(), C::integer()}]
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getSelectionBlockBottomRight(This) -> [{R::integer(), C::integer()}]
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getSelectionForeground(This) -> wx:wx_colour4()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getViewWidth(This) -> integer()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getGridWindow(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getGridRowLabelWindow(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getGridColLabelWindow(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
getGridCornerLabelWindow(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
hideCellEditControl(This) -> ok
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
insertCols(This) -> boolean()
```

Types:

**This = *wxGrid()***

Equivalent to *insertCols(This, [])*.

```
insertCols(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxGrid()***

**Option = {pos, integer()} | {numCols, integer()} | {updateLabels, boolean()}**

See **external documentation**.

`insertRows(This) -> boolean()`

Types:

**This = *wxGrid()***

Equivalent to *insertRows(This, [])*.

`insertRows(This, Options::[Option]) -> boolean()`

Types:

**This = *wxGrid()***

**Option = {pos, integer()} | {numRows, integer()} | {updateLabels, boolean()}**

See **external documentation**.

`isCellEditControlEnabled(This) -> boolean()`

Types:

**This = *wxGrid()***

See **external documentation**.

`isCurrentCellReadOnly(This) -> boolean()`

Types:

**This = *wxGrid()***

See **external documentation**.

`isEditable(This) -> boolean()`

Types:

**This = *wxGrid()***

See **external documentation**.

`isInSelection(This, Coords) -> boolean()`

Types:

**This = *wxGrid()***

**Coords = {R::integer(), C::integer()}**

See **external documentation**.

`isInSelection(This, Row, Col) -> boolean()`

Types:

**This = *wxGrid()***

**Row = integer()**

**Col = integer()**

See **external documentation**.

```
isReadOnly(This, Row, Col) -> boolean()
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

```
isSelection(This) -> boolean()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
isVisible(This, Coords) -> boolean()
```

Types:

**This = *wxGrid()***
**Coords = {R::integer(), C::integer()}**

Equivalent to *isVisible(This, Coords, [])*.

```
isVisible(This, Row, Col) -> boolean()
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.
Also:
isVisible(This, Coords, [Option]) -> boolean() when
This::wxGrid(), Coords::{R::integer(), C::integer()},
Option :: {'wholeCellVisible', boolean()}.

```
isVisible(This, Row, Col, Options::[Option]) -> boolean()
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**
**Option = {wholeCellVisible, boolean()}**

See **external documentation**.

```
makeCellVisible(This, Coords) -> ok
```

Types:

**This = *wxGrid()***
**Coords = {R::integer(), C::integer()}**

See **external documentation**.

```
makeCellVisible(This, Row, Col) -> ok
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

See **external documentation**.

```
moveCursorDown(This, ExpandSelection) -> boolean()
```

Types:

**This = *wxGrid()***
**ExpandSelection = boolean()**

See **external documentation**.

```
moveCursorLeft(This, ExpandSelection) -> boolean()
```

Types:

**This = *wxGrid()***
**ExpandSelection = boolean()**

See **external documentation**.

```
moveCursorRight(This, ExpandSelection) -> boolean()
```

Types:

**This = *wxGrid()***
**ExpandSelection = boolean()**

See **external documentation**.

```
moveCursorUp(This, ExpandSelection) -> boolean()
```

Types:

**This = *wxGrid()***
**ExpandSelection = boolean()**

See **external documentation**.

```
moveCursorDownBlock(This, ExpandSelection) -> boolean()
```

Types:

**This = *wxGrid()***
**ExpandSelection = boolean()**

See **external documentation**.

```
moveCursorLeftBlock(This, ExpandSelection) -> boolean()
```

Types:

**This = *wxGrid()***
**ExpandSelection = boolean()**

See **external documentation**.

```
moveCursorRightBlock(This, ExpandSelection) -> boolean()
```

Types:

**This = *wxGrid()***
**ExpandSelection = boolean()**

See **external documentation**.

```
moveCursorUpBlock(This, ExpandSelection) -> boolean()
```

Types:

**This = *wxGrid()***
**ExpandSelection = boolean()**

See **external documentation**.

```
movePageDown(This) -> boolean()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
movePageUp(This) -> boolean()
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
registerDataType(This, TypeName, Renderer, Editor) -> ok
```

Types:

**This = *wxGrid()***
**TypeName = *unicode:chardata()***
**Renderer = *wxGridCellRenderer:wxGridCellRenderer()***
**Editor = *wxGridCellEditor:wxGridCellEditor()***

See **external documentation**.

```
saveEditControlValue(This) -> ok
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
selectAll(This) -> ok
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
selectBlock(This, TopLeft, BottomRight) -> ok
```

Types:

**This = *wxGrid()***

**TopLeft = {R::integer(), C::integer()}**
**BottomRight = {R::integer(), C::integer()}**

Equivalent to *selectBlock(This, TopLeft, BottomRight, [])*.

`selectBlock(This, TopLeft, BottomRight, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***
**TopLeft = {R::integer(), C::integer()}**
**BottomRight = {R::integer(), C::integer()}**
**Option = {addToSelected, boolean()}**

See **external documentation**.

`selectBlock(This, TopRow, LeftCol, BottomRow, RightCol) -> ok`

Types:

**This = *wxGrid()***
**TopRow = integer()**
**LeftCol = integer()**
**BottomRow = integer()**
**RightCol = integer()**

Equivalent to *selectBlock(This, TopRow, LeftCol, BottomRow, RightCol, [])*.

`selectBlock(This, TopRow, LeftCol, BottomRow, RightCol, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***
**TopRow = integer()**
**LeftCol = integer()**
**BottomRow = integer()**
**RightCol = integer()**
**Option = {addToSelected, boolean()}**

See **external documentation**.

`selectCol(This, Col) -> ok`

Types:

**This = *wxGrid()***
**Col = integer()**

Equivalent to *selectCol(This, Col, [])*.

`selectCol(This, Col, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***
**Col = integer()**
**Option = {addToSelected, boolean()}**

See **external documentation**.

`selectRow(This, Row) -> ok`

Types:

**This = *wxGrid()***
**Row = integer()**

Equivalent to *selectRow(This, Row, [])*.

`selectRow(This, Row, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***
**Row = integer()**
**Option = {addToSelected, boolean()}**

See **external documentation**.

`setCellAlignment(This, Align) -> ok`

Types:

**This = *wxGrid()***
**Align = integer()**

See **external documentation**.

`setCellAlignment(This, Align, Row, Col) -> ok`

Types:

**This = *wxGrid()***
**Align = integer()**
**Row = integer()**
**Col = integer()**

See **external documentation**.

`setCellAlignment(This, Row, Col, Horiz, Vert) -> ok`

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**
**Horiz = integer()**
**Vert = integer()**

See **external documentation**.

`setCellBackgroundColour(This, Col) -> ok`

Types:

**This = *wxGrid()***
**Col = *wx:wx_colour()***

See **external documentation**.

`setCellBackgroundColour(This, Row, Col, Val) -> ok`

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**
**Val = *wx:wx_colour()***

See **external documentation**.
Also:
setCellBackgroundColour(This, Colour, Row, Col) -> 'ok' when
This::wxGrid(), Colour::wx:wx_colour(), Row::integer(), Col::integer().

`setCellEditor(This, Row, Col, Editor) -> ok`

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**
**Editor = *wxGridCellEditor:wxGridCellEditor()***

See **external documentation**.

`setCellFont(This, Row, Col, Val) -> ok`

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**
**Val = *wxFont:wxFont()***

See **external documentation**.

`setCellRenderer(This, Row, Col, Renderer) -> ok`

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**
**Renderer = *wxGridCellRenderer:wxGridCellRenderer()***

See **external documentation**.

`setCellTextColour(This, Col) -> ok`

Types:

**This = *wxGrid()***
**Col = *wx:wx_colour()***

See **external documentation**.

`setCellTextColour(This, Row, Col, Val) -> ok`

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**
**Val = *wx:wx_colour()***

See **external documentation**.
Also:
setCellTextColour(This, Val, Row, Col) -> 'ok' when
This::wxGrid(), Val::wx:wx_colour(), Row::integer(), Col::integer().

`setCellValue(This, Coords, S) -> ok`

Types:

**This = *wxGrid()***
**Coords = {R::integer(), C::integer()}**
**S = *unicode:chardata()***

See **external documentation**.

`setCellValue(This, Row, Col, S) -> ok`

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**
**S = *unicode:chardata()***

See **external documentation**.
Also:
setCellValue(This, Val, Row, Col) -> 'ok' when
This::wxGrid(), Val::unicode:chardata(), Row::integer(), Col::integer().

`setColAttr(This, Col, Attr) -> ok`

Types:

**This = *wxGrid()***
**Col = integer()**
**Attr = *wxGridCellAttr:wxGridCellAttr()***

See **external documentation**.

`setColFormatBool(This, Col) -> ok`

Types:

**This = *wxGrid()***
**Col = integer()**

See **external documentation**.

`setColFormatNumber(This, Col) -> ok`

Types:

**This = *wxGrid()***
**Col = integer()**

See **external documentation**.

`setColFormatFloat(This, Col) -> ok`

Types:

**This = *wxGrid()***
**Col = integer()**

Equivalent to *setColFormatFloat(This, Col, [])*.

`setColFormatFloat(This, Col, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***
**Col = integer()**
**Option = {width, integer()} | {precision, integer()}**

See **external documentation**.

`setColFormatCustom(This, Col, TypeName) -> ok`

Types:

**This = *wxGrid()***
**Col = integer()**
**TypeName = *unicode:chardata()***

See **external documentation**.

`setColLabelAlignment(This, Horiz, Vert) -> ok`

Types:

**This = *wxGrid()***
**Horiz = integer()**
**Vert = integer()**

See **external documentation**.

`setColLabelSize(This, Height) -> ok`

Types:

**This = *wxGrid()***
**Height = integer()**

See **external documentation**.

`setColLabelValue(This, Col, Val) -> ok`

Types:

**This = *wxGrid()***
**Col = integer()**
**Val = *unicode:chardata()***

See **external documentation**.

```
setColMinimalWidth(This, Col, Width) -> ok
```

Types:

**This = *wxGrid()***
**Col = integer()**
**Width = integer()**

See **external documentation**.

```
setColMinimalAcceptableWidth(This, Width) -> ok
```

Types:

**This = *wxGrid()***
**Width = integer()**

See **external documentation**.

```
setColSize(This, Col, Width) -> ok
```

Types:

**This = *wxGrid()***
**Col = integer()**
**Width = integer()**

See **external documentation**.

```
setDefaultCellAlignment(This, Horiz, Vert) -> ok
```

Types:

**This = *wxGrid()***
**Horiz = integer()**
**Vert = integer()**

See **external documentation**.

```
setDefaultCellBackgroundColour(This, Val) -> ok
```

Types:

**This = *wxGrid()***
**Val = *wx:wx_colour()***

See **external documentation**.

```
setDefaultCellFont(This, Val) -> ok
```

Types:

**This = *wxGrid()***
**Val = *wxFont:wxFont()***

See **external documentation**.

```
setDefaultCellTextColour(This, Val) -> ok
```

Types:

**This = *wxGrid()***
**Val = *wx:wx_colour()***

See **external documentation**.

`setDefaultEditor(This, Editor) -> ok`

Types:

**This = *wxGrid()***
**Editor = *wxGridCellEditor:wxGridCellEditor()***

See **external documentation**.

`setDefaultRenderer(This, Renderer) -> ok`

Types:

**This = *wxGrid()***
**Renderer = *wxGridCellRenderer:wxGridCellRenderer()***

See **external documentation**.

`setDefaultColSize(This, Width) -> ok`

Types:

**This = *wxGrid()***
**Width = integer()**

Equivalent to *setDefaultColSize(This, Width, [])*.

`setDefaultColSize(This, Width, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***
**Width = integer()**
**Option = {resizeExistingCols, boolean()}**

See **external documentation**.

`setDefaultRowSize(This, Height) -> ok`

Types:

**This = *wxGrid()***
**Height = integer()**

Equivalent to *setDefaultRowSize(This, Height, [])*.

`setDefaultRowSize(This, Height, Options::[Option]) -> ok`

Types:

**This = *wxGrid()***
**Height = integer()**
**Option = {resizeExistingRows, boolean()}**

See **external documentation**.

`setGridCursor(This, Row, Col) -> ok`

Types:

**This = *wxGrid()***

**Row = integer()**
**Col = integer()**

See **external documentation**.

`setGridLineColour(This, Val) -> ok`

Types:

**This = *wxGrid()***
**Val = *wx:wx_colour()***

See **external documentation**.

`setLabelBackgroundColour(This, Val) -> ok`

Types:

**This = *wxGrid()***
**Val = *wx:wx_colour()***

See **external documentation**.

`setLabelFont(This, Val) -> ok`

Types:

**This = *wxGrid()***
**Val = *wxFont:wxFont()***

See **external documentation**.

`setLabelTextColour(This, Val) -> ok`

Types:

**This = *wxGrid()***
**Val = *wx:wx_colour()***

See **external documentation**.

`setMargins(This, ExtraWidth, ExtraHeight) -> ok`

Types:

**This = *wxGrid()***
**ExtraWidth = integer()**
**ExtraHeight = integer()**

See **external documentation**.

`setReadOnly(This, Row, Col) -> ok`

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**

Equivalent to *setReadOnly(This, Row, Col, [])*.

```
setReadOnly(This, Row, Col, Options::[Option]) -> ok
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Col = integer()**
**Option = {isReadOnly, boolean()}**

See **external documentation**.

```
setRowAttr(This, Row, Attr) -> ok
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Attr = *wxGridCellAttr:wxGridCellAttr()***

See **external documentation**.

```
setRowLabelAlignment(This, Horiz, Vert) -> ok
```

Types:

**This = *wxGrid()***
**Horiz = integer()**
**Vert = integer()**

See **external documentation**.

```
setRowLabelSize(This, Width) -> ok
```

Types:

**This = *wxGrid()***
**Width = integer()**

See **external documentation**.

```
setRowLabelValue(This, Row, Val) -> ok
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Val = *unicode:chardata()***

See **external documentation**.

```
setRowMinimalHeight(This, Row, Width) -> ok
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Width = integer()**

See **external documentation**.

```
setRowMinimalAcceptableHeight(This, Width) -> ok
```

Types:

**This = *wxGrid()***
**Width = integer()**

See **external documentation**.

```
setRowSize(This, Row, Height) -> ok
```

Types:

**This = *wxGrid()***
**Row = integer()**
**Height = integer()**

See **external documentation**.

```
setScrollLineX(This, X) -> ok
```

Types:

**This = *wxGrid()***
**X = integer()**

See **external documentation**.

```
setScrollLineY(This, Y) -> ok
```

Types:

**This = *wxGrid()***
**Y = integer()**

See **external documentation**.

```
setSelectionBackground(This, C) -> ok
```

Types:

**This = *wxGrid()***
**C = *wx:wx_colour()***

See **external documentation**.

```
setSelectionForeground(This, C) -> ok
```

Types:

**This = *wxGrid()***
**C = *wx:wx_colour()***

See **external documentation**.

```
setSelectionMode(This, Selmode) -> ok
```

Types:

**This = *wxGrid()***
**Selmode = *wx:wx_enum()***

See **external documentation**.
Selmode = ?wxGrid_wxGridSelectCells | ?wxGrid_wxGridSelectRows | ?wxGrid_wxGridSelectColumns

```
showCellEditControl(This) -> ok
```

Types:

**This = *wxGrid()***

See **external documentation**.

```
xToCol(This, X) -> integer()
```

Types:

**This = *wxGrid()***

**X = integer()**

Equivalent to *xToCol(This, X, [])*.

```
xToCol(This, X, Options::[Option]) -> integer()
```

Types:

**This = *wxGrid()***

**X = integer()**

**Option = {clipToMinMax, boolean()}**

See **external documentation**.

```
xToEdgeOfCol(This, X) -> integer()
```

Types:

**This = *wxGrid()***

**X = integer()**

See **external documentation**.

```
yToEdgeOfRow(This, Y) -> integer()
```

Types:

**This = *wxGrid()***

**Y = integer()**

See **external documentation**.

```
yToRow(This, Y) -> integer()
```

Types:

**This = *wxGrid()***

**Y = integer()**

See **external documentation**.

```
destroy(This::wxGrid()) -> ok
```

Destroys this object, do not use object again

# wxGridEvent

Erlang module

See external documentation: **wxGridEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**grid_cell_left_click**, **grid_cell_right_click**, **grid_cell_left_dclick**, **grid_cell_right_dclick**, **grid_label_left_click**, **grid_label_right_click**, **grid_label_left_dclick**, **grid_label_right_dclick**, **grid_row_size**, **grid_col_size**, **grid_range_select**, **grid_cell_change**, **grid_select_cell**, **grid_editor_shown**, **grid_editor_hidden**, **grid_editor_created**, **grid_cell_begin_drag**

See also the message variant *#wxGrid{}* event record type.

This class is derived (and can use functions) from:
*wxNotifyEvent*
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxGridEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
altDown(This) -> boolean()
```

Types:

**This = *wxGridEvent()***

See **external documentation**.

```
controlDown(This) -> boolean()
```

Types:

**This = *wxGridEvent()***

See **external documentation**.

```
getCol(This) -> integer()
```

Types:

**This = *wxGridEvent()***

See **external documentation**.

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxGridEvent()***

See **external documentation**.

```
getRow(This) -> integer()
```

Types:

**This = *wxGridEvent()***

See **external documentation**.

```
metaDown(This) -> boolean()
```

Types:

**This = *wxGridEvent()***

See **external documentation**.

```
selecting(This) -> boolean()
```

Types:

**This = *wxGridEvent()***

See **external documentation**.

```
shiftDown(This) -> boolean()
```

Types:

**This = *wxGridEvent()***

See **external documentation**.

# wxGridSizer

Erlang module

See external documentation: **wxGridSizer**.

This class is derived (and can use functions) from:
*wxSizer*

## DATA TYPES

wxGridSizer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Cols) -> wxGridSizer()
```

Types:

**Cols = integer()**

Equivalent to *new(Cols, [])*.

```
new(Cols, Options::[Option]) -> wxGridSizer()
```

Types:

**Cols = integer()**
**Option = {vgap, integer()} | {hgap, integer()}**

See **external documentation**.

```
new(Rows, Cols, Vgap, Hgap) -> wxGridSizer()
```

Types:

**Rows = integer()**
**Cols = integer()**
**Vgap = integer()**
**Hgap = integer()**

See **external documentation**.

```
getCols(This) -> integer()
```

Types:

**This = *wxGridSizer()***

See **external documentation**.

```
getHGap(This) -> integer()
```

Types:

**This = *wxGridSizer()***

See **external documentation**.

```
getRows(This) -> integer()
```

Types:

**This = *wxGridSizer()***

See **external documentation**.

```
getVGap(This) -> integer()
```

Types:

**This = *wxGridSizer()***

See **external documentation**.

```
setCols(This, Cols) -> ok
```

Types:

**This = *wxGridSizer()***

**Cols = integer()**

See **external documentation**.

```
setHGap(This, Gap) -> ok
```

Types:

**This = *wxGridSizer()***

**Gap = integer()**

See **external documentation**.

```
setRows(This, Rows) -> ok
```

Types:

**This = *wxGridSizer()***

**Rows = integer()**

See **external documentation**.

```
setVGap(This, Gap) -> ok
```

Types:

**This = *wxGridSizer()***

**Gap = integer()**

See **external documentation**.

```
destroy(This::wxGridSizer()) -> ok
```

Destroys this object, do not use object again

# wxHelpEvent

Erlang module

See external documentation: **wxHelpEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**help**, **detailed_help**

See also the message variant *#wxHelp{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxHelpEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getOrigin(This) -> wx:wx_enum()
```

Types:

**This = *wxHelpEvent()***

See **external documentation**.
Res = ?wxHelpEvent_Origin_Unknown | ?wxHelpEvent_Origin_Keyboard | ?wxHelpEvent_Origin_HelpButton

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxHelpEvent()***

See **external documentation**.

```
setOrigin(This, Origin) -> ok
```

Types:

**This = *wxHelpEvent()***
**Origin = *wx:wx_enum()***

See **external documentation**.
Origin = ?wxHelpEvent_Origin_Unknown | ?wxHelpEvent_Origin_Keyboard | ?wxHelpEvent_Origin_HelpButton

```
setPosition(This, Pos) -> ok
```

Types:

**This = *wxHelpEvent()***
**Pos = {X::integer(), Y::integer()}**

See **external documentation**.

# wxHtmlEasyPrinting

Erlang module

See external documentation: **wxHtmlEasyPrinting**.

## DATA TYPES

wxHtmlEasyPrinting()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxHtmlEasyPrinting()
```

Equivalent to *new([])*.

```
new(Options::[Option]) -> wxHtmlEasyPrinting()
```

Types:

**Option = {name, *unicode:chardata()*} | {parentWindow, *wxWindow:wxWindow()*}**

See **external documentation**.

```
getPrintData(This) -> wxPrintData:wxPrintData()
```

Types:

**This = *wxHtmlEasyPrinting()***

See **external documentation**.

```
getPageSetupData(This) -> wxPageSetupDialogData:wxPageSetupDialogData()
```

Types:

**This = *wxHtmlEasyPrinting()***

See **external documentation**.

```
previewFile(This, Htmlfile) -> boolean()
```

Types:

**This = *wxHtmlEasyPrinting()***
**Htmlfile = *unicode:chardata()***

See **external documentation**.

```
previewText(This, Htmltext) -> boolean()
```

Types:

**This = *wxHtmlEasyPrinting()***
**Htmltext = *unicode:chardata()***

Equivalent to *previewText(This, Htmltext, [])*.

```
previewText(This, Htmltext, Options::[Option]) -> boolean()
```

Types:

**This = *wxHtmlEasyPrinting()***
**Htmltext = *unicode:chardata()***
**Option = {basepath, *unicode:chardata()*}**

See **external documentation**.

```
printFile(This, Htmlfile) -> boolean()
```

Types:

**This = *wxHtmlEasyPrinting()***
**Htmlfile = *unicode:chardata()***

See **external documentation**.

```
printText(This, Htmltext) -> boolean()
```

Types:

**This = *wxHtmlEasyPrinting()***
**Htmltext = *unicode:chardata()***

Equivalent to *printText(This, Htmltext, [])*.

```
printText(This, Htmltext, Options::[Option]) -> boolean()
```

Types:

**This = *wxHtmlEasyPrinting()***
**Htmltext = *unicode:chardata()***
**Option = {basepath, *unicode:chardata()*}**

See **external documentation**.

```
pageSetup(This) -> ok
```

Types:

**This = *wxHtmlEasyPrinting()***

See **external documentation**.

```
setFonts(This, Normal_face, Fixed_face) -> ok
```

Types:

**This = *wxHtmlEasyPrinting()***
**Normal_face = *unicode:chardata()***
**Fixed_face = *unicode:chardata()***

Equivalent to *setFonts(This, Normal_face, Fixed_face, [])*.

```
setFonts(This, Normal_face, Fixed_face, Options::[Option]) -> ok
```

Types:

**This = *wxHtmlEasyPrinting()***
**Normal_face = *unicode:chardata()***
**Fixed_face = *unicode:chardata()***

**Option = {sizes, [integer()]}**

See **external documentation**.

`setHeader(This, Header) -> ok`

Types:

**This = *wxHtmlEasyPrinting()***
**Header = *unicode:chardata()***

Equivalent to *setHeader(This, Header, [])*.

`setHeader(This, Header, Options::[Option]) -> ok`

Types:

**This = *wxHtmlEasyPrinting()***
**Header = *unicode:chardata()***
**Option = {pg, integer()}**

See **external documentation**.

`setFooter(This, Footer) -> ok`

Types:

**This = *wxHtmlEasyPrinting()***
**Footer = *unicode:chardata()***

Equivalent to *setFooter(This, Footer, [])*.

`setFooter(This, Footer, Options::[Option]) -> ok`

Types:

**This = *wxHtmlEasyPrinting()***
**Footer = *unicode:chardata()***
**Option = {pg, integer()}**

See **external documentation**.

`destroy(This::wxHtmlEasyPrinting()) -> ok`

Destroys this object, do not use object again

# wxHtmlLinkEvent

Erlang module

See external documentation: **wxHtmlLinkEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_html_link_clicked**

See also the message variant *#wxHtmlLink{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxHtmlLinkEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getLinkInfo(This) -> wx:wx_wxHtmlLinkInfo()
```

Types:

**This = *wxHtmlLinkEvent()***

See **external documentation**.

# wxHtmlWindow

Erlang module

See external documentation: **wxHtmlWindow**.

This class is derived (and can use functions) from:
*wxScrolledWindow*
*wxPanel*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxHtmlWindow()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxHtmlWindow()
```

See **external documentation**.

```
new(Parent) -> wxHtmlWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxHtmlWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
appendToPage(This, Source) -> boolean()
```

Types:

**This = *wxHtmlWindow()***

**Source = *unicode:chardata()***

See **external documentation**.

```
getOpenedAnchor(This) -> unicode:charlist()
```

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

```
getOpenedPage(This) -> unicode:charlist()
```

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

```
getOpenedPageTitle(This) -> unicode:charlist()
```

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

```
getRelatedFrame(This) -> wxFrame:wxFrame()
```

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

```
historyBack(This) -> boolean()
```

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

```
historyCanBack(This) -> boolean()
```

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

```
historyCanForward(This) -> boolean()
```

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

```
historyClear(This) -> ok
```

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

```
historyForward(This) -> boolean()
```

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

```
loadFile(This, Filename) -> boolean()
```

Types:

**This = *wxHtmlWindow()***

**Filename = *unicode:chardata()***

See **external documentation**.

`loadPage(This, Location) -> boolean()`

Types:

**This = *wxHtmlWindow()***

**Location = *unicode:chardata()***

See **external documentation**.

`selectAll(This) -> ok`

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

`selectionToText(This) -> unicode:charlist()`

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

`selectLine(This, Pos) -> ok`

Types:

**This = *wxHtmlWindow()***

**Pos = {X::integer(), Y::integer()}**

See **external documentation**.

`selectWord(This, Pos) -> ok`

Types:

**This = *wxHtmlWindow()***

**Pos = {X::integer(), Y::integer()}**

See **external documentation**.

`setBorders(This, B) -> ok`

Types:

**This = *wxHtmlWindow()***

**B = integer()**

See **external documentation**.

`setFonts(This, Normal_face, Fixed_face) -> ok`

Types:

**This = *wxHtmlWindow()***

**Normal_face = *unicode:chardata()***

**Fixed_face = *unicode:chardata()***

Equivalent to *setFonts(This, Normal_face, Fixed_face, [])*.

```
setFonts(This, Normal_face, Fixed_face, Options::[Option]) -> ok
```

Types:

**This = *wxHtmlWindow()***
**Normal_face = *unicode:chardata()***
**Fixed_face = *unicode:chardata()***
**Option = {sizes, integer()}**

See **external documentation**.

```
setPage(This, Source) -> boolean()
```

Types:

**This = *wxHtmlWindow()***
**Source = *unicode:chardata()***

See **external documentation**.

```
setRelatedFrame(This, Frame, Format) -> ok
```

Types:

**This = *wxHtmlWindow()***
**Frame = *wxFrame:wxFrame()***
**Format = *unicode:chardata()***

See **external documentation**.

```
setRelatedStatusBar(This, Bar) -> ok
```

Types:

**This = *wxHtmlWindow()***
**Bar = integer()**

See **external documentation**.

```
toText(This) -> unicode:charlist()
```

Types:

**This = *wxHtmlWindow()***

See **external documentation**.

```
destroy(This::wxHtmlWindow()) -> ok
```

Destroys this object, do not use object again

# wxIconBundle

Erlang module

See external documentation: **wxIconBundle**.

## DATA TYPES

wxIconBundle()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxIconBundle()`

See **external documentation**.

`new(Ic) -> wxIconBundle()`

Types:

**Ic = *wxIconBundle()* | *wxIcon:wxIcon()***

See **external documentation**.

`new(File, Type) -> wxIconBundle()`

Types:

**File = *unicode:chardata()***
**Type = integer()**

See **external documentation**.

`addIcon(This, Icon) -> ok`

Types:

**This = *wxIconBundle()***
**Icon = *wxIcon:wxIcon()***

See **external documentation**.

`addIcon(This, File, Type) -> ok`

Types:

**This = *wxIconBundle()***
**File = *unicode:chardata()***
**Type = integer()**

See **external documentation**.

`getIcon(This) -> wxIcon:wxIcon()`

Types:

**This = *wxIconBundle()***

Equivalent to *getIcon(This, [])*.

```
getIcon(This, Options::[Option]) -> wxIcon:wxIcon()
```

Types:

**This = *wxIconBundle()***

**Option = {size, integer()}**

See **external documentation**.
Also:
getIcon(This, Size) -> wxIcon:wxIcon() when
This::wxIconBundle(), Size::{W::integer(), H::integer()}.

```
destroy(This::wxIconBundle()) -> ok
```

Destroys this object, do not use object again

# wxIcon

Erlang module

See external documentation: **wxIcon**.

This class is derived (and can use functions) from:
*wxBitmap*

## DATA TYPES

wxIcon()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxIcon()`

See **external documentation**.

`new(Filename) -> wxIcon()`

Types:

**`Filename = unicode:chardata()`**

See **external documentation**.
Also:
new(Loc) -> wxIcon() when
Loc::wx:wx_object().

Type = ?wxBITMAP_TYPE_INVALID | ?wxBITMAP_TYPE_BMP | ?wxBITMAP_TYPE_BMP_RESOURCE | ?wxBITMAP_TYPE_RESOURCE | ?wxBITMAP_TYPE_ICO | ?wxBITMAP_TYPE_ICO_RESOURCE | ?wxBITMAP_TYPE_CUR | ?wxBITMAP_TYPE_CUR_RESOURCE | ?wxBITMAP_TYPE_XBM | ?wxBITMAP_TYPE_XBM_DATA | ?wxBITMAP_TYPE_XPM | ?wxBITMAP_TYPE_XPM_DATA | ?wxBITMAP_TYPE_TIF | ?wxBITMAP_TYPE_TIF_RESOURCE | ?wxBITMAP_TYPE_GIF | ?wxBITMAP_TYPE_GIF_RESOURCE | ?wxBITMAP_TYPE_PNG | ?wxBITMAP_TYPE_PNG_RESOURCE | ?wxBITMAP_TYPE_JPEG | ?wxBITMAP_TYPE_JPEG_RESOURCE | ?wxBITMAP_TYPE_PNM | ?wxBITMAP_TYPE_PNM_RESOURCE | ?wxBITMAP_TYPE_PCX | ?wxBITMAP_TYPE_PCX_RESOURCE | ?wxBITMAP_TYPE_PICT | ?wxBITMAP_TYPE_PICT_RESOURCE | ?wxBITMAP_TYPE_ICON | ?wxBITMAP_TYPE_ICON_RESOURCE | ?wxBITMAP_TYPE_ANI | ?wxBITMAP_TYPE_IFF | ?wxBITMAP_TYPE_TGA | ?wxBITMAP_TYPE_MACCURSOR | ?wxBITMAP_TYPE_MACCURSOR_RESOURCE | ?wxBITMAP_TYPE_ANY

`new(Filename, Options::[Option]) -> wxIcon()`

Types:

**`Filename = unicode:chardata()`**

**`Option = {type, wx:wx_enum()} | {desiredWidth, integer()} | {desiredHeight, integer()}`**

See **external documentation**.

Type = ?wxBITMAP_TYPE_INVALID | ?wxBITMAP_TYPE_BMP | ?wxBITMAP_TYPE_BMP_RESOURCE | ?wxBITMAP_TYPE_RESOURCE | ?wxBITMAP_TYPE_ICO | ?wxBITMAP_TYPE_ICO_RESOURCE | ?wxBITMAP_TYPE_CUR | ?wxBITMAP_TYPE_CUR_RESOURCE | ?wxBITMAP_TYPE_XBM | ?wxBITMAP_TYPE_XBM_DATA | ?wxBITMAP_TYPE_XPM | ?wxBITMAP_TYPE_XPM_DATA | ?wxBITMAP_TYPE_TIF | ?wxBITMAP_TYPE_TIF_RESOURCE | ?wxBITMAP_TYPE_GIF | ?wxBITMAP_TYPE_GIF_RESOURCE | ?wxBITMAP_TYPE_PNG | ?wxBITMAP_TYPE_PNG_RESOURCE | ?wxBITMAP_TYPE_JPEG | ?wxBITMAP_TYPE_JPEG_RESOURCE | ?wxBITMAP_TYPE_PNM | ?wxBITMAP_TYPE_PNM_RESOURCE | ?wxBITMAP_TYPE_PCX | ?wxBITMAP_TYPE_PCX_RESOURCE | ?wxBITMAP_TYPE_PICT | ?wxBITMAP_TYPE_PICT_RESOURCE | ?wxBITMAP_TYPE_ICON | ?wxBITMAP_TYPE_ICON_RESOURCE | ?wxBITMAP_TYPE_ANI | ?wxBITMAP_TYPE_IFF | ?wxBITMAP_TYPE_TGA | ?wxBITMAP_TYPE_MACCURSOR | ?wxBITMAP_TYPE_MACCURSOR_RESOURCE | ?wxBITMAP_TYPE_ANY

```
copyFromBitmap(This, Bmp) -> ok
```

Types:

**This = *wxIcon()***

**Bmp = *wxBitmap:wxBitmap()***

See **external documentation**.

```
destroy(This::wxIcon()) -> ok
```

Destroys this object, do not use object again

# wxIconizeEvent

Erlang module

See external documentation: **wxIconizeEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**iconize**

See also the message variant *#wxIconize{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxIconizeEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
iconized(This) -> boolean()
```

Types:

**This = *wxIconizeEvent()***

See **external documentation**.

# wxIdleEvent

Erlang module

See external documentation: **wxIdleEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**idle**

See also the message variant *#wxIdle{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxIdleEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`canSend(Win) -> boolean()`

Types:

**Win = *wxWindow:wxWindow()***

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

`getMode() -> wx:wx_enum()`

See **external documentation**.
Res = ?wxIDLE_PROCESS_ALL | ?wxIDLE_PROCESS_SPECIFIED

`requestMore(This) -> ok`

Types:

**This = *wxIdleEvent()***

Equivalent to *requestMore(This, [])*.

`requestMore(This, Options::[Option]) -> ok`

Types:

**This = *wxIdleEvent()***
**Option = {needMore, boolean()}**

See **external documentation**.

`moreRequested(This) -> boolean()`

Types:

**This = *wxIdleEvent()***

See **external documentation**.

```
setMode(Mode) -> ok
```

Types:

**Mode = *wx:wx_enum()***

See **external documentation**.
Mode = ?wxIDLE_PROCESS_ALL | ?wxIDLE_PROCESS_SPECIFIED

# wxImage

Erlang module

See external documentation: **wxImage**.

All (default) image handlers are initialized.

## DATA TYPES

wxImage()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxImage()`

See **external documentation**.

`new(Name) -> wxImage()`

Types:

**`Name = unicode:chardata()`**

Equivalent to *new(Name, [])*.

`new(Width, Height) -> wxImage()`

Types:

**`Width = integer()`**
**`Height = integer()`**

See **external documentation**.
Also:
new(Name, [Option]) -> wxImage() when
Name::unicode:chardata(),
Option :: {'type', integer()}
| {'index', integer()}.

`new(Width, Height, Data) -> wxImage()`

Types:

**`Width = integer()`**
**`Height = integer()`**
**`Data = binary()`**

See **external documentation**.
Also:
new(Width, Height, [Option]) -> wxImage() when
Width::integer(), Height::integer(),
Option :: {'clear', boolean()};
(Name, Mimetype, [Option]) -> wxImage() when

Name::unicode:chardata(), Mimetype::unicode:chardata(),
Option :: {'index', integer()}.

```
new(Width, Height, Data, Alpha) -> wxImage()
```

Types:

**Width = integer()**
**Height = integer()**
**Data = binary()**
**Alpha = binary()**

See **external documentation**.
Also:
new(Width, Height, Data, [Option]) -> wxImage() when
Width::integer(), Height::integer(), Data::binary(),
Option :: {'static_data', boolean()}.

```
new(Width, Height, Data, Alpha, Options::[Option]) -> wxImage()
```

Types:

**Width = integer()**
**Height = integer()**
**Data = binary()**
**Alpha = binary()**
**Option = {static_data, boolean()}**

See **external documentation**.

```
blur(This, Radius) -> wxImage()
```

Types:

**This = *wxImage()***
**Radius = integer()**

See **external documentation**.

```
blurHorizontal(This, Radius) -> wxImage()
```

Types:

**This = *wxImage()***
**Radius = integer()**

See **external documentation**.

```
blurVertical(This, Radius) -> wxImage()
```

Types:

**This = *wxImage()***
**Radius = integer()**

See **external documentation**.

```
convertAlphaToMask(This) -> boolean()
```

Types:

**This = *wxImage()***

Equivalent to *convertAlphaToMask(This, [])*.

`convertAlphaToMask(This, Options::[Option]) -> boolean()`

Types:

**This = *wxImage()***

**Option = {threshold, integer()}**

See **external documentation**.

`convertToGreyscale(This) -> wxImage()`

Types:

**This = *wxImage()***

Equivalent to *convertToGreyscale(This, [])*.

`convertToGreyscale(This, Options::[Option]) -> wxImage()`

Types:

**This = *wxImage()***

**Option = {lr, number()} | {lg, number()} | {lb, number()}**

See **external documentation**.

`convertToMono(This, R, G, B) -> wxImage()`

Types:

**This = *wxImage()***

**R = integer()**

**G = integer()**

**B = integer()**

See **external documentation**.

`copy(This) -> wxImage()`

Types:

**This = *wxImage()***

See **external documentation**.

`create(This, Width, Height) -> boolean()`

Types:

**This = *wxImage()***

**Width = integer()**

**Height = integer()**

Equivalent to *create(This, Width, Height, [])*.

`create(This, Width, Height, Data) -> boolean()`

Types:

**This = *wxImage()***

**Width = integer()**
**Height = integer()**
**Data = binary()**

See **external documentation**.
Also:
create(This, Width, Height, [Option]) -> boolean() when
This::wxImage(), Width::integer(), Height::integer(),
Option :: {'clear', boolean()}.

`create(This, Width, Height, Data, Alpha) -> boolean()`

Types:

**This = *wxImage()***
**Width = integer()**
**Height = integer()**
**Data = binary()**
**Alpha = binary()**

See **external documentation**.
Also:
create(This, Width, Height, Data, [Option]) -> boolean() when
This::wxImage(), Width::integer(), Height::integer(), Data::binary(),
Option :: {'static_data', boolean()}.

`create(This, Width, Height, Data, Alpha, Options::[Option]) -> boolean()`

Types:

**This = *wxImage()***
**Width = integer()**
**Height = integer()**
**Data = binary()**
**Alpha = binary()**
**Option = {static_data, boolean()}**

See **external documentation**.

`Destroy(This) -> ok`

Types:

**This = *wxImage()***

See **external documentation**.

`findFirstUnusedColour(This) -> Result`

Types:

**Result = {Res::boolean(), R::integer(), G::integer(), B::integer()}**
**This = *wxImage()***

Equivalent to *findFirstUnusedColour(This, [])*.

```
findFirstUnusedColour(This, Options::[Option]) -> Result
```

Types:

**Result = {Res::boolean(), R::integer(), G::integer(), B::integer()}**
**This = *wxImage()***
**Option = {startR, integer()} | {startG, integer()} | {startB, integer()}**

See **external documentation**.

```
getImageExtWildcard() -> unicode:charlist()
```

See **external documentation**.

```
getAlpha(This) -> binary()
```

Types:

**This = *wxImage()***

See **external documentation**.

```
getAlpha(This, X, Y) -> integer()
```

Types:

**This = *wxImage()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
getBlue(This, X, Y) -> integer()
```

Types:

**This = *wxImage()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
getData(This) -> binary()
```

Types:

**This = *wxImage()***

See **external documentation**.

```
getGreen(This, X, Y) -> integer()
```

Types:

**This = *wxImage()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
getImageCount(Name) -> integer()
```

Types:

**Name = *unicode:chardata()***

Equivalent to *getImageCount(Name, [])*.

```
getImageCount(Name, Options::[Option]) -> integer()
```

Types:

**Name = *unicode:chardata()***

**Option = {type, *wx:wx_enum()*}**

See **external documentation**.

Type = ?wxBITMAP_TYPE_INVALID | ?wxBITMAP_TYPE_BMP | ?wxBITMAP_TYPE_BMP_RESOURCE | ?wxBITMAP_TYPE_RESOURCE | ?wxBITMAP_TYPE_ICO | ?wxBITMAP_TYPE_ICO_RESOURCE | ?wxBITMAP_TYPE_CUR | ?wxBITMAP_TYPE_CUR_RESOURCE | ?wxBITMAP_TYPE_XBM | ?wxBITMAP_TYPE_XBM_DATA | ?wxBITMAP_TYPE_XPM | ?wxBITMAP_TYPE_XPM_DATA | ?wxBITMAP_TYPE_TIF | ?wxBITMAP_TYPE_TIF_RESOURCE | ?wxBITMAP_TYPE_GIF | ?wxBITMAP_TYPE_GIF_RESOURCE | ?wxBITMAP_TYPE_PNG | ?wxBITMAP_TYPE_PNG_RESOURCE | ?wxBITMAP_TYPE_JPEG | ?wxBITMAP_TYPE_JPEG_RESOURCE | ?wxBITMAP_TYPE_PNM | ?wxBITMAP_TYPE_PNM_RESOURCE | ?wxBITMAP_TYPE_PCX | ?wxBITMAP_TYPE_PCX_RESOURCE | ?wxBITMAP_TYPE_PICT | ?wxBITMAP_TYPE_PICT_RESOURCE | ?wxBITMAP_TYPE_ICON | ?wxBITMAP_TYPE_ICON_RESOURCE | ?wxBITMAP_TYPE_ANI | ?wxBITMAP_TYPE_IFF | ?wxBITMAP_TYPE_TGA | ?wxBITMAP_TYPE_MACCURSOR | ?wxBITMAP_TYPE_MACCURSOR_RESOURCE | ?wxBITMAP_TYPE_ANY

```
getHeight(This) -> integer()
```

Types:

**This = *wxImage()***

See **external documentation**.

```
getMaskBlue(This) -> integer()
```

Types:

**This = *wxImage()***

See **external documentation**.

```
getMaskGreen(This) -> integer()
```

Types:

**This = *wxImage()***

See **external documentation**.

```
getMaskRed(This) -> integer()
```

Types:

**This = *wxImage()***

See **external documentation**.

```
getOrFindMaskColour(This) -> Result
```

Types:

**Result = {Res::boolean(), R::integer(), G::integer(), B::integer()}**

**This = *wxImage()***

See **external documentation**.

```
getPalette(This) -> wxPalette:wxPalette()
```

Types:

**This = *wxImage()***

See **external documentation**.

```
getRed(This, X, Y) -> integer()
```

Types:

**This = *wxImage()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
getSubImage(This, Rect) -> wxImage()
```

Types:

**This = *wxImage()***
**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

See **external documentation**.

```
getWidth(This) -> integer()
```

Types:

**This = *wxImage()***

See **external documentation**.

```
hasAlpha(This) -> boolean()
```

Types:

**This = *wxImage()***

See **external documentation**.

```
hasMask(This) -> boolean()
```

Types:

**This = *wxImage()***

See **external documentation**.

```
getOption(This, Name) -> unicode:charlist()
```

Types:

**This = *wxImage()***
**Name = *unicode:chardata()***

See **external documentation**.

```
getOptionInt(This, Name) -> integer()
```

Types:

**This = *wxImage()***
**Name = *unicode:chardata()***

See **external documentation**.

`hasOption(This, Name) -> boolean()`

Types:

**This = *wxImage()***
**Name = *unicode:chardata()***

See **external documentation**.

`initAlpha(This) -> ok`

Types:

**This = *wxImage()***

See **external documentation**.

`initStandardHandlers() -> ok`

See **external documentation**.

`isTransparent(This, X, Y) -> boolean()`

Types:

**This = *wxImage()***
**X = integer()**
**Y = integer()**

Equivalent to *isTransparent(This, X, Y, [])*.

`isTransparent(This, X, Y, Options::[Option]) -> boolean()`

Types:

**This = *wxImage()***
**X = integer()**
**Y = integer()**
**Option = {threshold, integer()}**

See **external documentation**.

`loadFile(This, Name) -> boolean()`

Types:

**This = *wxImage()***
**Name = *unicode:chardata()***

Equivalent to *loadFile(This, Name, [])*.

`loadFile(This, Name, Options::[Option]) -> boolean()`

Types:

**This = *wxImage()***
**Name = *unicode:chardata()***

**Option = {type, integer()} | {index, integer()}**

See **external documentation**.

`loadFile(This, Name, Mimetype, Options::[Option]) -> boolean()`

Types:

**This = *wxImage()***
**Name = *unicode:chardata()***
**Mimetype = *unicode:chardata()***
**Option = {index, integer()}**

See **external documentation**.

`ok(This) -> boolean()`

Types:

**This = *wxImage()***

See **external documentation**.

`removeHandler(Name) -> boolean()`

Types:

**Name = *unicode:chardata()***

See **external documentation**.

`mirror(This) -> wxImage()`

Types:

**This = *wxImage()***

Equivalent to *mirror(This, [])*.

`mirror(This, Options::[Option]) -> wxImage()`

Types:

**This = *wxImage()***
**Option = {horizontally, boolean()}**

See **external documentation**.

`replace(This, R1, G1, B1, R2, G2, B2) -> ok`

Types:

**This = *wxImage()***
**R1 = integer()**
**G1 = integer()**
**B1 = integer()**
**R2 = integer()**
**G2 = integer()**
**B2 = integer()**

See **external documentation**.

```
rescale(This, Width, Height) -> wxImage()
```

Types:

**This = *wxImage()***
**Width = integer()**
**Height = integer()**

Equivalent to *rescale(This, Width, Height, [])*.

```
rescale(This, Width, Height, Options::[Option]) -> wxImage()
```

Types:

**This = *wxImage()***
**Width = integer()**
**Height = integer()**
**Option = {quality, *wx:wx_enum()*}**

See **external documentation**.
Quality = integer

```
resize(This, Size, Pos) -> wxImage()
```

Types:

**This = *wxImage()***
**Size = {W::integer(), H::integer()}**
**Pos = {X::integer(), Y::integer()}**

Equivalent to *resize(This, Size, Pos, [])*.

```
resize(This, Size, Pos, Options::[Option]) -> wxImage()
```

Types:

**This = *wxImage()***
**Size = {W::integer(), H::integer()}**
**Pos = {X::integer(), Y::integer()}**
**Option = {r, integer()} | {g, integer()} | {b, integer()}**

See **external documentation**.

```
rotate(This, Angle, Centre_of_rotation) -> wxImage()
```

Types:

**This = *wxImage()***
**Angle = number()**
**Centre_of_rotation = {X::integer(), Y::integer()}**

Equivalent to *rotate(This, Angle, Centre_of_rotation, [])*.

```
rotate(This, Angle, Centre_of_rotation, Options::[Option]) -> wxImage()
```

Types:

**This = *wxImage()***
**Angle = number()**
**Centre_of_rotation = {X::integer(), Y::integer()}**

**Option = {interpolating, boolean()} | {offset_after_rotation, {X::integer(), Y::integer()}}**

See **external documentation**.

`rotateHue(This, Angle) -> ok`

Types:

**This = *wxImage()***
**Angle = number()**

See **external documentation**.

`rotate90(This) -> wxImage()`

Types:

**This = *wxImage()***

Equivalent to *rotate90(This, [])*.

`rotate90(This, Options::[Option]) -> wxImage()`

Types:

**This = *wxImage()***
**Option = {clockwise, boolean()}**

See **external documentation**.

`saveFile(This, Name) -> boolean()`

Types:

**This = *wxImage()***
**Name = *unicode:chardata()***

See **external documentation**.

`saveFile(This, Name, Type) -> boolean()`

Types:

**This = *wxImage()***
**Name = *unicode:chardata()***
**Type = integer()**

See **external documentation**.
Also:
saveFile(This, Name, Mimetype) -> boolean() when
This::wxImage(), Name::unicode:chardata(), Mimetype::unicode:chardata().

`scale(This, Width, Height) -> wxImage()`

Types:

**This = *wxImage()***
**Width = integer()**
**Height = integer()**

Equivalent to *scale(This, Width, Height, [])*.

```
scale(This, Width, Height, Options::[Option]) -> wxImage()
```

Types:

**This = *wxImage()***
**Width = integer()**
**Height = integer()**
**Option = {quality, *wx:wx_enum()*}**

See **external documentation**.
Quality = integer

```
size(This, Size, Pos) -> wxImage()
```

Types:

**This = *wxImage()***
**Size = {W::integer(), H::integer()}**
**Pos = {X::integer(), Y::integer()}**

Equivalent to *size(This, Size, Pos, [])*.

```
size(This, Size, Pos, Options::[Option]) -> wxImage()
```

Types:

**This = *wxImage()***
**Size = {W::integer(), H::integer()}**
**Pos = {X::integer(), Y::integer()}**
**Option = {r, integer()} | {g, integer()} | {b, integer()}**

See **external documentation**.

```
setAlpha(This, Alpha) -> ok
```

Types:

**This = *wxImage()***
**Alpha = binary()**

Equivalent to *setAlpha(This, Alpha, [])*.

```
setAlpha(This, Alpha, Options::[Option]) -> ok
```

Types:

**This = *wxImage()***
**Alpha = binary()**
**Option = {static_data, boolean()}**

See **external documentation**.

```
setAlpha(This, X, Y, Alpha) -> ok
```

Types:

**This = *wxImage()***
**X = integer()**
**Y = integer()**
**Alpha = integer()**

See **external documentation**.

```
setData(This, Data) -> ok
```

Types:

**This = *wxImage()***
**Data = binary()**

Equivalent to *setData(This, Data, [])*.

```
setData(This, Data, Options::[Option]) -> ok
```

Types:

**This = *wxImage()***
**Data = binary()**
**Option = {static_data, boolean()}**

See **external documentation**.

```
setData(This, Data, New_width, New_height) -> ok
```

Types:

**This = *wxImage()***
**Data = binary()**
**New_width = integer()**
**New_height = integer()**

Equivalent to *setData(This, Data, New_width, New_height, [])*.

```
setData(This, Data, New_width, New_height, Options::[Option]) -> ok
```

Types:

**This = *wxImage()***
**Data = binary()**
**New_width = integer()**
**New_height = integer()**
**Option = {static_data, boolean()}**

See **external documentation**.

```
setMask(This) -> ok
```

Types:

**This = *wxImage()***

Equivalent to *setMask(This, [])*.

```
setMask(This, Options::[Option]) -> ok
```

Types:

**This = *wxImage()***
**Option = {mask, boolean()}**

See **external documentation**.

```
setMaskColour(This, R, G, B) -> ok
```

Types:

**This = *wxImage()***
**R = integer()**
**G = integer()**
**B = integer()**

See **external documentation**.

```
setMaskFromImage(This, Mask, Mr, Mg, Mb) -> boolean()
```

Types:

**This = *wxImage()***
**Mask = *wxImage()***
**Mr = integer()**
**Mg = integer()**
**Mb = integer()**

See **external documentation**.

```
setOption(This, Name, Value) -> ok
```

Types:

**This = *wxImage()***
**Name = *unicode:chardata()***
**Value = integer()**

See **external documentation**.
Also:
setOption(This, Name, Value) -> 'ok' when
This::wxImage(), Name::unicode:chardata(), Value::unicode:chardata().

```
setPalette(This, Palette) -> ok
```

Types:

**This = *wxImage()***
**Palette = *wxPalette:wxPalette()***

See **external documentation**.

```
setRGB(This, Rect, R, G, B) -> ok
```

Types:

**This = *wxImage()***
**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**
**R = integer()**
**G = integer()**
**B = integer()**

See **external documentation**.

```
setRGB(This, X, Y, R, G, B) -> ok
```

Types:

**This = *wxImage()***
**X = integer()**
**Y = integer()**
**R = integer()**
**G = integer()**
**B = integer()**

See **external documentation**.

```
destroy(This::wxImage()) -> ok
```

Destroys this object, do not use object again

# wxImageList

Erlang module

See external documentation: **wxImageList**.

## DATA TYPES

wxImageList()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxImageList()
```

See **external documentation**.

```
new(Width, Height) -> wxImageList()
```

Types:

**Width = integer()**
**Height = integer()**

Equivalent to *new(Width, Height, [])*.

```
new(Width, Height, Options::[Option]) -> wxImageList()
```

Types:

**Width = integer()**
**Height = integer()**
**Option = {mask, boolean()} | {initialCount, integer()}**

See **external documentation**.

```
add(This, Bitmap) -> integer()
```

Types:

**This = *wxImageList()***
**Bitmap = *wxBitmap:wxBitmap()***

See **external documentation**.

```
add(This, Bitmap, Mask) -> integer()
```

Types:

**This = *wxImageList()***
**Bitmap = *wxBitmap:wxBitmap()***
**Mask = *wxBitmap:wxBitmap()***

See **external documentation**.
Also:
add(This, Bitmap, MaskColour) -> integer() when

This::wxImageList(), Bitmap::wxBitmap:wxBitmap(), MaskColour::wx:wx_colour().

`create(This, Width, Height) -> boolean()`

Types:

**This = *wxImageList()***
**Width = integer()**
**Height = integer()**

Equivalent to *create(This, Width, Height, [])*.

`create(This, Width, Height, Options::[Option]) -> boolean()`

Types:

**This = *wxImageList()***
**Width = integer()**
**Height = integer()**
**Option = {mask, boolean()} | {initialCount, integer()}**

See **external documentation**.

`draw(This, Index, Dc, X, Y) -> boolean()`

Types:

**This = *wxImageList()***
**Index = integer()**
**Dc = *wxDC:wxDC()***
**X = integer()**
**Y = integer()**

Equivalent to *draw(This, Index, Dc, X, Y, [])*.

`draw(This, Index, Dc, X, Y, Options::[Option]) -> boolean()`

Types:

**This = *wxImageList()***
**Index = integer()**
**Dc = *wxDC:wxDC()***
**X = integer()**
**Y = integer()**
**Option = {flags, integer()} | {solidBackground, boolean()}**

See **external documentation**.

`getBitmap(This, Index) -> wxBitmap:wxBitmap()`

Types:

**This = *wxImageList()***
**Index = integer()**

See **external documentation**.

```
getIcon(This, Index) -> wxIcon:wxIcon()
```

Types:

**This = *wxImageList()***
**Index = integer()**

See **external documentation**.

```
getImageCount(This) -> integer()
```

Types:

**This = *wxImageList()***

See **external documentation**.

```
getSize(This, Index) -> Result
```

Types:

**Result = {Res::boolean(), Width::integer(), Height::integer()}**
**This = *wxImageList()***
**Index = integer()**

See **external documentation**.

```
remove(This, Index) -> boolean()
```

Types:

**This = *wxImageList()***
**Index = integer()**

See **external documentation**.

```
removeAll(This) -> boolean()
```

Types:

**This = *wxImageList()***

See **external documentation**.

```
replace(This, Index, Bitmap) -> boolean()
```

Types:

**This = *wxImageList()***
**Index = integer()**
**Bitmap = *wxBitmap:wxBitmap()***

See **external documentation**.

```
replace(This, Index, Bitmap, Mask) -> boolean()
```

Types:

**This = *wxImageList()***
**Index = integer()**
**Bitmap = *wxBitmap:wxBitmap()***
**Mask = *wxBitmap:wxBitmap()***

See **external documentation**.

```
destroy(This::wxImageList()) -> ok
```

Destroys this object, do not use object again

# wxInitDialogEvent

Erlang module

See external documentation: **wxInitDialogEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**init_dialog**

See also the message variant *#wxInitDialog{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxInitDialogEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxJoystickEvent

Erlang module

See external documentation: **wxJoystickEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**joy_button_down**, **joy_button_up**, **joy_move**, **joy_zmove**

See also the message variant *#wxJoystick{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxJoystickEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
buttonDown(This) -> boolean()
```

Types:

**This = *wxJoystickEvent()***

Equivalent to *buttonDown(This, [])*.

```
buttonDown(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxJoystickEvent()***
**Option = {but, integer()}**

See **external documentation**.

```
buttonIsDown(This) -> boolean()
```

Types:

**This = *wxJoystickEvent()***

Equivalent to *buttonIsDown(This, [])*.

```
buttonIsDown(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxJoystickEvent()***
**Option = {but, integer()}**

See **external documentation**.

```
buttonUp(This) -> boolean()
```

Types:

**This = *wxJoystickEvent()***

Equivalent to *buttonUp(This, [])*.

```
buttonUp(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxJoystickEvent()***

**Option = {but, integer()}**

See **external documentation**.

```
getButtonChange(This) -> integer()
```

Types:

**This = *wxJoystickEvent()***

See **external documentation**.

```
getButtonState(This) -> integer()
```

Types:

**This = *wxJoystickEvent()***

See **external documentation**.

```
getJoystick(This) -> integer()
```

Types:

**This = *wxJoystickEvent()***

See **external documentation**.

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxJoystickEvent()***

See **external documentation**.

```
getZPosition(This) -> integer()
```

Types:

**This = *wxJoystickEvent()***

See **external documentation**.

```
isButton(This) -> boolean()
```

Types:

**This = *wxJoystickEvent()***

See **external documentation**.

```
isMove(This) -> boolean()
```

Types:

**This = *wxJoystickEvent()***

See **external documentation**.

```
isZMove(This) -> boolean()
```

Types:

**This = *wxJoystickEvent()***

See **external documentation**.

# wxKeyEvent

Erlang module

See external documentation: **wxKeyEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**char**, **char_hook**, **key_down**, **key_up**

See also the message variant *#wxKey{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxKeyEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`altDown(This) -> boolean()`

Types:

**This = *wxKeyEvent()***

See **external documentation**.

`cmdDown(This) -> boolean()`

Types:

**This = *wxKeyEvent()***

See **external documentation**.

`controlDown(This) -> boolean()`

Types:

**This = *wxKeyEvent()***

See **external documentation**.

`getKeyCode(This) -> integer()`

Types:

**This = *wxKeyEvent()***

See **external documentation**.

`getModifiers(This) -> integer()`

Types:

**This = *wxKeyEvent()***

See **external documentation**.

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxKeyEvent()***

See **external documentation**.

```
getRawKeyCode(This) -> integer()
```

Types:

**This = *wxKeyEvent()***

See **external documentation**.

```
getRawKeyFlags(This) -> integer()
```

Types:

**This = *wxKeyEvent()***

See **external documentation**.

```
getUnicodeKey(This) -> integer()
```

Types:

**This = *wxKeyEvent()***

See **external documentation**.

```
getX(This) -> integer()
```

Types:

**This = *wxKeyEvent()***

See **external documentation**.

```
getY(This) -> integer()
```

Types:

**This = *wxKeyEvent()***

See **external documentation**.

```
hasModifiers(This) -> boolean()
```

Types:

**This = *wxKeyEvent()***

See **external documentation**.

```
metaDown(This) -> boolean()
```

Types:

**This = *wxKeyEvent()***

See **external documentation**.

```
shiftDown(This) -> boolean()
```

Types:

**This = *wxKeyEvent()***

See **external documentation**.

# wxLayoutAlgorithm

Erlang module

See external documentation: **wxLayoutAlgorithm**.

## DATA TYPES

wxLayoutAlgorithm()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxLayoutAlgorithm()
```

See **external documentation**.

```
layoutFrame(This, Frame) -> boolean()
```

Types:

**This = *wxLayoutAlgorithm()***
**Frame = *wxFrame:wxFrame()***

Equivalent to *layoutFrame(This, Frame, [])*.

```
layoutFrame(This, Frame, Options::[Option]) -> boolean()
```

Types:

**This = *wxLayoutAlgorithm()***
**Frame = *wxFrame:wxFrame()***
**Option = {mainWindow, *wxWindow:wxWindow()*}**

See **external documentation**.

```
layoutMDIFrame(This, Frame) -> boolean()
```

Types:

**This = *wxLayoutAlgorithm()***
**Frame = *wxMDIParentFrame:wxMDIParentFrame()***

Equivalent to *layoutMDIFrame(This, Frame, [])*.

```
layoutMDIFrame(This, Frame, Options::[Option]) -> boolean()
```

Types:

**This = *wxLayoutAlgorithm()***
**Frame = *wxMDIParentFrame:wxMDIParentFrame()***
**Option = {rect, {X::integer(), Y::integer(), W::integer(), H::integer()}}**

See **external documentation**.

```
layoutWindow(This, Frame) -> boolean()
```

Types:

**This = *wxLayoutAlgorithm()***
**Frame = *wxWindow:wxWindow()***

Equivalent to *layoutWindow(This, Frame, [])*.

```
layoutWindow(This, Frame, Options::[Option]) -> boolean()
```

Types:

**This = *wxLayoutAlgorithm()***
**Frame = *wxWindow:wxWindow()***
**Option = {mainWindow, *wxWindow:wxWindow()*}**

See **external documentation**.

```
destroy(This::wxLayoutAlgorithm()) -> ok
```

Destroys this object, do not use object again

# wxListbook

Erlang module

See external documentation: **wxListbook**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxListbook()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxListbook()
```

See **external documentation**.

```
new(Parent, Id) -> wxListbook()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxListbook()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
addPage(This, Page, Text) -> boolean()
```

Types:

**This = *wxListbook()***
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***

Equivalent to *addPage(This, Page, Text, [])*.

```
addPage(This, Page, Text, Options::[Option]) -> boolean()
```

Types:

**This = *wxListbook()***
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***
**Option = {bSelect, boolean()} | {imageId, integer()}**

See **external documentation**.

`advanceSelection(This) -> ok`

Types:

**This = *wxListbook()***

Equivalent to *advanceSelection(This, [])*.

`advanceSelection(This, Options::[Option]) -> ok`

Types:

**This = *wxListbook()***
**Option = {forward, boolean()}**

See **external documentation**.

`assignImageList(This, ImageList) -> ok`

Types:

**This = *wxListbook()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

`create(This, Parent, Id) -> boolean()`

Types:

**This = *wxListbook()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

`create(This, Parent, Id, Options::[Option]) -> boolean()`

Types:

**This = *wxListbook()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`deleteAllPages(This) -> boolean()`

Types:

**This = *wxListbook()***

See **external documentation**.

```
deletePage(This, N) -> boolean()
```

Types:

**This = *wxListbook()***

**N = integer()**

See **external documentation**.

```
removePage(This, N) -> boolean()
```

Types:

**This = *wxListbook()***

**N = integer()**

See **external documentation**.

```
getCurrentPage(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxListbook()***

See **external documentation**.

```
getImageList(This) -> wxImageList:wxImageList()
```

Types:

**This = *wxListbook()***

See **external documentation**.

```
getPage(This, N) -> wxWindow:wxWindow()
```

Types:

**This = *wxListbook()***

**N = integer()**

See **external documentation**.

```
getPageCount(This) -> integer()
```

Types:

**This = *wxListbook()***

See **external documentation**.

```
getPageImage(This, N) -> integer()
```

Types:

**This = *wxListbook()***

**N = integer()**

See **external documentation**.

```
getPageText(This, N) -> unicode:charlist()
```

Types:

**This = *wxListbook()***

**N = integer()**

See **external documentation**.

```
getSelection(This) -> integer()
```

Types:

**This = *wxListbook()***

See **external documentation**.

```
hitTest(This, Pt) -> Result
```

Types:

**Result = {Res::integer(), Flags::integer()}**
**This = *wxListbook()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
insertPage(This, N, Page, Text) -> boolean()
```

Types:

**This = *wxListbook()***
**N = integer()**
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***

Equivalent to *insertPage(This, N, Page, Text, [])*.

```
insertPage(This, N, Page, Text, Options::[Option]) -> boolean()
```

Types:

**This = *wxListbook()***
**N = integer()**
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***
**Option = {bSelect, boolean()} | {imageId, integer()}**

See **external documentation**.

```
setImageList(This, ImageList) -> ok
```

Types:

**This = *wxListbook()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

```
setPageSize(This, Size) -> ok
```

Types:

**This = *wxListbook()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
setPageImage(This, N, ImageId) -> boolean()
```

Types:

**This = *wxListbook()***
**N = integer()**
**ImageId = integer()**

See **external documentation**.

```
setPageText(This, N, StrText) -> boolean()
```

Types:

**This = *wxListbook()***
**N = integer()**
**StrText = *unicode:chardata()***

See **external documentation**.

```
setSelection(This, N) -> integer()
```

Types:

**This = *wxListbook()***
**N = integer()**

See **external documentation**.

```
changeSelection(This, N) -> integer()
```

Types:

**This = *wxListbook()***
**N = integer()**

See **external documentation**.

```
destroy(This::wxListbook()) -> ok
```

Destroys this object, do not use object again

# wxListBox

Erlang module

See external documentation: **wxListBox**.

This class is derived (and can use functions) from:
*wxControlWithItems*
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxListBox()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxListBox()
```

See **external documentation**.

```
new(Parent, Id) -> wxListBox()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxListBox()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {choices, [*unicode:chardata()*]} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id, Pos, Size, Choices) -> boolean()
```

Types:

**This = *wxListBox()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Pos = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**
**Choices = [*unicode:chardata()*]**

Equivalent to *create(This, Parent, Id, Pos, Size, Choices, [])*.

```
create(This, Parent, Id, Pos, Size, Choices, Options::[Option]) -> boolean()
```

Types:

**This = *wxListBox()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Pos = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**
**Choices = [*unicode:chardata()*]**
**Option = {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
deselect(This, N) -> ok
```

Types:

**This = *wxListBox()***
**N = integer()**

See **external documentation**.

```
getSelections(This) -> Result
```

Types:

**Result = {Res::integer(), ASelections::[integer()]}**
**This = *wxListBox()***

See **external documentation**.

```
insertItems(This, Items, Pos) -> ok
```

Types:

**This = *wxListBox()***
**Items = [*unicode:chardata()*]**
**Pos = integer()**

See **external documentation**.

```
isSelected(This, N) -> boolean()
```

Types:

**This = *wxListBox()***
**N = integer()**

See **external documentation**.

```
set(This, Items) -> ok
```

Types:

**This = *wxListBox()***
**Items = [*unicode:chardata()*]**

See **external documentation**.

```
hitTest(This, Point) -> integer()
```

Types:

**This = *wxListBox()***
**Point = {X::integer(), Y::integer()}**

See **external documentation**.

```
setFirstItem(This, N) -> ok
```

Types:

**This = *wxListBox()***
**N = integer()**

See **external documentation**.
Also:
setFirstItem(This, S) -> 'ok' when
This::wxListBox(), S::unicode:chardata().

```
destroy(This::wxListBox()) -> ok
```

Destroys this object, do not use object again

# wxListCtrl

Erlang module

See external documentation: **wxListCtrl**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxListCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxListCtrl()
```

See **external documentation**.

```
new(Parent) -> wxListCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***

```
new(Parent, Options::[Option]) -> wxListCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {winid, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*} | {onGetItemText, function()} | {onGetItemAttr, function()} | {onGetItemColumnImage, function()}**

Creates a listctrl with optional callback functions:

OnGetItemText = (This, Item, Column) -> unicode:charlist() OnGetItemAttr = (This, Item) -> wxListItemAttr:wxListItemAttr() OnGetItemColumnImage = (This, Item, Column) -> integer()

See **external documentation**.

```
arrange(This) -> boolean()
```

Types:

**This = *wxListCtrl()***

Equivalent to *arrange(This, [])*.

```
arrange(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxListCtrl()***

**Option = {flag, integer()}**

See **external documentation**.

`assignImageList(This, ImageList, Which) -> ok`

Types:

**This = *wxListCtrl()***

**ImageList = *wxImageList:wxImageList()***

**Which = integer()**

See **external documentation**.

`clearAll(This) -> ok`

Types:

**This = *wxListCtrl()***

See **external documentation**.

`create(This, Parent) -> wxListCtrl()`

Types:

**This = *wxWindow:wxWindow()***

**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

`create(This, Parent, Options::[Option]) -> wxListCtrl()`

Types:

**This = *wxWindow:wxWindow()***

**Parent = *wxWindow:wxWindow()***

**Option = {winid, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*} | {onGetItemText, function()} | {onGetItemAttr, function()} | {onGetItemColumnImage, function()}**

See **external documentation**.

`deleteAllItems(This) -> boolean()`

Types:

**This = *wxListCtrl()***

See **external documentation**.

`deleteColumn(This, Col) -> boolean()`

Types:

**This = *wxListCtrl()***

**Col = integer()**

See **external documentation**.

```
deleteItem(This, Item) -> boolean()
```

Types:

**This = *wxListCtrl()***
**Item = integer()**

See **external documentation**.

```
editLabel(This, Item) -> wxTextCtrl:wxTextCtrl()
```

Types:

**This = *wxListCtrl()***
**Item = integer()**

See **external documentation**.

```
ensureVisible(This, Item) -> boolean()
```

Types:

**This = *wxListCtrl()***
**Item = integer()**

See **external documentation**.

```
findItem(This, Start, Str) -> integer()
```

Types:

**This = *wxListCtrl()***
**Start = integer()**
**Str = *unicode:chardata()***

Equivalent to *findItem(This, Start, Str, [])*.

```
findItem(This, Start, Str, Options::[Option]) -> integer()
```

Types:

**This = *wxListCtrl()***
**Start = integer()**
**Str = *unicode:chardata()***
**Option = {partial, boolean()}**

See **external documentation**.
Also:
findItem(This, Start, Pt, Direction) -> integer() when
This::wxListCtrl(), Start::integer(), Pt::{X::integer(), Y::integer()}, Direction::integer().

```
getColumn(This, Col, Item) -> boolean()
```

Types:

**This = *wxListCtrl()***
**Col = integer()**
**Item = *wxListItem:wxListItem()***

See **external documentation**.

```
getColumnCount(This) -> integer()
```

Types:

**This = *wxListCtrl()***

See **external documentation**.

```
getColumnWidth(This, Col) -> integer()
```

Types:

**This = *wxListCtrl()***

**Col = integer()**

See **external documentation**.

```
getCountPerPage(This) -> integer()
```

Types:

**This = *wxListCtrl()***

See **external documentation**.

```
getEditControl(This) -> wxTextCtrl:wxTextCtrl()
```

Types:

**This = *wxListCtrl()***

See **external documentation**.

```
getImageList(This, Which) -> wxImageList:wxImageList()
```

Types:

**This = *wxListCtrl()***

**Which = integer()**

See **external documentation**.

```
getItem(This, Info) -> boolean()
```

Types:

**This = *wxListCtrl()***

**Info = *wxListItem:wxListItem()***

See **external documentation**.

```
getItemBackgroundColour(This, Item) -> wx:wx_colour4()
```

Types:

**This = *wxListCtrl()***

**Item = integer()**

See **external documentation**.

```
getItemCount(This) -> integer()
```

Types:

**This = *wxListCtrl()***

See **external documentation**.

```
getItemData(This, Item) -> integer()
```

Types:

**This = *wxListCtrl()***

**Item = integer()**

See **external documentation**.

```
getItemFont(This, Item) -> wxFont:wxFont()
```

Types:

**This = *wxListCtrl()***

**Item = integer()**

See **external documentation**.

```
getItemPosition(This, Item) -> Result
```

Types:

**Result = {Res::boolean(), Pos::{X::integer(), Y::integer()}}**

**This = *wxListCtrl()***

**Item = integer()**

See **external documentation**.

```
getItemRect(This, Item) -> Result
```

Types:

**Result = {Res::boolean(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}}**

**This = *wxListCtrl()***

**Item = integer()**

Equivalent to *getItemRect(This, Item, [])*.

```
getItemRect(This, Item, Options::[Option]) -> Result
```

Types:

**Result = {Res::boolean(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}}**

**This = *wxListCtrl()***

**Item = integer()**

**Option = {code, integer()}**

See **external documentation**.

```
getItemSpacing(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxListCtrl()***

See **external documentation**.

```
getItemState(This, Item, StateMask) -> integer()
```

Types:

**This = *wxListCtrl()***
**Item = integer()**
**StateMask = integer()**

See **external documentation**.

`getItemText(This, Item) -> unicode:charlist()`

Types:

**This = *wxListCtrl()***
**Item = integer()**

See **external documentation**.

`getItemTextColour(This, Item) -> wx:wx_colour4()`

Types:

**This = *wxListCtrl()***
**Item = integer()**

See **external documentation**.

`getNextItem(This, Item) -> integer()`

Types:

**This = *wxListCtrl()***
**Item = integer()**

Equivalent to *getNextItem(This, Item, [])*.

`getNextItem(This, Item, Options::[Option]) -> integer()`

Types:

**This = *wxListCtrl()***
**Item = integer()**
**Option = {geometry, integer()} | {state, integer()}**

See **external documentation**.

`getSelectedItemCount(This) -> integer()`

Types:

**This = *wxListCtrl()***

See **external documentation**.

`getTextColour(This) -> wx:wx_colour4()`

Types:

**This = *wxListCtrl()***

See **external documentation**.

`getTopItem(This) -> integer()`

Types:

**This = *wxListCtrl()***

See **external documentation**.

```
getViewRect(This) -> {X::integer(), Y::integer(), W::integer(), H::integer()}
```

Types:

**This = *wxListCtrl()***

See **external documentation**.

```
hitTest(This, Point) -> Result
```

Types:

**Result = {Res::integer(), Flags::integer(), PSubItem::integer()}**
**This = *wxListCtrl()***
**Point = {X::integer(), Y::integer()}**

See **external documentation**.

```
insertColumn(This, Col, Heading) -> integer()
```

Types:

**This = *wxListCtrl()***
**Col = integer()**
**Heading = *unicode:chardata()***

See **external documentation**.
Also:
insertColumn(This, Col, Info) -> integer() when
This::wxListCtrl(), Col::integer(), Info::wxListItem:wxListItem().

```
insertColumn(This, Col, Heading, Options::[Option]) -> integer()
```

Types:

**This = *wxListCtrl()***
**Col = integer()**
**Heading = *unicode:chardata()***
**Option = {format, integer()} | {width, integer()}**

See **external documentation**.

```
insertItem(This, Info) -> integer()
```

Types:

**This = *wxListCtrl()***
**Info = *wxListItem:wxListItem()***

See **external documentation**.

```
insertItem(This, Index, ImageIndex) -> integer()
```

Types:

**This = *wxListCtrl()***
**Index = integer()**
**ImageIndex = integer()**

See **external documentation**.
Also:
insertItem(This, Index, Label) -> integer() when
This::wxListCtrl(), Index::integer(), Label::unicode:chardata().

`insertItem(This, Index, Label, ImageIndex) -> integer()`

Types:

**This = *wxListCtrl()***
**Index = integer()**
**Label = *unicode:chardata()***
**ImageIndex = integer()**

See **external documentation**.

`refreshItem(This, Item) -> ok`

Types:

**This = *wxListCtrl()***
**Item = integer()**

See **external documentation**.

`refreshItems(This, ItemFrom, ItemTo) -> ok`

Types:

**This = *wxListCtrl()***
**ItemFrom = integer()**
**ItemTo = integer()**

See **external documentation**.

`scrollList(This, Dx, Dy) -> boolean()`

Types:

**This = *wxListCtrl()***
**Dx = integer()**
**Dy = integer()**

See **external documentation**.

`setBackgroundColour(This, Colour) -> boolean()`

Types:

**This = *wxListCtrl()***
**Colour = *wx:wx_colour()***

See **external documentation**.

`setColumn(This, Col, Item) -> boolean()`

Types:

**This = *wxListCtrl()***
**Col = integer()**
**Item = *wxListItem:wxListItem()***

See **external documentation**.

```
setColumnWidth(This, Col, Width) -> boolean()
```

Types:

**This = *wxListCtrl()***
**Col = integer()**
**Width = integer()**

See **external documentation**.

```
setImageList(This, ImageList, Which) -> ok
```

Types:

**This = *wxListCtrl()***
**ImageList = *wxImageList:wxImageList()***
**Which = integer()**

See **external documentation**.

```
setItem(This, Info) -> boolean()
```

Types:

**This = *wxListCtrl()***
**Info = *wxListItem:wxListItem()***

See **external documentation**.

```
setItem(This, Index, Col, Label) -> integer()
```

Types:

**This = *wxListCtrl()***
**Index = integer()**
**Col = integer()**
**Label = *unicode:chardata()***

Equivalent to *setItem(This, Index, Col, Label, [])*.

```
setItem(This, Index, Col, Label, Options::[Option]) -> integer()
```

Types:

**This = *wxListCtrl()***
**Index = integer()**
**Col = integer()**
**Label = *unicode:chardata()***
**Option = {imageId, integer()}**

See **external documentation**.

```
setItemBackgroundColour(This, Item, Col) -> ok
```

Types:

**This = *wxListCtrl()***
**Item = integer()**

**Col = *wx:wx_colour()***

See **external documentation**.

`setItemCount(This, Count) -> ok`

Types:

**This = *wxListCtrl()***

**Count = integer()**

See **external documentation**.

`setItemData(This, Item, Data) -> boolean()`

Types:

**This = *wxListCtrl()***

**Item = integer()**

**Data = integer()**

See **external documentation**.

`setItemFont(This, Item, F) -> ok`

Types:

**This = *wxListCtrl()***

**Item = integer()**

**F = *wxFont:wxFont()***

See **external documentation**.

`setItemImage(This, Item, Image) -> boolean()`

Types:

**This = *wxListCtrl()***

**Item = integer()**

**Image = integer()**

Equivalent to *setItemImage(This, Item, Image, [])*.

`setItemImage(This, Item, Image, Options::[Option]) -> boolean()`

Types:

**This = *wxListCtrl()***

**Item = integer()**

**Image = integer()**

**Option = {selImage, integer()}**

See **external documentation**.

`setItemColumnImage(This, Item, Column, Image) -> boolean()`

Types:

**This = *wxListCtrl()***

**Item = integer()**

**Column = integer()**

**Image = integer()**

See **external documentation**.

`setItemPosition(This, Item, Pos) -> boolean()`

Types:

**This = *wxListCtrl()***
**Item = integer()**
**Pos = {X::integer(), Y::integer()}**

See **external documentation**.

`setItemState(This, Item, State, StateMask) -> boolean()`

Types:

**This = *wxListCtrl()***
**Item = integer()**
**State = integer()**
**StateMask = integer()**

See **external documentation**.

`setItemText(This, Item, Str) -> ok`

Types:

**This = *wxListCtrl()***
**Item = integer()**
**Str = *unicode:chardata()***

See **external documentation**.

`setItemTextColour(This, Item, Col) -> ok`

Types:

**This = *wxListCtrl()***
**Item = integer()**
**Col = *wx:wx_colour()***

See **external documentation**.

`setSingleStyle(This, Style) -> ok`

Types:

**This = *wxListCtrl()***
**Style = integer()**

Equivalent to *setSingleStyle(This, Style, [])*.

`setSingleStyle(This, Style, Options::[Option]) -> ok`

Types:

**This = *wxListCtrl()***
**Style = integer()**
**Option = {add, boolean()}**

See **external documentation**.

`setTextColour(This, Col) -> ok`

Types:

**This = *wxListCtrl()***
**Col = *wx:wx_colour()***

See **external documentation**.

`setWindowStyleFlag(This, Style) -> ok`

Types:

**This = *wxListCtrl()***
**Style = integer()**

See **external documentation**.

`sortItems(This::wxListCtrl(), SortCallBack::function()) -> boolean()`

Sort the items in the list control

```
SortCallBack(Item1,Item2) -> integer()
```

SortCallBack receives the client data associated with two items to compare, and should return 0 if the items are equal, a negative value if the first item is less than the second one and a positive value if the first item is greater than the second one.
NOTE: The callback may not call other (wx) processes.

`destroy(This::wxListCtrl()) -> ok`

Destroys this object, do not use object again

# wxListEvent

Erlang module

See external documentation: **wxListEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_list_begin_drag**, **command_list_begin_rdrag**, **command_list_begin_label_edit**, **command_list_end_label_edit**, **command_list_delete_item**, **command_list_delete_all_items**, **command_list_key_down**, **command_list_insert_item**, **command_list_col_click**, **command_list_col_right_click**, **command_list_col_begin_drag**, **command_list_col_dragging**, **command_list_col_end_drag**, **command_list_item_selected**, **command_list_item_deselected**, **command_list_item_right_click**, **command_list_item_middle_click**, **command_list_item_activated**, **command_list_item_focused**, **command_list_cache_hint**

See also the message variant *#wxList{}* event record type.

This class is derived (and can use functions) from:
*wxNotifyEvent*
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxListEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getCacheFrom(This) -> integer()`

Types:

**This = *wxListEvent()***

See **external documentation**.

`getCacheTo(This) -> integer()`

Types:

**This = *wxListEvent()***

See **external documentation**.

`getKeyCode(This) -> integer()`

Types:

**This = *wxListEvent()***

See **external documentation**.

`getIndex(This) -> integer()`

Types:

**This = *wxListEvent()***

See **external documentation**.

```
getColumn(This) -> integer()
```

Types:

**This = *wxListEvent()***

See **external documentation**.

```
getPoint(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxListEvent()***

See **external documentation**.

```
getLabel(This) -> unicode:charlist()
```

Types:

**This = *wxListEvent()***

See **external documentation**.

```
getText(This) -> unicode:charlist()
```

Types:

**This = *wxListEvent()***

See **external documentation**.

```
getImage(This) -> integer()
```

Types:

**This = *wxListEvent()***

See **external documentation**.

```
getData(This) -> integer()
```

Types:

**This = *wxListEvent()***

See **external documentation**.

```
getMask(This) -> integer()
```

Types:

**This = *wxListEvent()***

See **external documentation**.

```
getItem(This) -> wxListItem:wxListItem()
```

Types:

**This = *wxListEvent()***

See **external documentation**.

```
isEditCancelled(This) -> boolean()
```

Types:

**`This = wxListEvent()`**

See **external documentation**.

# wxListItemAttr

Erlang module

See external documentation: **wxListItemAttr**.

## DATA TYPES

wxListItemAttr()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxListItemAttr()
```

See **external documentation**.

```
new(ColText, ColBack, Font) -> wxListItemAttr()
```

Types:

**ColText = *wx:wx_colour()***
**ColBack = *wx:wx_colour()***
**Font = *wxFont:wxFont()***

See **external documentation**.

```
getBackgroundColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxListItemAttr()***

See **external documentation**.

```
getFont(This) -> wxFont:wxFont()
```

Types:

**This = *wxListItemAttr()***

See **external documentation**.

```
getTextColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxListItemAttr()***

See **external documentation**.

```
hasBackgroundColour(This) -> boolean()
```

Types:

**This = *wxListItemAttr()***

See **external documentation**.

```
hasFont(This) -> boolean()
```

Types:

**This = *wxListItemAttr()***

See **external documentation**.

```
hasTextColour(This) -> boolean()
```

Types:

**This = *wxListItemAttr()***

See **external documentation**.

```
setBackgroundColour(This, ColBack) -> ok
```

Types:

**This = *wxListItemAttr()***

**ColBack = *wx:wx_colour()***

See **external documentation**.

```
setFont(This, Font) -> ok
```

Types:

**This = *wxListItemAttr()***

**Font = *wxFont:wxFont()***

See **external documentation**.

```
setTextColour(This, ColText) -> ok
```

Types:

**This = *wxListItemAttr()***

**ColText = *wx:wx_colour()***

See **external documentation**.

```
destroy(This::wxListItemAttr()) -> ok
```

Destroys this object, do not use object again

# wxListItem

Erlang module

See external documentation: **wxListItem**.

## DATA TYPES

wxListItem()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxListItem()
```

See **external documentation**.

```
new(Item) -> wxListItem()
```

Types:

**Item = *wxListItem()***

See **external documentation**.

```
clear(This) -> ok
```

Types:

**This = *wxListItem()***

See **external documentation**.

```
getAlign(This) -> wx:wx_enum()
```

Types:

**This = *wxListItem()***

See **external documentation**.
Res = ?wxLIST_FORMAT_LEFT | ?wxLIST_FORMAT_RIGHT | ?wxLIST_FORMAT_CENTRE | ?wxLIST_FORMAT_CENTER

```
getBackgroundColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxListItem()***

See **external documentation**.

```
getColumn(This) -> integer()
```

Types:

**This = *wxListItem()***

See **external documentation**.

```
getFont(This) -> wxFont:wxFont()
```

Types:

**This = *wxListItem()***

See **external documentation**.

```
getId(This) -> integer()
```

Types:

**This = *wxListItem()***

See **external documentation**.

```
getImage(This) -> integer()
```

Types:

**This = *wxListItem()***

See **external documentation**.

```
getMask(This) -> integer()
```

Types:

**This = *wxListItem()***

See **external documentation**.

```
getState(This) -> integer()
```

Types:

**This = *wxListItem()***

See **external documentation**.

```
getText(This) -> unicode:charlist()
```

Types:

**This = *wxListItem()***

See **external documentation**.

```
getTextColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxListItem()***

See **external documentation**.

```
getWidth(This) -> integer()
```

Types:

**This = *wxListItem()***

See **external documentation**.

```
setAlign(This, Align) -> ok
```

Types:

**This = *wxListItem()***

**Align = *wx:wx_enum()***

See **external documentation**.
Align = ?wxLIST_FORMAT_LEFT | ?wxLIST_FORMAT_RIGHT | ?wxLIST_FORMAT_CENTRE | ?wxLIST_FORMAT_CENTER

`setBackgroundColour(This, ColBack) -> ok`

Types:

**This = *wxListItem()***
**ColBack = *wx:wx_colour()***

See **external documentation**.

`setColumn(This, Col) -> ok`

Types:

**This = *wxListItem()***
**Col = integer()**

See **external documentation**.

`setFont(This, Font) -> ok`

Types:

**This = *wxListItem()***
**Font = *wxFont:wxFont()***

See **external documentation**.

`setId(This, Id) -> ok`

Types:

**This = *wxListItem()***
**Id = integer()**

See **external documentation**.

`setImage(This, Image) -> ok`

Types:

**This = *wxListItem()***
**Image = integer()**

See **external documentation**.

`setMask(This, Mask) -> ok`

Types:

**This = *wxListItem()***
**Mask = integer()**

See **external documentation**.

`setState(This, State) -> ok`

Types:

**This = *wxListItem()***
**State = integer()**

See **external documentation**.

`setStateMask(This, StateMask) -> ok`

Types:

**This = *wxListItem()***
**StateMask = integer()**

See **external documentation**.

`setText(This, Text) -> ok`

Types:

**This = *wxListItem()***
**Text = *unicode:chardata()***

See **external documentation**.

`setTextColour(This, ColText) -> ok`

Types:

**This = *wxListItem()***
**ColText = *wx:wx_colour()***

See **external documentation**.

`setWidth(This, Width) -> ok`

Types:

**This = *wxListItem()***
**Width = integer()**

See **external documentation**.

`destroy(This::wxListItem()) -> ok`

Destroys this object, do not use object again

# wxListView

Erlang module

See external documentation: **wxListView**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxListView()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
clearColumnImage(This, Col) -> ok
```

Types:

**This = *wxListView()***
**Col = integer()**

See **external documentation**.

```
focus(This, Index) -> ok
```

Types:

**This = *wxListView()***
**Index = integer()**

See **external documentation**.

```
getFirstSelected(This) -> integer()
```

Types:

**This = *wxListView()***

See **external documentation**.

```
getFocusedItem(This) -> integer()
```

Types:

**This = *wxListView()***

See **external documentation**.

```
getNextSelected(This, Item) -> integer()
```

Types:

**This = *wxListView()***
**Item = integer()**

See **external documentation**.

```
isSelected(This, Index) -> boolean()
```

Types:

**This = *wxListView()***
**Index = integer()**

See **external documentation**.

```
select(This, N) -> ok
```

Types:

**This = *wxListView()***
**N = integer()**

Equivalent to *select(This, N, [])*.

```
select(This, N, Options::[Option]) -> ok
```

Types:

**This = *wxListView()***
**N = integer()**
**Option = {on, boolean()}**

See **external documentation**.

```
setColumnImage(This, Col, Image) -> ok
```

Types:

**This = *wxListView()***
**Col = integer()**
**Image = integer()**

See **external documentation**.

# wxLocale

Erlang module

See external documentation: **wxLocale**.

## DATA TYPES

wxLocale()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxLocale()
```

See **external documentation**.

```
new(Language) -> wxLocale()
```

Types:

**Language = integer()**

Equivalent to *new(Language, [])*.

```
new(Language, Options::[Option]) -> wxLocale()
```

Types:

**Language = integer()**
**Option = {flags, integer()}**

See **external documentation**.

```
init(This) -> boolean()
```

Types:

**This = *wxLocale()***

Equivalent to *init(This, [])*.

```
init(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxLocale()***
**Option = {language, integer()} | {flags, integer()}**

See **external documentation**.

```
addCatalog(This, SzDomain) -> boolean()
```

Types:

**This = *wxLocale()***
**SzDomain = *unicode:chardata()***

See **external documentation**.

```
addCatalog(This, SzDomain, MsgIdLanguage, MsgIdCharset) -> boolean()
```

Types:

**This = *wxLocale()***

**SzDomain = *unicode:chardata()***

**MsgIdLanguage = *wx:wx_enum()***

**MsgIdCharset = *unicode:chardata()***

See **external documentation**.

MsgIdLanguage = ?wxLANGUAGE_DEFAULT | ?wxLANGUAGE_UNKNOWN | ?wxLANGUAGE_ABKHAZIAN | ?wxLANGUAGE_AFAR | ?wxLANGUAGE_AFRIKAANS | ?wxLANGUAGE_ALBANIAN | ?wxLANGUAGE_AMHARIC | ?wxLANGUAGE_ARABIC | ?wxLANGUAGE_ARABIC_ALGERIA | ?wxLANGUAGE_ARABIC_BAHRAIN | ?wxLANGUAGE_ARABIC_EGYPT | ?wxLANGUAGE_ARABIC_IRAQ | ?wxLANGUAGE_ARABIC_JORDAN | ?wxLANGUAGE_ARABIC_KUWAIT | ?wxLANGUAGE_ARABIC_LEBANON | ?wxLANGUAGE_ARABIC_LIBYA | ?wxLANGUAGE_ARABIC_MOROCCO | ?wxLANGUAGE_ARABIC_OMAN | ?wxLANGUAGE_ARABIC_QATAR | ?wxLANGUAGE_ARABIC_SAUDI_ARABIA | ?wxLANGUAGE_ARABIC_SUDAN | ?wxLANGUAGE_ARABIC_SYRIA | ?wxLANGUAGE_ARABIC_TUNISIA | ?wxLANGUAGE_ARABIC_UAE | ?wxLANGUAGE_ARABIC_YEMEN | ?wxLANGUAGE_ARMENIAN | ?wxLANGUAGE_ASSAMESE | ?wxLANGUAGE_AYMARA | ?wxLANGUAGE_AZERI | ?wxLANGUAGE_AZERI_CYRILLIC | ?wxLANGUAGE_AZERI_LATIN | ?wxLANGUAGE_BASHKIR | ?wxLANGUAGE_BASQUE | ?wxLANGUAGE_BELARUSIAN | ?wxLANGUAGE_BENGALI | ?wxLANGUAGE_BHUTANI | ?wxLANGUAGE_BIHARI | ?wxLANGUAGE_BISLAMA | ?wxLANGUAGE_BRETON | ?wxLANGUAGE_BULGARIAN | ?wxLANGUAGE_BURMESE | ?wxLANGUAGE_CAMBODIAN | ?wxLANGUAGE_CATALAN | ?wxLANGUAGE_CHINESE | ?wxLANGUAGE_CHINESE_SIMPLIFIED | ?wxLANGUAGE_CHINESE_TRADITIONAL | ?wxLANGUAGE_CHINESE_HONGKONG | ?wxLANGUAGE_CHINESE_MACAU | ?wxLANGUAGE_CHINESE_SINGAPORE | ?wxLANGUAGE_CHINESE_TAIWAN | ?wxLANGUAGE_CORSICAN | ?wxLANGUAGE_CROATIAN | ?wxLANGUAGE_CZECH | ?wxLANGUAGE_DANISH | ?wxLANGUAGE_DUTCH | ?wxLANGUAGE_DUTCH_BELGIAN | ?wxLANGUAGE_ENGLISH | ?wxLANGUAGE_ENGLISH_UK | ?wxLANGUAGE_ENGLISH_US | ?wxLANGUAGE_ENGLISH_AUSTRALIA | ?wxLANGUAGE_ENGLISH_BELIZE | ?wxLANGUAGE_ENGLISH_BOTSWANA | ?wxLANGUAGE_ENGLISH_CANADA | ?wxLANGUAGE_ENGLISH_CARIBBEAN | ?wxLANGUAGE_ENGLISH_DENMARK | ?wxLANGUAGE_ENGLISH_EIRE | ?wxLANGUAGE_ENGLISH_JAMAICA | ?wxLANGUAGE_ENGLISH_NEW_ZEALAND | ?wxLANGUAGE_ENGLISH_PHILIPPINES | ?wxLANGUAGE_ENGLISH_SOUTH_AFRICA | ?wxLANGUAGE_ENGLISH_TRINIDAD | ?wxLANGUAGE_ENGLISH_ZIMBABWE | ?wxLANGUAGE_ESPERANTO | ?wxLANGUAGE_ESTONIAN | ?wxLANGUAGE_FAEROESE | ?wxLANGUAGE_FARSI | ?wxLANGUAGE_FIJI | ?wxLANGUAGE_FINNISH | ?wxLANGUAGE_FRENCH | ?wxLANGUAGE_FRENCH_BELGIAN | ?wxLANGUAGE_FRENCH_CANADIAN | ?wxLANGUAGE_FRENCH_LUXEMBOURG | ?wxLANGUAGE_FRENCH_MONACO | ?wxLANGUAGE_FRENCH_SWISS | ?wxLANGUAGE_FRISIAN | ?wxLANGUAGE_GALICIAN | ?wxLANGUAGE_GEORGIAN | ?wxLANGUAGE_GERMAN | ?wxLANGUAGE_GERMAN_AUSTRIAN | ?wxLANGUAGE_GERMAN_BELGIUM | ?wxLANGUAGE_GERMAN_LIECHTENSTEIN | ?wxLANGUAGE_GERMAN_LUXEMBOURG | ?wxLANGUAGE_GERMAN_SWISS | ?wxLANGUAGE_GREEK | ?wxLANGUAGE_GREENLANDIC | ?wxLANGUAGE_GUARANI | ?wxLANGUAGE_GUJARATI | ?wxLANGUAGE_HAUSA | ?wxLANGUAGE_HEBREW | ?wxLANGUAGE_HINDI | ?wxLANGUAGE_HUNGARIAN | ?wxLANGUAGE_ICELANDIC | ?wxLANGUAGE_INDONESIAN | ?wxLANGUAGE_INTERLINGUA | ?wxLANGUAGE_INTERLINGUE | ?wxLANGUAGE_INUKTITUT | ?wxLANGUAGE_INUPIAK | ?wxLANGUAGE_IRISH | ?wxLANGUAGE_ITALIAN | ?wxLANGUAGE_ITALIAN_SWISS | ?wxLANGUAGE_JAPANESE | ?

wxLANGUAGE_JAVANESE | ?wxLANGUAGE_KANNADA | ?wxLANGUAGE_KASHMIRI | ?wxLANGUAGE_KASHMIRI_INDIA | ?wxLANGUAGE_KAZAKH | ?wxLANGUAGE_KERNEWEK | ?wxLANGUAGE_KINYARWANDA | ?wxLANGUAGE_KIRGHIZ | ?wxLANGUAGE_KIRUNDI | ?wxLANGUAGE_KONKANI | ?wxLANGUAGE_KOREAN | ?wxLANGUAGE_KURDISH | ?wxLANGUAGE_LAOTHIAN | ?wxLANGUAGE_LATIN | ?wxLANGUAGE_LATVIAN | ?wxLANGUAGE_LINGALA | ?wxLANGUAGE_LITHUANIAN | ?wxLANGUAGE_MACEDONIAN | ?wxLANGUAGE_MALAGASY | ?wxLANGUAGE_MALAY | ?wxLANGUAGE_MALAYALAM | ?wxLANGUAGE_MALAY_BRUNEI_DARUSSALAM | ?wxLANGUAGE_MALAY_MALAYSIA | ?wxLANGUAGE_MALTESE | ?wxLANGUAGE_MANIPURI | ?wxLANGUAGE_MAORI | ?wxLANGUAGE_MARATHI | ?wxLANGUAGE_MOLDAVIAN | ?wxLANGUAGE_MONGOLIAN | ?wxLANGUAGE_NAURU | ?wxLANGUAGE_NEPALI | ?wxLANGUAGE_NEPALI_INDIA | ?wxLANGUAGE_NORWEGIAN_BOKMAL | ?wxLANGUAGE_NORWEGIAN_NYNORSK | ?wxLANGUAGE_OCCITAN | ?wxLANGUAGE_ORIYA | ?wxLANGUAGE_OROMO | ?wxLANGUAGE_PASHTO | ?wxLANGUAGE_POLISH | ?wxLANGUAGE_PORTUGUESE | ?wxLANGUAGE_PORTUGUESE_BRAZILIAN | ?wxLANGUAGE_PUNJABI | ?wxLANGUAGE_QUECHUA | ?wxLANGUAGE_RHAETO_ROMANCE | ?wxLANGUAGE_ROMANIAN | ?wxLANGUAGE_RUSSIAN | ?wxLANGUAGE_RUSSIAN_UKRAINE | ?wxLANGUAGE_SAMOAN | ?wxLANGUAGE_SANGHO | ?wxLANGUAGE_SANSKRIT | ?wxLANGUAGE_SCOTS_GAELIC | ?wxLANGUAGE_SERBIAN | ?wxLANGUAGE_SERBIAN_CYRILLIC | ?wxLANGUAGE_SERBIAN_LATIN | ?wxLANGUAGE_SERBO_CROATIAN | ?wxLANGUAGE_SESOTHO | ?wxLANGUAGE_SETSWANA | ?wxLANGUAGE_SHONA | ?wxLANGUAGE_SINDHI | ?wxLANGUAGE_SINHALESE | ?wxLANGUAGE_SISWATI | ?wxLANGUAGE_SLOVAK | ?wxLANGUAGE_SLOVENIAN | ?wxLANGUAGE_SOMALI | ?wxLANGUAGE_SPANISH | ?wxLANGUAGE_SPANISH_ARGENTINA | ?wxLANGUAGE_SPANISH_BOLIVIA | ?wxLANGUAGE_SPANISH_CHILE | ?wxLANGUAGE_SPANISH_COLOMBIA | ?wxLANGUAGE_SPANISH_COSTA_RICA | ?wxLANGUAGE_SPANISH_DOMINICAN_REPUBLIC | ?wxLANGUAGE_SPANISH_ECUADOR | ?wxLANGUAGE_SPANISH_EL_SALVADOR | ?wxLANGUAGE_SPANISH_GUATEMALA | ?wxLANGUAGE_SPANISH_HONDURAS | ?wxLANGUAGE_SPANISH_MEXICAN | ?wxLANGUAGE_SPANISH_MODERN | ?wxLANGUAGE_SPANISH_NICARAGUA | ?wxLANGUAGE_SPANISH_PANAMA | ?wxLANGUAGE_SPANISH_PARAGUAY | ?wxLANGUAGE_SPANISH_PERU | ?wxLANGUAGE_SPANISH_PUERTO_RICO | ?wxLANGUAGE_SPANISH_URUGUAY | ?wxLANGUAGE_SPANISH_US | ?wxLANGUAGE_SPANISH_VENEZUELA | ?wxLANGUAGE_SUNDANESE | ?wxLANGUAGE_SWAHILI | ?wxLANGUAGE_SWEDISH | ?wxLANGUAGE_SWEDISH_FINLAND | ?wxLANGUAGE_TAGALOG | ?wxLANGUAGE_TAJIK | ?wxLANGUAGE_TAMIL | ?wxLANGUAGE_TATAR | ?wxLANGUAGE_TELUGU | ?wxLANGUAGE_THAI | ?wxLANGUAGE_TIBETAN | ?wxLANGUAGE_TIGRINYA | ?wxLANGUAGE_TONGA | ?wxLANGUAGE_TSONGA | ?wxLANGUAGE_TURKISH | ?wxLANGUAGE_TURKMEN | ?wxLANGUAGE_TWI | ?wxLANGUAGE_UIGHUR | ?wxLANGUAGE_UKRAINIAN | ?wxLANGUAGE_URDU | ?wxLANGUAGE_URDU_INDIA | ?wxLANGUAGE_URDU_PAKISTAN | ?wxLANGUAGE_UZBEK | ?wxLANGUAGE_UZBEK_CYRILLIC | ?wxLANGUAGE_UZBEK_LATIN | ?wxLANGUAGE_VIETNAMESE | ?wxLANGUAGE_VOLAPUK | ?wxLANGUAGE_WELSH | ?wxLANGUAGE_WOLOF | ?wxLANGUAGE_XHOSA | ?wxLANGUAGE_YIDDISH | ?wxLANGUAGE_YORUBA | ?wxLANGUAGE_ZHUANG | ?wxLANGUAGE_ZULU | ?wxLANGUAGE_USER_DEFINED | ?wxLANGUAGE_VALENCIAN | ?wxLANGUAGE_SAMI

`addCatalogLookupPathPrefix(Prefix) -> ok`

Types:

**`Prefix = unicode:chardata()`**

See **external documentation**.

```
getCanonicalName(This) -> unicode:charlist()
```

Types:

**This = *wxLocale()***

See **external documentation**.

```
getLanguage(This) -> integer()
```

Types:

**This = *wxLocale()***

See **external documentation**.

```
getLanguageName(Lang) -> unicode:charlist()
```

Types:

**Lang = integer()**

See **external documentation**.

```
getLocale(This) -> unicode:charlist()
```

Types:

**This = *wxLocale()***

See **external documentation**.

```
getName(This) -> unicode:charlist()
```

Types:

**This = *wxLocale()***

See **external documentation**.

```
getString(This, SzOrigString) -> unicode:charlist()
```

Types:

**This = *wxLocale()***

**SzOrigString = *unicode:chardata()***

Equivalent to *getString(This, SzOrigString, [])*.

```
getString(This, SzOrigString, Options::[Option]) -> unicode:charlist()
```

Types:

**This = *wxLocale()***

**SzOrigString = *unicode:chardata()***

**Option = {szDomain, *unicode:chardata()*}**

See **external documentation**.

```
getString(This, SzOrigString, SzOrigString2, N) -> unicode:charlist()
```

Types:

**This = *wxLocale()***

**SzOrigString = *unicode:chardata()***

**SzOrigString2 = *unicode:chardata()***

**N = integer()**

Equivalent to *getString(This, SzOrigString, SzOrigString2, N, [])*.

```
getString(This, SzOrigString, SzOrigString2, N, Options::[Option]) ->
unicode:charlist()
```

Types:

**This = *wxLocale()***
**SzOrigString = *unicode:chardata()***
**SzOrigString2 = *unicode:chardata()***
**N = integer()**
**Option = {szDomain, *unicode:chardata()*}**

See **external documentation**.

```
getHeaderValue(This, SzHeader) -> unicode:charlist()
```

Types:

**This = *wxLocale()***
**SzHeader = *unicode:chardata()***

Equivalent to *getHeaderValue(This, SzHeader, [])*.

```
getHeaderValue(This, SzHeader, Options::[Option]) -> unicode:charlist()
```

Types:

**This = *wxLocale()***
**SzHeader = *unicode:chardata()***
**Option = {szDomain, *unicode:chardata()*}**

See **external documentation**.

```
getSysName(This) -> unicode:charlist()
```

Types:

**This = *wxLocale()***

See **external documentation**.

```
getSystemEncoding() -> wx:wx_enum()
```

See **external documentation**.

Res = ?wxFONTENCODING_SYSTEM | ?wxFONTENCODING_DEFAULT | ?wxFONTENCODING_ISO8859_1 | ?wxFONTENCODING_ISO8859_2 | ?wxFONTENCODING_ISO8859_3 | ?wxFONTENCODING_ISO8859_4 | ?wxFONTENCODING_ISO8859_5 | ?wxFONTENCODING_ISO8859_6 | ?wxFONTENCODING_ISO8859_7 | ?wxFONTENCODING_ISO8859_8 | ?wxFONTENCODING_ISO8859_9 | ?wxFONTENCODING_ISO8859_10 | ?wxFONTENCODING_ISO8859_11 | ?wxFONTENCODING_ISO8859_12 | ?wxFONTENCODING_ISO8859_13 | ?wxFONTENCODING_ISO8859_14 | ?wxFONTENCODING_ISO8859_15 | ?wxFONTENCODING_ISO8859_MAX | ?wxFONTENCODING_KOI8 | ?wxFONTENCODING_KOI8_U | ?wxFONTENCODING_ALTERNATIVE | ?wxFONTENCODING_BULGARIAN | ?wxFONTENCODING_CP437 | ?wxFONTENCODING_CP850 | ?wxFONTENCODING_CP852 | ?wxFONTENCODING_CP855 | ?wxFONTENCODING_CP866 | ?wxFONTENCODING_CP874 | ?wxFONTENCODING_CP932 | ?wxFONTENCODING_CP936 | ?wxFONTENCODING_CP949 | ?wxFONTENCODING_CP950 | ?wxFONTENCODING_CP1250 | ?wxFONTENCODING_CP1251 | ?

wxFONTENCODING_CP1252 | ?wxFONTENCODING_CP1253 | ?wxFONTENCODING_CP1254 | ?wxFONTENCODING_CP1255 | ?wxFONTENCODING_CP1256 | ?wxFONTENCODING_CP1257 | ?wxFONTENCODING_CP12_MAX | ?wxFONTENCODING_UTF7 | ?wxFONTENCODING_UTF8 | ?wxFONTENCODING_EUC_JP | ?wxFONTENCODING_UTF16BE | ?wxFONTENCODING_UTF16LE | ?wxFONTENCODING_UTF32BE | ?wxFONTENCODING_UTF32LE | ?wxFONTENCODING_MACROMAN | ?wxFONTENCODING_MACJAPANESE | ?wxFONTENCODING_MACCHINESETRAD | ?wxFONTENCODING_MACKOREAN | ?wxFONTENCODING_MACARABIC | ?wxFONTENCODING_MACHEBREW | ?wxFONTENCODING_MACGREEK | ?wxFONTENCODING_MACCYRILLIC | ?wxFONTENCODING_MACDEVANAGARI | ?wxFONTENCODING_MACGURMUKHI | ?wxFONTENCODING_MACGUJARATI | ?wxFONTENCODING_MACORIYA | ?wxFONTENCODING_MACBENGALI | ?wxFONTENCODING_MACTAMIL | ?wxFONTENCODING_MACTELUGU | ?wxFONTENCODING_MACKANNADA | ?wxFONTENCODING_MACMALAJALAM | ?wxFONTENCODING_MACSINHALESE | ?wxFONTENCODING_MACBURMESE | ?wxFONTENCODING_MACKHMER | ?wxFONTENCODING_MACTHAI | ?wxFONTENCODING_MACLAOTIAN | ?wxFONTENCODING_MACGEORGIAN | ?wxFONTENCODING_MACARMENIAN | ?wxFONTENCODING_MACCHINESESIMP | ?wxFONTENCODING_MACTIBETAN | ?wxFONTENCODING_MACMONGOLIAN | ?wxFONTENCODING_MACETHIOPIC | ?wxFONTENCODING_MACCENTRALEUR | ?wxFONTENCODING_MACVIATNAMESE | ?wxFONTENCODING_MACARABICEXT | ?wxFONTENCODING_MACSYMBOL | ?wxFONTENCODING_MACDINGBATS | ?wxFONTENCODING_MACTURKISH | ?wxFONTENCODING_MACCROATIAN | ?wxFONTENCODING_MACICELANDIC | ?wxFONTENCODING_MACROMANIAN | ?wxFONTENCODING_MACCELTIC | ?wxFONTENCODING_MACGAELIC | ?wxFONTENCODING_MACKEYBOARD | ?wxFONTENCODING_MAX | ?wxFONTENCODING_MACMIN | ?wxFONTENCODING_MACMAX | ?wxFONTENCODING_UTF16 | ?wxFONTENCODING_UTF32 | ?wxFONTENCODING_UNICODE | ?wxFONTENCODING_GB2312 | ?wxFONTENCODING_BIG5 | ?wxFONTENCODING_SHIFT_JIS

```
getSystemEncodingName() -> unicode:charlist()
```

See **external documentation**.

```
getSystemLanguage() -> integer()
```

See **external documentation**.

```
isLoaded(This, SzDomain) -> boolean()
```

Types:

**This = *wxLocale()***

**SzDomain = *unicode:chardata()***

See **external documentation**.

```
isOk(This) -> boolean()
```

Types:

**This = *wxLocale()***

See **external documentation**.

```
destroy(This::wxLocale()) -> ok
```

Destroys this object, do not use object again

# wxLogNull

Erlang module

See external documentation: **wxLogNull**.

## DATA TYPES

wxLogNull()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxLogNull()
```

See **external documentation**.

```
destroy(This::wxLogNull()) -> ok
```

Destroys this object, do not use object again

# wxMask

Erlang module

See external documentation: **wxMask**.

## DATA TYPES

wxMask()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxMask()`

See **external documentation**.

`new(Bitmap) -> wxMask()`

Types:

**Bitmap = *wxBitmap:wxBitmap()***

See **external documentation**.

`new(Bitmap, PaletteIndex) -> wxMask()`

Types:

**Bitmap = *wxBitmap:wxBitmap()***
**PaletteIndex = integer()**

See **external documentation**.
Also:
new(Bitmap, Colour) -> wxMask() when
Bitmap::wxBitmap:wxBitmap(), Colour::wx:wx_colour().

`create(This, Bitmap) -> boolean()`

Types:

**This = *wxMask()***
**Bitmap = *wxBitmap:wxBitmap()***

See **external documentation**.

`create(This, Bitmap, PaletteIndex) -> boolean()`

Types:

**This = *wxMask()***
**Bitmap = *wxBitmap:wxBitmap()***
**PaletteIndex = integer()**

See **external documentation**.
Also:

create(This, Bitmap, Colour) -> boolean() when
This::wxMask(), Bitmap::wxBitmap:wxBitmap(), Colour::wx:wx_colour().

```
destroy(This::wxMask()) -> ok
```

Destroys this object, do not use object again

# wxMaximizeEvent

Erlang module

See external documentation: **wxMaximizeEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**maximize**

See also the message variant *#wxMaximize{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxMaximizeEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxMDIChildFrame

Erlang module

See external documentation: **wxMDIChildFrame**.

This class is derived (and can use functions) from:
*wxFrame*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxMDIChildFrame()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxMDIChildFrame()
```

See **external documentation**.

```
new(Parent, Id, Title) -> wxMDIChildFrame()
```

Types:

**Parent = *wxMDIParentFrame:wxMDIParentFrame()***
**Id = integer()**
**Title = *unicode:chardata()***

Equivalent to *new(Parent, Id, Title, [])*.

```
new(Parent, Id, Title, Options::[Option]) -> wxMDIChildFrame()
```

Types:

**Parent = *wxMDIParentFrame:wxMDIParentFrame()***
**Id = integer()**
**Title = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
activate(This) -> ok
```

Types:

**This = *wxMDIChildFrame()***

See **external documentation**.

```
create(This, Parent, Id, Title) -> boolean()
```

Types:

**This = *wxMDIChildFrame()***
**Parent = *wxMDIParentFrame:wxMDIParentFrame()***
**Id = integer()**
**Title = *unicode:chardata()***

Equivalent to *create(This, Parent, Id, Title, [])*.

```
create(This, Parent, Id, Title, Options::[Option]) -> boolean()
```

Types:

**This = *wxMDIChildFrame()***
**Parent = *wxMDIParentFrame:wxMDIParentFrame()***
**Id = integer()**
**Title = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
maximize(This) -> ok
```

Types:

**This = *wxMDIChildFrame()***

Equivalent to *maximize(This, [])*.

```
maximize(This, Options::[Option]) -> ok
```

Types:

**This = *wxMDIChildFrame()***
**Option = {maximize, boolean()}**

See **external documentation**.

```
restore(This) -> ok
```

Types:

**This = *wxMDIChildFrame()***

See **external documentation**.

```
destroy(This::wxMDIChildFrame()) -> ok
```

Destroys this object, do not use object again

# wxMDIClientWindow

Erlang module

See external documentation: **wxMDIClientWindow**.

This class is derived (and can use functions) from:
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxMDIClientWindow()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxMDIClientWindow()
```

See **external documentation**.

```
new(Parent) -> wxMDIClientWindow()
```

Types:

**Parent = *wxMDIParentFrame:wxMDIParentFrame()***

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxMDIClientWindow()
```

Types:

**Parent = *wxMDIParentFrame:wxMDIParentFrame()***
**Option = {style, integer()}**

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

```
createClient(This, Parent) -> boolean()
```

Types:

**This = *wxMDIClientWindow()***
**Parent = *wxMDIParentFrame:wxMDIParentFrame()***

Equivalent to *createClient(This, Parent, [])*.

```
createClient(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxMDIClientWindow()***
**Parent = *wxMDIParentFrame:wxMDIParentFrame()***
**Option = {style, integer()}**

See **external documentation**.

```
destroy(This::wxMDIClientWindow()) -> ok
```

Destroys this object, do not use object again

# wxMDIParentFrame

Erlang module

See external documentation: **wxMDIParentFrame**.

This class is derived (and can use functions) from:
*wxFrame*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxMDIParentFrame()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxMDIParentFrame()
```

See **external documentation**.

```
new(Parent, Id, Title) -> wxMDIParentFrame()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***

Equivalent to *new(Parent, Id, Title, [])*.

```
new(Parent, Id, Title, Options::[Option]) -> wxMDIParentFrame()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
activateNext(This) -> ok
```

Types:

**This = *wxMDIParentFrame()***

See **external documentation**.

```
activatePrevious(This) -> ok
```

Types:

**This = *wxMDIParentFrame()***

See **external documentation**.

```
arrangeIcons(This) -> ok
```

Types:

**This = *wxMDIParentFrame()***

See **external documentation**.

```
cascade(This) -> ok
```

Types:

**This = *wxMDIParentFrame()***

See **external documentation**.

```
create(This, Parent, Id, Title) -> boolean()
```

Types:

**This = *wxMDIParentFrame()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***

Equivalent to *create(This, Parent, Id, Title, [])*.

```
create(This, Parent, Id, Title, Options::[Option]) -> boolean()
```

Types:

**This = *wxMDIParentFrame()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
getActiveChild(This) -> wxMDIChildFrame:wxMDIChildFrame()
```

Types:

**This = *wxMDIParentFrame()***

See **external documentation**.

```
getClientWindow(This) -> wxMDIClientWindow:wxMDIClientWindow()
```

Types:

**This = *wxMDIParentFrame()***

See **external documentation**.

```
tile(This) -> ok
```

Types:

**This = *wxMDIParentFrame()***

Equivalent to *tile(This, [])*.

```
tile(This, Options::[Option]) -> ok
```

Types:

**This = *wxMDIParentFrame()***

**Option = {orient, *wx:wx_enum()*}**

See **external documentation**.
Orient = ?wxHORIZONTAL | ?wxVERTICAL | ?wxBOTH

```
destroy(This::wxMDIParentFrame()) -> ok
```

Destroys this object, do not use object again

# wxMemoryDC

Erlang module

See external documentation: **wxMemoryDC**.

This class is derived (and can use functions) from:
*wxDC*

## DATA TYPES

wxMemoryDC()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxMemoryDC()`

See **external documentation**.

`new(Dc) -> wxMemoryDC()`

Types:

**Dc = *wxDC:wxDC() | wxBitmap:wxBitmap()***

See **external documentation**.

`selectObject(This, Bmp) -> ok`

Types:

**This = *wxMemoryDC()***
**Bmp = *wxBitmap:wxBitmap()***

See **external documentation**.

`selectObjectAsSource(This, Bmp) -> ok`

Types:

**This = *wxMemoryDC()***
**Bmp = *wxBitmap:wxBitmap()***

See **external documentation**.

`destroy(This::wxMemoryDC()) -> ok`

Destroys this object, do not use object again

# wxMenuBar

Erlang module

See external documentation: **wxMenuBar**.

This class is derived (and can use functions) from:
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxMenuBar()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxMenuBar()
```

See **external documentation**.

```
new(Style) -> wxMenuBar()
```

Types:

**Style = integer()**

See **external documentation**.

```
append(This, Menu, Title) -> boolean()
```

Types:

**This = *wxMenuBar()***
**Menu = *wxMenu:wxMenu()***
**Title = *unicode:chardata()***

See **external documentation**.

```
check(This, Itemid, Check) -> ok
```

Types:

**This = *wxMenuBar()***
**Itemid = integer()**
**Check = boolean()**

See **external documentation**.

```
enable(This) -> boolean()
```

Types:

**This = *wxMenuBar()***

Equivalent to *enable(This, [])*.

```
enable(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxMenuBar()***
**Option = {enable, boolean()}**

See **external documentation**.

```
enable(This, Itemid, Enable) -> ok
```

Types:

**This = *wxMenuBar()***
**Itemid = integer()**
**Enable = boolean()**

See **external documentation**.

```
enableTop(This, Pos, Flag) -> ok
```

Types:

**This = *wxMenuBar()***
**Pos = integer()**
**Flag = boolean()**

See **external documentation**.

```
findMenu(This, Title) -> integer()
```

Types:

**This = *wxMenuBar()***
**Title = *unicode:chardata()***

See **external documentation**.

```
findMenuItem(This, MenuString, ItemString) -> integer()
```

Types:

**This = *wxMenuBar()***
**MenuString = *unicode:chardata()***
**ItemString = *unicode:chardata()***

See **external documentation**.

```
findItem(This, Id) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenuBar()***
**Id = integer()**

See **external documentation**.

```
getHelpString(This, Itemid) -> unicode:charlist()
```

Types:

**This = *wxMenuBar()***
**Itemid = integer()**

See **external documentation**.

```
getLabel(This) -> unicode:charlist()
```

Types:

**This = *wxMenuBar()***

See **external documentation**.

```
getLabel(This, Itemid) -> unicode:charlist()
```

Types:

**This = *wxMenuBar()***
**Itemid = integer()**

See **external documentation**.

```
getLabelTop(This, Pos) -> unicode:charlist()
```

Types:

**This = *wxMenuBar()***
**Pos = integer()**

See **external documentation**.

```
getMenu(This, Pos) -> wxMenu:wxMenu()
```

Types:

**This = *wxMenuBar()***
**Pos = integer()**

See **external documentation**.

```
getMenuCount(This) -> integer()
```

Types:

**This = *wxMenuBar()***

See **external documentation**.

```
insert(This, Pos, Menu, Title) -> boolean()
```

Types:

**This = *wxMenuBar()***
**Pos = integer()**
**Menu = *wxMenu:wxMenu()***
**Title = *unicode:chardata()***

See **external documentation**.

```
isChecked(This, Itemid) -> boolean()
```

Types:

**This = *wxMenuBar()***
**Itemid = integer()**

See **external documentation**.

```
isEnabled(This) -> boolean()
```

Types:

**This = *wxMenuBar()***

See **external documentation**.

```
isEnabled(This, Itemid) -> boolean()
```

Types:

**This = *wxMenuBar()***
**Itemid = integer()**

See **external documentation**.

```
remove(This, Pos) -> wxMenu:wxMenu()
```

Types:

**This = *wxMenuBar()***
**Pos = integer()**

See **external documentation**.

```
replace(This, Pos, Menu, Title) -> wxMenu:wxMenu()
```

Types:

**This = *wxMenuBar()***
**Pos = integer()**
**Menu = *wxMenu:wxMenu()***
**Title = *unicode:chardata()***

See **external documentation**.

```
setHelpString(This, Itemid, HelpString) -> ok
```

Types:

**This = *wxMenuBar()***
**Itemid = integer()**
**HelpString = *unicode:chardata()***

See **external documentation**.

```
setLabel(This, S) -> ok
```

Types:

**This = *wxMenuBar()***
**S = *unicode:chardata()***

See **external documentation**.

```
setLabel(This, Itemid, Label) -> ok
```

Types:

**This = *wxMenuBar()***
**Itemid = integer()**
**Label = *unicode:chardata()***

See **external documentation**.

```
setLabelTop(This, Pos, Label) -> ok
```

Types:

**This = *wxMenuBar()***
**Pos = integer()**
**Label = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxMenuBar()) -> ok
```

Destroys this object, do not use object again

# wxMenu

Erlang module

See external documentation: **wxMenu**.

This class is derived (and can use functions) from:
*wxEvtHandler*

## DATA TYPES

wxMenu()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxMenu()`

Equivalent to *new([])*.

`new(Options::[Option]) -> wxMenu()`

Types:

**`Option = {style, integer()}`**

See **external documentation**.

`new(Title, Options::[Option]) -> wxMenu()`

Types:

**`Title = unicode:chardata()`**
**`Option = {style, integer()}`**

See **external documentation**.

`append(This, Item) -> wxMenuItem:wxMenuItem()`

Types:

**`This = wxMenu()`**
**`Item = wxMenuItem:wxMenuItem()`**

See **external documentation**.

`append(This, Itemid, Text) -> wxMenuItem:wxMenuItem()`

Types:

**`This = wxMenu()`**
**`Itemid = integer()`**
**`Text = unicode:chardata()`**

Equivalent to *append(This, Itemid, Text, [])*.

```
append(This, Itemid, Text, Submenu) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***
**Submenu = *wxMenu()***

See **external documentation**.
Also:
append(This, Itemid, Text, [Option]) -> wxMenuItem:wxMenuItem() when
This::wxMenu(), Itemid::integer(), Text::unicode:chardata(),
Option :: {'help', unicode:chardata()}
| {'kind', wx:wx_enum()}.

Kind = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

```
append(This, Itemid, Text, Help, IsCheckable) -> ok
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***
**Help = *unicode:chardata()***
**IsCheckable = boolean()**

See **external documentation**.
Also:
append(This, Itemid, Text, Submenu, [Option]) -> wxMenuItem:wxMenuItem() when
This::wxMenu(), Itemid::integer(), Text::unicode:chardata(), Submenu::wxMenu(),
Option :: {'help', unicode:chardata()}.

```
appendCheckItem(This, Itemid, Text) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***

Equivalent to *appendCheckItem(This, Itemid, Text, [])*.

```
appendCheckItem(This, Itemid, Text, Options::[Option]) ->
wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***
**Option = {help, *unicode:chardata()*}**

See **external documentation**.

```
appendRadioItem(This, Itemid, Text) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***

Equivalent to *appendRadioItem(This, Itemid, Text, [])*.

```
appendRadioItem(This, Itemid, Text, Options::[Option]) ->
wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***
**Option = {help, *unicode:chardata()*}**

See **external documentation**.

```
appendSeparator(This) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***

See **external documentation**.

```
break(This) -> ok
```

Types:

**This = *wxMenu()***

See **external documentation**.

```
check(This, Itemid, Check) -> ok
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Check = boolean()**

See **external documentation**.

```
delete(This, Itemid) -> boolean()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**

See **external documentation**.
Also:
delete(This, Item) -> boolean() when
This::wxMenu(), Item::wxMenuItem:wxMenuItem().

```
Destroy(This, Itemid) -> boolean()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**

See **external documentation**.
Also:
'Destroy'(This, Item) -> boolean() when
This::wxMenu(), Item::wxMenuItem:wxMenuItem().

```
enable(This, Itemid, Enable) -> ok
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Enable = boolean()**

See **external documentation**.

```
findItem(This, Itemid) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**

See **external documentation**.
Also:
findItem(This, Item) -> integer() when
This::wxMenu(), Item::unicode:chardata().

```
findItemByPosition(This, Position) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Position = integer()**

See **external documentation**.

```
getHelpString(This, Itemid) -> unicode:charlist()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**

See **external documentation**.

```
getLabel(This, Itemid) -> unicode:charlist()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**

See **external documentation**.

```
getMenuItemCount(This) -> integer()
```

Types:

**This = *wxMenu()***

See **external documentation**.

`getMenuItems(This) -> [wxMenuItem:wxMenuItem()]`

Types:

**This = *wxMenu()***

See **external documentation**.

`getTitle(This) -> unicode:charlist()`

Types:

**This = *wxMenu()***

See **external documentation**.

`insert(This, Pos, Itemid) -> wxMenuItem:wxMenuItem()`

Types:

**This = *wxMenu()***
**Pos = integer()**
**Itemid = integer()**

See **external documentation**.
Also:
insert(This, Pos, Item) -> wxMenuItem:wxMenuItem() when
This::wxMenu(), Pos::integer(), Item::wxMenuItem:wxMenuItem().

Kind = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

`insert(This, Pos, Itemid, Options::[Option]) -> wxMenuItem:wxMenuItem()`

Types:

**This = *wxMenu()***
**Pos = integer()**
**Itemid = integer()**
**Option = {text, *unicode:chardata()*} | {help, *unicode:chardata()*} | {kind, *wx:wx_enum()*}**

See **external documentation**.
Kind = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

`insert(This, Pos, Itemid, Text, Submenu) -> wxMenuItem:wxMenuItem()`

Types:

**This = *wxMenu()***
**Pos = integer()**
**Itemid = integer()**
**Text = *unicode:chardata()***
**Submenu = *wxMenu()***

Equivalent to *insert(This, Pos, Itemid, Text, Submenu, [])*.

```
insert(This, Pos, Itemid, Text, Help, IsCheckable) -> ok
```

Types:

**This = *wxMenu()***
**Pos = integer()**
**Itemid = integer()**
**Text = *unicode:chardata()***
**Help = *unicode:chardata()***
**IsCheckable = boolean()**

See **external documentation**.
Also:
insert(This, Pos, Itemid, Text, Submenu, [Option]) -> wxMenuItem:wxMenuItem() when This::wxMenu(), Pos::integer(), Itemid::integer(), Text::unicode:chardata(), Submenu::wxMenu(), Option :: {'help', unicode:chardata()}.

```
insertCheckItem(This, Pos, Itemid, Text) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Pos = integer()**
**Itemid = integer()**
**Text = *unicode:chardata()***

Equivalent to *insertCheckItem(This, Pos, Itemid, Text, [])*.

```
insertCheckItem(This, Pos, Itemid, Text, Options::[Option]) ->
wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Pos = integer()**
**Itemid = integer()**
**Text = *unicode:chardata()***
**Option = {help, *unicode:chardata()*}**

See **external documentation**.

```
insertRadioItem(This, Pos, Itemid, Text) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Pos = integer()**
**Itemid = integer()**
**Text = *unicode:chardata()***

Equivalent to *insertRadioItem(This, Pos, Itemid, Text, [])*.

```
insertRadioItem(This, Pos, Itemid, Text, Options::[Option]) ->
wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***

**Pos = integer()**
**Itemid = integer()**
**Text = *unicode:chardata()***
**Option = {help, *unicode:chardata()*}**

See **external documentation**.

`insertSeparator(This, Pos) -> wxMenuItem:wxMenuItem()`

Types:

**This = *wxMenu()***
**Pos = integer()**

See **external documentation**.

`isChecked(This, Itemid) -> boolean()`

Types:

**This = *wxMenu()***
**Itemid = integer()**

See **external documentation**.

`isEnabled(This, Itemid) -> boolean()`

Types:

**This = *wxMenu()***
**Itemid = integer()**

See **external documentation**.

`prepend(This, Itemid) -> wxMenuItem:wxMenuItem()`

Types:

**This = *wxMenu()***
**Itemid = integer()**

See **external documentation**.
Also:
prepend(This, Item) -> wxMenuItem:wxMenuItem() when
This::wxMenu(), Item::wxMenuItem:wxMenuItem().

Kind = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

`prepend(This, Itemid, Options::[Option]) -> wxMenuItem:wxMenuItem()`

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Option = {text, *unicode:chardata()*} | {help, *unicode:chardata()*} | {kind, *wx:wx_enum()*}**

See **external documentation**.
Kind = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

```
prepend(This, Itemid, Text, Submenu) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***
**Submenu = *wxMenu()***

Equivalent to *prepend(This, Itemid, Text, Submenu, [])*.

```
prepend(This, Itemid, Text, Help, IsCheckable) -> ok
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***
**Help = *unicode:chardata()***
**IsCheckable = boolean()**

See **external documentation**.
Also:
prepend(This, Itemid, Text, Submenu, [Option]) -> wxMenuItem:wxMenuItem() when This::wxMenu(), Itemid::integer(), Text::unicode:chardata(), Submenu::wxMenu(), Option :: {'help', unicode:chardata()}.

```
prependCheckItem(This, Itemid, Text) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***

Equivalent to *prependCheckItem(This, Itemid, Text, [])*.

```
prependCheckItem(This, Itemid, Text, Options::[Option]) ->
wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***
**Option = {help, *unicode:chardata()*}**

See **external documentation**.

```
prependRadioItem(This, Itemid, Text) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***

Equivalent to *prependRadioItem(This, Itemid, Text, [])*.

```
prependRadioItem(This, Itemid, Text, Options::[Option]) ->
wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Text = *unicode:chardata()***
**Option = {help, *unicode:chardata()*}**

See **external documentation**.

```
prependSeparator(This) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***

See **external documentation**.

```
remove(This, Itemid) -> wxMenuItem:wxMenuItem()
```

Types:

**This = *wxMenu()***
**Itemid = integer()**

See **external documentation**.
Also:
remove(This, Item) -> wxMenuItem:wxMenuItem() when
This::wxMenu(), Item::wxMenuItem:wxMenuItem().

```
setHelpString(This, Itemid, HelpString) -> ok
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**HelpString = *unicode:chardata()***

See **external documentation**.

```
setLabel(This, Itemid, Label) -> ok
```

Types:

**This = *wxMenu()***
**Itemid = integer()**
**Label = *unicode:chardata()***

See **external documentation**.

```
setTitle(This, Title) -> ok
```

Types:

**This = *wxMenu()***
**Title = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxMenu()) -> ok
```

Destroys this object, do not use object again

# wxMenuEvent

Erlang module

See external documentation: **wxMenuEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**menu_open**, **menu_close**, **menu_highlight**

See also the message variant *#wxMenu{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxMenuEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getMenu(This) -> wxMenu:wxMenu()`

Types:

**This = *wxMenuEvent()***

See **external documentation**.

`getMenuId(This) -> integer()`

Types:

**This = *wxMenuEvent()***

See **external documentation**.

`isPopup(This) -> boolean()`

Types:

**This = *wxMenuEvent()***

See **external documentation**.

# wxMenuItem

Erlang module

See external documentation: **wxMenuItem**.

## DATA TYPES

wxMenuItem()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxMenuItem()
```

Equivalent to *new([])*.

```
new(Options::[Option]) -> wxMenuItem()
```

Types:

**Option = {parentMenu, *wxMenu:wxMenu()*} | {id, integer()} | {text, *unicode:chardata()*} | {help, *unicode:chardata()*} | {kind, *wx:wx_enum()*} | {subMenu, *wxMenu:wxMenu()*}**

See **external documentation**.
Kind = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

```
check(This) -> ok
```

Types:

**This = *wxMenuItem()***

Equivalent to *check(This, [])*.

```
check(This, Options::[Option]) -> ok
```

Types:

**This = *wxMenuItem()***
**Option = {check, boolean()}**

See **external documentation**.

```
enable(This) -> ok
```

Types:

**This = *wxMenuItem()***

Equivalent to *enable(This, [])*.

```
enable(This, Options::[Option]) -> ok
```

Types:

**This = *wxMenuItem()***
**Option = {enable, boolean()}**

See **external documentation**.

`getBitmap(This) -> wxBitmap:wxBitmap()`

Types:

**This = *wxMenuItem()***

See **external documentation**.

`getHelp(This) -> unicode:charlist()`

Types:

**This = *wxMenuItem()***

See **external documentation**.

`getId(This) -> integer()`

Types:

**This = *wxMenuItem()***

See **external documentation**.

`getKind(This) -> wx:wx_enum()`

Types:

**This = *wxMenuItem()***

See **external documentation**.
Res = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

`getLabel(This) -> unicode:charlist()`

Types:

**This = *wxMenuItem()***

See **external documentation**.

`getLabelFromText(Text) -> unicode:charlist()`

Types:

**Text = *unicode:chardata()***

See **external documentation**.

`getMenu(This) -> wxMenu:wxMenu()`

Types:

**This = *wxMenuItem()***

See **external documentation**.

`getText(This) -> unicode:charlist()`

Types:

**This = *wxMenuItem()***

See **external documentation**.

```
getSubMenu(This) -> wxMenu:wxMenu()
```

Types:

**This = *wxMenuItem()***

See **external documentation**.

```
isCheckable(This) -> boolean()
```

Types:

**This = *wxMenuItem()***

See **external documentation**.

```
isChecked(This) -> boolean()
```

Types:

**This = *wxMenuItem()***

See **external documentation**.

```
isEnabled(This) -> boolean()
```

Types:

**This = *wxMenuItem()***

See **external documentation**.

```
isSeparator(This) -> boolean()
```

Types:

**This = *wxMenuItem()***

See **external documentation**.

```
isSubMenu(This) -> boolean()
```

Types:

**This = *wxMenuItem()***

See **external documentation**.

```
setBitmap(This, Bitmap) -> ok
```

Types:

**This = *wxMenuItem()***

**Bitmap = *wxBitmap:wxBitmap()***

See **external documentation**.

```
setHelp(This, Str) -> ok
```

Types:

**This = *wxMenuItem()***

**Str = *unicode:chardata()***

See **external documentation**.

```
setMenu(This, Menu) -> ok
```

Types:

**This = *wxMenuItem()***

**Menu = *wxMenu:wxMenu()***

See **external documentation**.

```
setSubMenu(This, Menu) -> ok
```

Types:

**This = *wxMenuItem()***

**Menu = *wxMenu:wxMenu()***

See **external documentation**.

```
setText(This, Str) -> ok
```

Types:

**This = *wxMenuItem()***

**Str = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxMenuItem()) -> ok
```

Destroys this object, do not use object again

# wxMessageDialog

Erlang module

See external documentation: **wxMessageDialog**.

This class is derived (and can use functions) from:
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxMessageDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Parent, Message) -> wxMessageDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Message = *unicode:chardata()***

Equivalent to *new(Parent, Message, [])*.

```
new(Parent, Message, Options::[Option]) -> wxMessageDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Message = *unicode:chardata()***
**Option = {caption, *unicode:chardata()*} | {style, integer()} | {pos, {X::integer(), Y::integer()}}**

See **external documentation**.

```
destroy(This::wxMessageDialog()) -> ok
```

Destroys this object, do not use object again

# wxMiniFrame

Erlang module

See external documentation: **wxMiniFrame**.

This class is derived (and can use functions) from:
*wxFrame*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxMiniFrame()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxMiniFrame()
```

See **external documentation**.

```
new(Parent, Id, Title) -> wxMiniFrame()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***

Equivalent to *new(Parent, Id, Title, [])*.

```
new(Parent, Id, Title, Options::[Option]) -> wxMiniFrame()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
create(This, Parent, Id, Title) -> boolean()
```

Types:

**This = *wxMiniFrame()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***

Equivalent to *create(This, Parent, Id, Title, []).*

```
create(This, Parent, Id, Title, Options::[Option]) -> boolean()
```

Types:

**This = *wxMiniFrame()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Title = *unicode:chardata()***

**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
destroy(This::wxMiniFrame()) -> ok
```

Destroys this object, do not use object again

# wxMirrorDC

Erlang module

See external documentation: **wxMirrorDC**.

This class is derived (and can use functions) from:
*wxDC*

## DATA TYPES

wxMirrorDC()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new(Dc, Mirror) -> wxMirrorDC()`

Types:

**Dc = *wxDC:wxDC()***
**Mirror = boolean()**

See **external documentation**.

`destroy(This::wxMirrorDC()) -> ok`

Destroys this object, do not use object again

# wxMouseCaptureChangedEvent

Erlang module

See external documentation: **wxMouseCaptureChangedEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**mouse_capture_changed**

See also the message variant *#wxMouseCaptureChanged{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxMouseCaptureChangedEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getCapturedWindow(This) -> wxWindow:wxWindow()`

Types:

**`This = wxMouseCaptureChangedEvent()`**

See **external documentation**.

# wxMouseCaptureLostEvent

Erlang module

See external documentation: **wxMouseCaptureLostEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**mouse_capture_lost**

See also the message variant *#wxMouseCaptureLost{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxMouseCaptureLostEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxMouseEvent

Erlang module

See external documentation: **wxMouseEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**left_down**, **left_up**, **middle_down**, **middle_up**, **right_down**, **right_up**, **motion**, **enter_window**, **leave_window**, **left_dclick**, **middle_dclick**, **right_dclick**, **mousewheel**

See also the message variant *#wxMouse{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxMouseEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
altDown(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
button(This, But) -> boolean()
```

Types:

**This = *wxMouseEvent()***
**But = integer()**

See **external documentation**.

```
buttonDClick(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

Equivalent to *buttonDClick(This, [])*.

```
buttonDClick(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxMouseEvent()***
**Option = {but, integer()}**

See **external documentation**.

```
buttonDown(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

Equivalent to *buttonDown(This, [])*.

```
buttonDown(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxMouseEvent()***

**Option = {but, integer()}**

See **external documentation**.

```
buttonUp(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

Equivalent to *buttonUp(This, [])*.

```
buttonUp(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxMouseEvent()***

**Option = {but, integer()}**

See **external documentation**.

```
cmdDown(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
controlDown(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
dragging(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
entering(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
getButton(This) -> integer()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
getLogicalPosition(This, Dc) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxMouseEvent()***

**Dc = *wxDC:wxDC()***

See **external documentation**.

```
getLinesPerAction(This) -> integer()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
getWheelRotation(This) -> integer()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
getWheelDelta(This) -> integer()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
getX(This) -> integer()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
getY(This) -> integer()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
isButton(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

`isPageScroll(This) -> boolean()`

Types:

**This = *wxMouseEvent()***

See **external documentation**.

`leaving(This) -> boolean()`

Types:

**This = *wxMouseEvent()***

See **external documentation**.

`leftDClick(This) -> boolean()`

Types:

**This = *wxMouseEvent()***

See **external documentation**.

`leftDown(This) -> boolean()`

Types:

**This = *wxMouseEvent()***

See **external documentation**.

`leftIsDown(This) -> boolean()`

Types:

**This = *wxMouseEvent()***

See **external documentation**.

`leftUp(This) -> boolean()`

Types:

**This = *wxMouseEvent()***

See **external documentation**.

`metaDown(This) -> boolean()`

Types:

**This = *wxMouseEvent()***

See **external documentation**.

`middleDClick(This) -> boolean()`

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
middleDown(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
middleIsDown(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
middleUp(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
moving(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
rightDClick(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
rightDown(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
rightIsDown(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
rightUp(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

```
shiftDown(This) -> boolean()
```

Types:

**This = *wxMouseEvent()***

See **external documentation**.

# wxMoveEvent

Erlang module

See external documentation: **wxMoveEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**move**

See also the message variant *#wxMove{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxMoveEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxMoveEvent()***

See **external documentation**.

# wxMultiChoiceDialog

Erlang module

See external documentation: **wxMultiChoiceDialog**.

This class is derived (and can use functions) from:
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxMultiChoiceDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxMultiChoiceDialog()
```

See **external documentation**.

```
new(Parent, Message, Caption, Choices) -> wxMultiChoiceDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Message = *unicode:chardata()***
**Caption = *unicode:chardata()***
**Choices = [*unicode:chardata()*]**

Equivalent to *new(Parent, Message, Caption, Choices, [])*.

```
new(Parent, Message, Caption, Choices, Options::[Option]) ->
wxMultiChoiceDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Message = *unicode:chardata()***
**Caption = *unicode:chardata()***
**Choices = [*unicode:chardata()*]**
**Option = {style, integer()} | {pos, {X::integer(), Y::integer()}}**

See **external documentation**.

```
getSelections(This) -> [integer()]
```

Types:

**This = *wxMultiChoiceDialog()***

See **external documentation**.

```
setSelections(This, Selections) -> ok
```

Types:

**This = *wxMultiChoiceDialog()***

**Selections = [integer()]**

See **external documentation**.

```
destroy(This::wxMultiChoiceDialog()) -> ok
```

Destroys this object, do not use object again

# wxNavigationKeyEvent

Erlang module

See external documentation: **wxNavigationKeyEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**navigation_key**

See also the message variant *#wxNavigationKey{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxNavigationKeyEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getDirection(This) -> boolean()`

Types:

**This = *wxNavigationKeyEvent()***

See **external documentation**.

`setDirection(This, BForward) -> ok`

Types:

**This = *wxNavigationKeyEvent()***
**BForward = boolean()**

See **external documentation**.

`isWindowChange(This) -> boolean()`

Types:

**This = *wxNavigationKeyEvent()***

See **external documentation**.

`setWindowChange(This, BIs) -> ok`

Types:

**This = *wxNavigationKeyEvent()***
**BIs = boolean()**

See **external documentation**.

`isFromTab(This) -> boolean()`

Types:

**This = *wxNavigationKeyEvent()***

See **external documentation**.

`setFromTab(This, BIs) -> ok`

Types:

**This = *wxNavigationKeyEvent()***

**BIs = boolean()**

See **external documentation**.

`getCurrentFocus(This) -> wxWindow:wxWindow()`

Types:

**This = *wxNavigationKeyEvent()***

See **external documentation**.

`setCurrentFocus(This, Win) -> ok`

Types:

**This = *wxNavigationKeyEvent()***

**Win = *wxWindow:wxWindow()***

See **external documentation**.

# wxNotebook

Erlang module

See external documentation: **wxNotebook**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxNotebook()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxNotebook()
```

See **external documentation**.

```
new(Parent, Winid) -> wxNotebook()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Winid = integer()**

Equivalent to *new(Parent, Winid, [])*.

```
new(Parent, Winid, Options::[Option]) -> wxNotebook()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Winid = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
addPage(This, Page, Text) -> boolean()
```

Types:

**This = *wxNotebook()***
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***

Equivalent to *addPage(This, Page, Text, [])*.

```
addPage(This, Page, Text, Options::[Option]) -> boolean()
```

Types:

**This = *wxNotebook()***
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***
**Option = {bSelect, boolean()} | {imageId, integer()}**

See **external documentation**.

`advanceSelection(This) -> ok`

Types:

**This = *wxNotebook()***

Equivalent to *advanceSelection(This, [])*.

`advanceSelection(This, Options::[Option]) -> ok`

Types:

**This = *wxNotebook()***
**Option = {forward, boolean()}**

See **external documentation**.

`assignImageList(This, ImageList) -> ok`

Types:

**This = *wxNotebook()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

`create(This, Parent, Id) -> boolean()`

Types:

**This = *wxNotebook()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

`create(This, Parent, Id, Options::[Option]) -> boolean()`

Types:

**This = *wxNotebook()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`deleteAllPages(This) -> boolean()`

Types:

**This = *wxNotebook()***

See **external documentation**.

```
deletePage(This, NPage) -> boolean()
```

Types:

**This = *wxNotebook()***
**NPage = integer()**

See **external documentation**.

```
removePage(This, NPage) -> boolean()
```

Types:

**This = *wxNotebook()***
**NPage = integer()**

See **external documentation**.

```
getCurrentPage(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxNotebook()***

See **external documentation**.

```
getImageList(This) -> wxImageList:wxImageList()
```

Types:

**This = *wxNotebook()***

See **external documentation**.

```
getPage(This, N) -> wxWindow:wxWindow()
```

Types:

**This = *wxNotebook()***
**N = integer()**

See **external documentation**.

```
getPageCount(This) -> integer()
```

Types:

**This = *wxNotebook()***

See **external documentation**.

```
getPageImage(This, NPage) -> integer()
```

Types:

**This = *wxNotebook()***
**NPage = integer()**

See **external documentation**.

```
getPageText(This, NPage) -> unicode:charlist()
```

Types:

**This = *wxNotebook()***
**NPage = integer()**

See **external documentation**.

```
getRowCount(This) -> integer()
```

Types:

**This = *wxNotebook()***

See **external documentation**.

```
getSelection(This) -> integer()
```

Types:

**This = *wxNotebook()***

See **external documentation**.

```
getThemeBackgroundColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxNotebook()***

See **external documentation**.

```
hitTest(This, Pt) -> Result
```

Types:

**Result = {Res::integer(), Flags::integer()}**
**This = *wxNotebook()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
insertPage(This, Position, Win, StrText) -> boolean()
```

Types:

**This = *wxNotebook()***
**Position = integer()**
**Win = *wxWindow:wxWindow()***
**StrText = *unicode:chardata()***

Equivalent to *insertPage(This, Position, Win, StrText, [])*.

```
insertPage(This, Position, Win, StrText, Options::[Option]) -> boolean()
```

Types:

**This = *wxNotebook()***
**Position = integer()**
**Win = *wxWindow:wxWindow()***
**StrText = *unicode:chardata()***
**Option = {bSelect, boolean()} | {imageId, integer()}**

See **external documentation**.

```
setImageList(This, ImageList) -> ok
```

Types:

**This = *wxNotebook()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

`setPadding(This, Padding) -> ok`

Types:

**This = *wxNotebook()***
**Padding = {W::integer(), H::integer()}**

See **external documentation**.

`setPageSize(This, Size) -> ok`

Types:

**This = *wxNotebook()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

`setPageImage(This, NPage, NImage) -> boolean()`

Types:

**This = *wxNotebook()***
**NPage = integer()**
**NImage = integer()**

See **external documentation**.

`setPageText(This, NPage, StrText) -> boolean()`

Types:

**This = *wxNotebook()***
**NPage = integer()**
**StrText = *unicode:chardata()***

See **external documentation**.

`setSelection(This, NPage) -> integer()`

Types:

**This = *wxNotebook()***
**NPage = integer()**

See **external documentation**.

`changeSelection(This, NPage) -> integer()`

Types:

**This = *wxNotebook()***
**NPage = integer()**

See **external documentation**.

```
destroy(This::wxNotebook()) -> ok
```

Destroys this object, do not use object again

# wxNotebookEvent

Erlang module

See external documentation: **wxNotebookEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_notebook_page_changed**, **command_notebook_page_changing**

See also the message variant *#wxNotebook{}* event record type.

This class is derived (and can use functions) from:
*wxNotifyEvent*
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxNotebookEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getOldSelection(This) -> integer()`

Types:

**This = *wxNotebookEvent()***

See **external documentation**.

`getSelection(This) -> integer()`

Types:

**This = *wxNotebookEvent()***

See **external documentation**.

`setOldSelection(This, NOldSel) -> ok`

Types:

**This = *wxNotebookEvent()***
**NOldSel = integer()**

See **external documentation**.

`setSelection(This, NSel) -> ok`

Types:

**This = *wxNotebookEvent()***
**NSel = integer()**

See **external documentation**.

# wxNotifyEvent

Erlang module

See external documentation: **wxNotifyEvent**.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxNotifyEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
allow(This) -> ok
```

Types:

**This = *wxNotifyEvent()***

See **external documentation**.

```
isAllowed(This) -> boolean()
```

Types:

**This = *wxNotifyEvent()***

See **external documentation**.

```
veto(This) -> ok
```

Types:

**This = *wxNotifyEvent()***

See **external documentation**.

# wxOverlay

Erlang module

See external documentation: **wxOverlay**.

## DATA TYPES

wxOverlay()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxOverlay()
```

See **external documentation**.

```
reset(This) -> ok
```

Types:

**This = *wxOverlay()***

See **external documentation**.

```
destroy(This::wxOverlay()) -> ok
```

Destroys this object, do not use object again

# wxPageSetupDialogData

Erlang module

See external documentation: **wxPageSetupDialogData**.

## DATA TYPES

wxPageSetupDialogData()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxPageSetupDialogData()
```

See **external documentation**.

```
new(PrintData) -> wxPageSetupDialogData()
```

Types:

**PrintData = *wxPrintData:wxPrintData()* | *wxPageSetupDialogData()***

See **external documentation**.

```
enableHelp(This, Flag) -> ok
```

Types:

**This = *wxPageSetupDialogData()***
**Flag = boolean()**

See **external documentation**.

```
enableMargins(This, Flag) -> ok
```

Types:

**This = *wxPageSetupDialogData()***
**Flag = boolean()**

See **external documentation**.

```
enableOrientation(This, Flag) -> ok
```

Types:

**This = *wxPageSetupDialogData()***
**Flag = boolean()**

See **external documentation**.

```
enablePaper(This, Flag) -> ok
```

Types:

**This = *wxPageSetupDialogData()***
**Flag = boolean()**

See **external documentation**.

```
enablePrinter(This, Flag) -> ok
```

Types:

**This = *wxPageSetupDialogData()***

**Flag = boolean()**

See **external documentation**.

```
getDefaultMinMargins(This) -> boolean()
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getEnableMargins(This) -> boolean()
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getEnableOrientation(This) -> boolean()
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getEnablePaper(This) -> boolean()
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getEnablePrinter(This) -> boolean()
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getEnableHelp(This) -> boolean()
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getDefaultInfo(This) -> boolean()
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getMarginTopLeft(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getMarginBottomRight(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getMinMarginTopLeft(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getMinMarginBottomRight(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getPaperId(This) -> wx:wx_enum()
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

Res = ?wxPAPER_NONE | ?wxPAPER_LETTER | ?wxPAPER_LEGAL | ?wxPAPER_A4 | ?wxPAPER_CSHEET | ?wxPAPER_DSHEET | ?wxPAPER_ESHEET | ?wxPAPER_LETTERSMALL | ?wxPAPER_TABLOID | ?wxPAPER_LEDGER | ?wxPAPER_STATEMENT | ?wxPAPER_EXECUTIVE | ?wxPAPER_A3 | ?wxPAPER_A4SMALL | ?wxPAPER_A5 | ?wxPAPER_B4 | ?wxPAPER_B5 | ?wxPAPER_FOLIO | ?wxPAPER_QUARTO | ?wxPAPER_10X14 | ?wxPAPER_11X17 | ?wxPAPER_NOTE | ?wxPAPER_ENV_9 | ?wxPAPER_ENV_10 | ?wxPAPER_ENV_11 | ?wxPAPER_ENV_12 | ?wxPAPER_ENV_14 | ?wxPAPER_ENV_DL | ?wxPAPER_ENV_C5 | ?wxPAPER_ENV_C3 | ?wxPAPER_ENV_C4 | ?wxPAPER_ENV_C6 | ?wxPAPER_ENV_C65 | ?wxPAPER_ENV_B4 | ?wxPAPER_ENV_B5 | ?wxPAPER_ENV_B6 | ?wxPAPER_ENV_ITALY | ?wxPAPER_ENV_MONARCH | ?wxPAPER_ENV_PERSONAL | ?wxPAPER_FANFOLD_US | ?wxPAPER_FANFOLD_STD_GERMAN | ?wxPAPER_FANFOLD_LGL_GERMAN | ?wxPAPER_ISO_B4 | ?wxPAPER_JAPANESE_POSTCARD | ?wxPAPER_9X11 | ?wxPAPER_10X11 | ?wxPAPER_15X11 | ?wxPAPER_ENV_INVITE | ?wxPAPER_LETTER_EXTRA | ?wxPAPER_LEGAL_EXTRA | ?wxPAPER_TABLOID_EXTRA | ?wxPAPER_A4_EXTRA | ?wxPAPER_LETTER_TRANSVERSE | ?wxPAPER_A4_TRANSVERSE | ?wxPAPER_LETTER_EXTRA_TRANSVERSE | ?wxPAPER_A_PLUS | ?wxPAPER_B_PLUS | ?wxPAPER_LETTER_PLUS | ?wxPAPER_A4_PLUS | ?wxPAPER_A5_TRANSVERSE | ?wxPAPER_B5_TRANSVERSE | ?wxPAPER_A3_EXTRA | ?wxPAPER_A5_EXTRA | ?wxPAPER_B5_EXTRA | ?wxPAPER_A2 | ?wxPAPER_A3_TRANSVERSE | ?wxPAPER_A3_EXTRA_TRANSVERSE | ?wxPAPER_DBL_JAPANESE_POSTCARD | ?wxPAPER_A6 | ?wxPAPER_JENV_KAKU2 | ?wxPAPER_JENV_KAKU3 | ?wxPAPER_JENV_CHOU3 | ?wxPAPER_JENV_CHOU4 | ?wxPAPER_LETTER_ROTATED | ?wxPAPER_A3_ROTATED | ?wxPAPER_A4_ROTATED | ?wxPAPER_A5_ROTATED | ?wxPAPER_B4_JIS_ROTATED | ?wxPAPER_B5_JIS_ROTATED | ?wxPAPER_JAPANESE_POSTCARD_ROTATED | ?wxPAPER_DBL_JAPANESE_POSTCARD_ROTATED | ?wxPAPER_A6_ROTATED | ?wxPAPER_JENV_KAKU2_ROTATED | ?wxPAPER_JENV_KAKU3_ROTATED

| ?wxPAPER_JENV_CHOU3_ROTATED | ?wxPAPER_JENV_CHOU4_ROTATED | ?wxPAPER_B6_JIS | ?wxPAPER_B6_JIS_ROTATED | ?wxPAPER_12X11 | ?wxPAPER_JENV_YOU4 | ?wxPAPER_JENV_YOU4_ROTATED | ?wxPAPER_P16K | ?wxPAPER_P32K | ?wxPAPER_P32KBIG | ?wxPAPER_PENV_1 | ?wxPAPER_PENV_2 | ?wxPAPER_PENV_3 | ?wxPAPER_PENV_4 | ?wxPAPER_PENV_5 | ?wxPAPER_PENV_6 | ?wxPAPER_PENV_7 | ?wxPAPER_PENV_8 | ?wxPAPER_PENV_9 | ?wxPAPER_PENV_10 | ?wxPAPER_P16K_ROTATED | ?wxPAPER_P32K_ROTATED | ?wxPAPER_P32KBIG_ROTATED | ?wxPAPER_PENV_1_ROTATED | ?wxPAPER_PENV_2_ROTATED | ?wxPAPER_PENV_3_ROTATED | ?wxPAPER_PENV_4_ROTATED | ?wxPAPER_PENV_5_ROTATED | ?wxPAPER_PENV_6_ROTATED | ?wxPAPER_PENV_7_ROTATED | ?wxPAPER_PENV_8_ROTATED | ?wxPAPER_PENV_9_ROTATED | ?wxPAPER_PENV_10_ROTATED

```
getPaperSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
getPrintData(This) -> wxPrintData:wxPrintData()
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
isOk(This) -> boolean()
```

Types:

**This = *wxPageSetupDialogData()***

See **external documentation**.

```
setDefaultInfo(This, Flag) -> ok
```

Types:

**This = *wxPageSetupDialogData()***
**Flag = boolean()**

See **external documentation**.

```
setDefaultMinMargins(This, Flag) -> ok
```

Types:

**This = *wxPageSetupDialogData()***
**Flag = boolean()**

See **external documentation**.

```
setMarginTopLeft(This, Pt) -> ok
```

Types:

**This = *wxPageSetupDialogData()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
setMarginBottomRight(This, Pt) -> ok
```

Types:

**This = *wxPageSetupDialogData()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
setMinMarginTopLeft(This, Pt) -> ok
```

Types:

**This = *wxPageSetupDialogData()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
setMinMarginBottomRight(This, Pt) -> ok
```

Types:

**This = *wxPageSetupDialogData()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
setPaperId(This, Id) -> ok
```

Types:

**This = *wxPageSetupDialogData()***
**Id = *wx:wx_enum()***

See **external documentation**.
Id = ?wxPAPER_NONE | ?wxPAPER_LETTER | ?wxPAPER_LEGAL | ?wxPAPER_A4 | ?wxPAPER_CSHEET | ?wxPAPER_DSHEET | ?wxPAPER_ESHEET | ?wxPAPER_LETTERSMALL | ?wxPAPER_TABLOID | ?wxPAPER_LEDGER | ?wxPAPER_STATEMENT | ?wxPAPER_EXECUTIVE | ?wxPAPER_A3 | ?wxPAPER_A4SMALL | ?wxPAPER_A5 | ?wxPAPER_B4 | ?wxPAPER_B5 | ?wxPAPER_FOLIO | ?wxPAPER_QUARTO | ?wxPAPER_10X14 | ?wxPAPER_11X17 | ?wxPAPER_NOTE | ?wxPAPER_ENV_9 | ?wxPAPER_ENV_10 | ?wxPAPER_ENV_11 | ?wxPAPER_ENV_12 | ?wxPAPER_ENV_14 | ?wxPAPER_ENV_DL | ?wxPAPER_ENV_C5 | ?wxPAPER_ENV_C3 | ?wxPAPER_ENV_C4 | ?wxPAPER_ENV_C6 | ?wxPAPER_ENV_C65 | ?wxPAPER_ENV_B4 | ?wxPAPER_ENV_B5 | ?wxPAPER_ENV_B6 | ?wxPAPER_ENV_ITALY | ?wxPAPER_ENV_MONARCH | ?wxPAPER_ENV_PERSONAL | ?wxPAPER_FANFOLD_US | ?wxPAPER_FANFOLD_STD_GERMAN | ?wxPAPER_FANFOLD_LGL_GERMAN | ?wxPAPER_ISO_B4 | ?wxPAPER_JAPANESE_POSTCARD | ?wxPAPER_9X11 | ?wxPAPER_10X11 | ?wxPAPER_15X11 | ?wxPAPER_ENV_INVITE | ?wxPAPER_LETTER_EXTRA | ?wxPAPER_LEGAL_EXTRA | ?wxPAPER_TABLOID_EXTRA | ?wxPAPER_A4_EXTRA | ?wxPAPER_LETTER_TRANSVERSE | ?wxPAPER_A4_TRANSVERSE | ?wxPAPER_LETTER_EXTRA_TRANSVERSE | ?wxPAPER_A_PLUS | ?wxPAPER_B_PLUS | ?wxPAPER_LETTER_PLUS | ?wxPAPER_A4_PLUS | ?wxPAPER_A5_TRANSVERSE | ?wxPAPER_B5_TRANSVERSE | ?wxPAPER_A3_EXTRA | ?wxPAPER_A5_EXTRA | ?wxPAPER_B5_EXTRA | ?wxPAPER_A2 | ?wxPAPER_A3_TRANSVERSE | ?wxPAPER_A3_EXTRA_TRANSVERSE | ?wxPAPER_DBL_JAPANESE_POSTCARD | ?wxPAPER_A6 | ?wxPAPER_JENV_KAKU2 | ?wxPAPER_JENV_KAKU3 | ?wxPAPER_JENV_CHOU3 | ?wxPAPER_JENV_CHOU4 | ?wxPAPER_LETTER_ROTATED | ?wxPAPER_A3_ROTATED | ?wxPAPER_A4_ROTATED | ?wxPAPER_A5_ROTATED | ?wxPAPER_B4_JIS_ROTATED | ?wxPAPER_B5_JIS_ROTATED | ?wxPAPER_JAPANESE_POSTCARD_ROTATED | ?wxPAPER_DBL_JAPANESE_POSTCARD_ROTATED | ?wxPAPER_A6_ROTATED | ?wxPAPER_JENV_KAKU2_ROTATED | ?wxPAPER_JENV_KAKU3_ROTATED | ?wxPAPER_JENV_CHOU3_ROTATED | ?wxPAPER_JENV_CHOU4_ROTATED | ?wxPAPER_B6_JIS

| ?wxPAPER_B6_JIS_ROTATED | ?wxPAPER_12X11 | ?wxPAPER_JENV_YOU4 | ?wxPAPER_JENV_YOU4_ROTATED | ?wxPAPER_P16K | ?wxPAPER_P32K | ?wxPAPER_P32KBIG | ?wxPAPER_PENV_1 | ?wxPAPER_PENV_2 | ?wxPAPER_PENV_3 | ?wxPAPER_PENV_4 | ?wxPAPER_PENV_5 | ?wxPAPER_PENV_6 | ?wxPAPER_PENV_7 | ?wxPAPER_PENV_8 | ?wxPAPER_PENV_9 | ?wxPAPER_PENV_10 | ?wxPAPER_P16K_ROTATED | ?wxPAPER_P32K_ROTATED | ?wxPAPER_P32KBIG_ROTATED | ?wxPAPER_PENV_1_ROTATED | ?wxPAPER_PENV_2_ROTATED | ?wxPAPER_PENV_3_ROTATED | ?wxPAPER_PENV_4_ROTATED | ?wxPAPER_PENV_5_ROTATED | ?wxPAPER_PENV_6_ROTATED | ?wxPAPER_PENV_7_ROTATED | ?wxPAPER_PENV_8_ROTATED | ?wxPAPER_PENV_9_ROTATED | ?wxPAPER_PENV_10_ROTATED

`setPaperSize(This, Id) -> ok`

Types:

**`This = wxPageSetupDialogData()`**

**`Id = wx:wx_enum()`**

See **external documentation**.

Also:

setPaperSize(This, Sz) -> 'ok' when

This::wxPageSetupDialogData(), Sz::{W::integer(), H::integer()}.

Id = ?wxPAPER_NONE | ?wxPAPER_LETTER | ?wxPAPER_LEGAL | ?wxPAPER_A4 | ?wxPAPER_CSHEET | ?wxPAPER_DSHEET | ?wxPAPER_ESHEET | ?wxPAPER_LETTERSMALL | ?wxPAPER_TABLOID | ?wxPAPER_LEDGER | ?wxPAPER_STATEMENT | ?wxPAPER_EXECUTIVE | ?wxPAPER_A3 | ?wxPAPER_A4SMALL | ?wxPAPER_A5 | ?wxPAPER_B4 | ?wxPAPER_B5 | ?wxPAPER_FOLIO | ?wxPAPER_QUARTO | ?wxPAPER_10X14 | ?wxPAPER_11X17 | ?wxPAPER_NOTE | ?wxPAPER_ENV_9 | ?wxPAPER_ENV_10 | ?wxPAPER_ENV_11 | ?wxPAPER_ENV_12 | ?wxPAPER_ENV_14 | ?wxPAPER_ENV_DL | ?wxPAPER_ENV_C5 | ?wxPAPER_ENV_C3 | ?wxPAPER_ENV_C4 | ?wxPAPER_ENV_C6 | ?wxPAPER_ENV_C65 | ?wxPAPER_ENV_B4 | ?wxPAPER_ENV_B5 | ?wxPAPER_ENV_B6 | ?wxPAPER_ENV_ITALY | ?wxPAPER_ENV_MONARCH | ?wxPAPER_ENV_PERSONAL | ?wxPAPER_FANFOLD_US | ?wxPAPER_FANFOLD_STD_GERMAN | ?wxPAPER_FANFOLD_LGL_GERMAN | ?wxPAPER_ISO_B4 | ?wxPAPER_JAPANESE_POSTCARD | ?wxPAPER_9X11 | ?wxPAPER_10X11 | ?wxPAPER_15X11 | ?wxPAPER_ENV_INVITE | ?wxPAPER_LETTER_EXTRA | ?wxPAPER_LEGAL_EXTRA | ?wxPAPER_TABLOID_EXTRA | ?wxPAPER_A4_EXTRA | ?wxPAPER_LETTER_TRANSVERSE | ?wxPAPER_A4_TRANSVERSE | ?wxPAPER_LETTER_EXTRA_TRANSVERSE | ?wxPAPER_A_PLUS | ?wxPAPER_B_PLUS | ?wxPAPER_LETTER_PLUS | ?wxPAPER_A4_PLUS | ?wxPAPER_A5_TRANSVERSE | ?wxPAPER_B5_TRANSVERSE | ?wxPAPER_A3_EXTRA | ?wxPAPER_A5_EXTRA | ?wxPAPER_B5_EXTRA | ?wxPAPER_A2 | ?wxPAPER_A3_TRANSVERSE | ?wxPAPER_A3_EXTRA_TRANSVERSE | ?wxPAPER_DBL_JAPANESE_POSTCARD | ?wxPAPER_A6 | ?wxPAPER_JENV_KAKU2 | ?wxPAPER_JENV_KAKU3 | ?wxPAPER_JENV_CHOU3 | ?wxPAPER_JENV_CHOU4 | ?wxPAPER_LETTER_ROTATED | ?wxPAPER_A3_ROTATED | ?wxPAPER_A4_ROTATED | ?wxPAPER_A5_ROTATED | ?wxPAPER_B4_JIS_ROTATED | ?wxPAPER_B5_JIS_ROTATED | ?wxPAPER_JAPANESE_POSTCARD_ROTATED | ?wxPAPER_DBL_JAPANESE_POSTCARD_ROTATED | ?wxPAPER_A6_ROTATED | ?wxPAPER_JENV_KAKU2_ROTATED | ?wxPAPER_JENV_KAKU3_ROTATED | ?wxPAPER_JENV_CHOU3_ROTATED | ?wxPAPER_JENV_CHOU4_ROTATED | ?wxPAPER_B6_JIS | ?wxPAPER_B6_JIS_ROTATED | ?wxPAPER_12X11 | ?wxPAPER_JENV_YOU4 | ?wxPAPER_JENV_YOU4_ROTATED | ?wxPAPER_P16K | ?wxPAPER_P32K | ?wxPAPER_P32KBIG | ?wxPAPER_PENV_1 | ?wxPAPER_PENV_2 | ?wxPAPER_PENV_3 | ?wxPAPER_PENV_4 | ?wxPAPER_PENV_5 | ?wxPAPER_PENV_6 | ?wxPAPER_PENV_7 | ?wxPAPER_PENV_8 | ?wxPAPER_PENV_9 | ?wxPAPER_PENV_10 | ?wxPAPER_P16K_ROTATED | ?wxPAPER_P32K_ROTATED | ?wxPAPER_P32KBIG_ROTATED | ?wxPAPER_PENV_1_ROTATED | ?wxPAPER_PENV_2_ROTATED | ?wxPAPER_PENV_3_ROTATED | ?wxPAPER_PENV_4_ROTATED | ?wxPAPER_PENV_5_ROTATED | ?

wxPAPER_PENV_6_ROTATED | ?wxPAPER_PENV_7_ROTATED | ?wxPAPER_PENV_8_ROTATED | ?wxPAPER_PENV_9_ROTATED | ?wxPAPER_PENV_10_ROTATED

```
setPrintData(This, PrintData) -> ok
```

Types:

**This = *wxPageSetupDialogData()***

**PrintData = *wxPrintData:wxPrintData()***

See **external documentation**.

```
destroy(This::wxPageSetupDialogData()) -> ok
```

Destroys this object, do not use object again

# wxPageSetupDialog

Erlang module

See external documentation: **wxPageSetupDialog**.

## DATA TYPES

wxPageSetupDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Parent) -> wxPageSetupDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxPageSetupDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {data, *wxPageSetupDialogData:wxPageSetupDialogData()*}**

See **external documentation**.

```
getPageSetupData(This) -> wxPageSetupDialogData:wxPageSetupDialogData()
```

Types:

**This = *wxPageSetupDialog()***

See **external documentation**.

```
showModal(This) -> integer()
```

Types:

**This = *wxPageSetupDialog()***

See **external documentation**.

```
destroy(This::wxPageSetupDialog()) -> ok
```

Destroys this object, do not use object again

# wxPaintDC

Erlang module

See external documentation: **wxPaintDC**.

This class is derived (and can use functions) from:
*wxWindowDC*
*wxDC*

## DATA TYPES

wxPaintDC()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxPaintDC()
```

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

```
new(Win) -> wxPaintDC()
```

Types:

**Win = *wxWindow:wxWindow()***

See **external documentation**.

```
destroy(This::wxPaintDC()) -> ok
```

Destroys this object, do not use object again

# wxPaintEvent

Erlang module

See external documentation: **wxPaintEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**paint**

See also the message variant *#wxPaint{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxPaintEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxPaletteChangedEvent

Erlang module

See external documentation: **wxPaletteChangedEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**palette_changed**

See also the message variant *#wxPaletteChanged{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxPaletteChangedEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
setChangedWindow(This, Win) -> ok
```

Types:

**This = *wxPaletteChangedEvent()***
**Win = *wxWindow:wxWindow()***

See **external documentation**.

```
getChangedWindow(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxPaletteChangedEvent()***

See **external documentation**.

# wxPalette

Erlang module

See external documentation: **wxPalette**.

## DATA TYPES

wxPalette()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxPalette()
```

See **external documentation**.

```
new(Red, Green, Blue) -> wxPalette()
```

Types:

**Red = binary()**
**Green = binary()**
**Blue = binary()**

See **external documentation**.

```
create(This, Red, Green, Blue) -> boolean()
```

Types:

**This = *wxPalette()***
**Red = binary()**
**Green = binary()**
**Blue = binary()**

See **external documentation**.

```
getColoursCount(This) -> integer()
```

Types:

**This = *wxPalette()***

See **external documentation**.

```
getPixel(This, Red, Green, Blue) -> integer()
```

Types:

**This = *wxPalette()***
**Red = integer()**
**Green = integer()**
**Blue = integer()**

See **external documentation**.

```
getRGB(This, Pixel) -> Result
```

Types:

**Result = {Res::boolean(), Red::integer(), Green::integer(), Blue::integer()}**

**This = *wxPalette()***

**Pixel = integer()**

See **external documentation**.

```
isOk(This) -> boolean()
```

Types:

**This = *wxPalette()***

See **external documentation**.

```
destroy(This::wxPalette()) -> ok
```

Destroys this object, do not use object again

# wxPanel

Erlang module

See external documentation: **wxPanel**.

This class is derived (and can use functions) from:
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxPanel()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxPanel()`

See **external documentation**.

`new(Parent) -> wxPanel()`

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

`new(Parent, Options::[Option]) -> wxPanel()`

Types:

**Parent = *wxWindow:wxWindow()***
**Option = {winid, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`new(Parent, X, Y, Width, Height) -> wxPanel()`

Types:

**Parent = *wxWindow:wxWindow()***
**X = integer()**
**Y = integer()**
**Width = integer()**
**Height = integer()**

Equivalent to *new(Parent, X, Y, Width, Height, [])*.

`new(Parent, X, Y, Width, Height, Options::[Option]) -> wxPanel()`

Types:

**Parent = *wxWindow:wxWindow()***

```
X = integer()
Y = integer()
Width = integer()
Height = integer()
Option = {style, integer()}
```

See **external documentation**.

`initDialog(This) -> ok`

Types:

```
This = wxPanel()
```

See **external documentation**.

`setFocusIgnoringChildren(This) -> ok`

Types:

```
This = wxPanel()
```

See **external documentation**.

`destroy(This::wxPanel()) -> ok`

Destroys this object, do not use object again

# wxPasswordEntryDialog

Erlang module

See external documentation: **wxPasswordEntryDialog**.

This class is derived (and can use functions) from:
*wxTextEntryDialog*
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxPasswordEntryDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new(Parent, Message) -> wxPasswordEntryDialog()`

Types:

**Parent = *wxWindow:wxWindow()***
**Message = *unicode:chardata()***

Equivalent to *new(Parent, Message, [])*.

`new(Parent, Message, Options::[Option]) -> wxPasswordEntryDialog()`

Types:

**Parent = *wxWindow:wxWindow()***
**Message = *unicode:chardata()***
**Option = {caption, *unicode:chardata()*} | {value, *unicode:chardata()*} | {style, integer()} | {pos, {X::integer(), Y::integer()}}**

See **external documentation**.

`destroy(This::wxPasswordEntryDialog()) -> ok`

Destroys this object, do not use object again

# wxPen

Erlang module

See external documentation: **wxPen**.

## DATA TYPES

wxPen()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxPen()`

See **external documentation**.

`new(Colour) -> wxPen()`

Types:

**Colour = *wx:wx_colour()***

Equivalent to *new(Colour, [])*.

`new(Colour, Options::[Option]) -> wxPen()`

Types:

**Colour = *wx:wx_colour()***

**Option = {width, integer()} | {style, integer()}**

See **external documentation**.

`getCap(This) -> integer()`

Types:

**This = *wxPen()***

See **external documentation**.

`getColour(This) -> wx:wx_colour4()`

Types:

**This = *wxPen()***

See **external documentation**.

`getJoin(This) -> integer()`

Types:

**This = *wxPen()***

See **external documentation**.

```
getStyle(This) -> integer()
```

Types:

**This = *wxPen()***

See **external documentation**.

```
getWidth(This) -> integer()
```

Types:

**This = *wxPen()***

See **external documentation**.

```
isOk(This) -> boolean()
```

Types:

**This = *wxPen()***

See **external documentation**.

```
setCap(This, CapStyle) -> ok
```

Types:

**This = *wxPen()***
**CapStyle = *wx:wx_enum()***

See **external documentation**.
CapStyle = integer

```
setColour(This, Colour) -> ok
```

Types:

**This = *wxPen()***
**Colour = *wx:wx_colour()***

See **external documentation**.

```
setColour(This, Red, Green, Blue) -> ok
```

Types:

**This = *wxPen()***
**Red = integer()**
**Green = integer()**
**Blue = integer()**

See **external documentation**.

```
setJoin(This, JoinStyle) -> ok
```

Types:

**This = *wxPen()***
**JoinStyle = *wx:wx_enum()***

See **external documentation**.
JoinStyle = integer

```
setStyle(This, Style) -> ok
```

Types:

**This = *wxPen()***
**Style = integer()**

See **external documentation**.

```
setWidth(This, Width) -> ok
```

Types:

**This = *wxPen()***
**Width = integer()**

See **external documentation**.

```
destroy(This::wxPen()) -> ok
```

Destroys this object, do not use object again

# wxPickerBase

Erlang module

See external documentation: **wxPickerBase**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxPickerBase()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`setInternalMargin(This, Newmargin) -> ok`

Types:

**This = *wxPickerBase()***
**Newmargin = integer()**

See **external documentation**.

`getInternalMargin(This) -> integer()`

Types:

**This = *wxPickerBase()***

See **external documentation**.

`setTextCtrlProportion(This, Prop) -> ok`

Types:

**This = *wxPickerBase()***
**Prop = integer()**

See **external documentation**.

`setPickerCtrlProportion(This, Prop) -> ok`

Types:

**This = *wxPickerBase()***
**Prop = integer()**

See **external documentation**.

`getTextCtrlProportion(This) -> integer()`

Types:

**This = *wxPickerBase()***

See **external documentation**.

```
getPickerCtrlProportion(This) -> integer()
```

Types:

**This = *wxPickerBase()***

See **external documentation**.

```
hasTextCtrl(This) -> boolean()
```

Types:

**This = *wxPickerBase()***

See **external documentation**.

```
getTextCtrl(This) -> wxTextCtrl:wxTextCtrl()
```

Types:

**This = *wxPickerBase()***

See **external documentation**.

```
isTextCtrlGrowable(This) -> boolean()
```

Types:

**This = *wxPickerBase()***

See **external documentation**.

```
setPickerCtrlGrowable(This) -> ok
```

Types:

**This = *wxPickerBase()***

Equivalent to *setPickerCtrlGrowable(This, [])*.

```
setPickerCtrlGrowable(This, Options::[Option]) -> ok
```

Types:

**This = *wxPickerBase()***

**Option = {grow, boolean()}**

See **external documentation**.

```
setTextCtrlGrowable(This) -> ok
```

Types:

**This = *wxPickerBase()***

Equivalent to *setTextCtrlGrowable(This, [])*.

```
setTextCtrlGrowable(This, Options::[Option]) -> ok
```

Types:

**This = *wxPickerBase()***

**Option = {grow, boolean()}**

See **external documentation**.

```
isPickerCtrlGrowable(This) -> boolean()
```

Types:

**`This = wxPickerBase()`**

See **external documentation**.

# wxPopupTransientWindow

Erlang module

See external documentation: **wxPopupTransientWindow**.

This class is derived (and can use functions) from:
*wxPopupWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxPopupTransientWindow()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxPopupTransientWindow()
```

See **external documentation**.

```
new(Parent) -> wxPopupTransientWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxPopupTransientWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Option = {style, integer()}**

See **external documentation**.

```
popup(This) -> ok
```

Types:

**This = *wxPopupTransientWindow()***

Equivalent to *popup(This, [])*.

```
popup(This, Options::[Option]) -> ok
```

Types:

**This = *wxPopupTransientWindow()***
**Option = {focus, *wxWindow:wxWindow()*}**

See **external documentation**.

```
dismiss(This) -> ok
```

Types:

**This = *wxPopupTransientWindow()***

See **external documentation**.

```
destroy(This::wxPopupTransientWindow()) -> ok
```

Destroys this object, do not use object again

# wxPopupWindow

Erlang module

See external documentation: **wxPopupWindow**.

This class is derived (and can use functions) from:
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxPopupWindow()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxPopupWindow()
```

See **external documentation**.

```
new(Parent) -> wxPopupWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxPopupWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Option = {flags, integer()}**

See **external documentation**.

```
create(This, Parent) -> boolean()
```

Types:

**This = *wxPopupWindow()***
**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

```
create(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxPopupWindow()***
**Parent = *wxWindow:wxWindow()***
**Option = {flags, integer()}**

See **external documentation**.

```
position(This, PtOrigin, Size) -> ok
```

Types:

**This = *wxPopupWindow()***
**PtOrigin = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
destroy(This::wxPopupWindow()) -> ok
```

Destroys this object, do not use object again

# wxPostScriptDC

Erlang module

See external documentation: **wxPostScriptDC**.

This class is derived (and can use functions) from:
*wxDC*

## DATA TYPES

wxPostScriptDC()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxPostScriptDC()`

See **external documentation**.

`new(PrintData) -> wxPostScriptDC()`

Types:

**`PrintData = wxPrintData:wxPrintData()`**

See **external documentation**.

`setResolution(Ppi) -> ok`

Types:

**`Ppi = integer()`**

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

`getResolution() -> integer()`

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

`destroy(This::wxPostScriptDC()) -> ok`

Destroys this object, do not use object again

# wxPreviewCanvas

Erlang module

See external documentation: **wxPreviewCanvas**.

This class is derived (and can use functions) from:
*wxScrolledWindow*
*wxPanel*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxPreviewCanvas()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxPreviewControlBar

Erlang module

See external documentation: **wxPreviewControlBar**.

This class is derived (and can use functions) from:
*wxPanel*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxPreviewControlBar()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Preview, Buttons, Parent) -> wxPreviewControlBar()
```

Types:

**Preview = *wxPrintPreview:wxPrintPreview()***
**Buttons = integer()**
**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Preview, Buttons, Parent, [])*.

```
new(Preview, Buttons, Parent, Options::[Option]) -> wxPreviewControlBar()
```

Types:

**Preview = *wxPrintPreview:wxPrintPreview()***
**Buttons = integer()**
**Parent = *wxWindow:wxWindow()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
createButtons(This) -> ok
```

Types:

**This = *wxPreviewControlBar()***

See **external documentation**.

```
getPrintPreview(This) -> wxPrintPreview:wxPrintPreview()
```

Types:

**This = *wxPreviewControlBar()***

See **external documentation**.

```
getZoomControl(This) -> integer()
```

Types:

**This = *wxPreviewControlBar()***

See **external documentation**.

```
setZoomControl(This, Zoom) -> ok
```

Types:

**This = *wxPreviewControlBar()***

**Zoom = integer()**

See **external documentation**.

```
destroy(This::wxPreviewControlBar()) -> ok
```

Destroys this object, do not use object again

# wxPreviewFrame

Erlang module

See external documentation: **wxPreviewFrame**.

This class is derived (and can use functions) from:
*wxFrame*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxPreviewFrame()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new(Preview, Parent) -> wxPreviewFrame()`

Types:

**Preview = *wxPrintPreview:wxPrintPreview()***
**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Preview, Parent, [])*.

`new(Preview, Parent, Options::[Option]) -> wxPreviewFrame()`

Types:

**Preview = *wxPrintPreview:wxPrintPreview()***
**Parent = *wxWindow:wxWindow()***
**Option = {title, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`createControlBar(This) -> ok`

Types:

**This = *wxPreviewFrame()***

See **external documentation**.

`createCanvas(This) -> ok`

Types:

**This = *wxPreviewFrame()***

See **external documentation**.

```
initialize(This) -> ok
```

Types:

**`This = wxPreviewFrame()`**

See **external documentation**.

```
onCloseWindow(This, Event) -> ok
```

Types:

**`This = wxPreviewFrame()`**

**`Event = wxCloseEvent:wxCloseEvent()`**

See **external documentation**.

```
destroy(This::wxPreviewFrame()) -> ok
```

Destroys this object, do not use object again

# wxPrintData

Erlang module

See external documentation: **wxPrintData**.

## DATA TYPES

wxPrintData()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxPrintData()
```

See **external documentation**.

```
new(PrintData) -> wxPrintData()
```

Types:

**PrintData = *wxPrintData()***

See **external documentation**.

```
getCollate(This) -> boolean()
```

Types:

**This = *wxPrintData()***

See **external documentation**.

```
getBin(This) -> wx:wx_enum()
```

Types:

**This = *wxPrintData()***

See **external documentation**.
Res = ?wxPRINTBIN_DEFAULT | ?wxPRINTBIN_ONLYONE | ?wxPRINTBIN_LOWER | ?wxPRINTBIN_MIDDLE | ?wxPRINTBIN_MANUAL | ?wxPRINTBIN_ENVELOPE | ?wxPRINTBIN_ENVMANUAL | ?wxPRINTBIN_AUTO | ?wxPRINTBIN_TRACTOR | ?wxPRINTBIN_SMALLFMT | ?wxPRINTBIN_LARGEFMT | ?wxPRINTBIN_LARGECAPACITY | ?wxPRINTBIN_CASSETTE | ?wxPRINTBIN_FORMSOURCE | ?wxPRINTBIN_USER

```
getColour(This) -> boolean()
```

Types:

**This = *wxPrintData()***

See **external documentation**.

```
getDuplex(This) -> wx:wx_enum()
```

Types:

**This = *wxPrintData()***

See **external documentation**.
Res = ?wxDUPLEX_SIMPLEX | ?wxDUPLEX_HORIZONTAL | ?wxDUPLEX_VERTICAL

`getNoCopies(This) -> integer()`

Types:

**`This = wxPrintData()`**

See **external documentation**.

`getOrientation(This) -> integer()`

Types:

**`This = wxPrintData()`**

See **external documentation**.

`getPaperId(This) -> wx:wx_enum()`

Types:

**`This = wxPrintData()`**

See **external documentation**.
Res = ?wxPAPER_NONE | ?wxPAPER_LETTER | ?wxPAPER_LEGAL | ?wxPAPER_A4 | ?wxPAPER_CSHEET | ?wxPAPER_DSHEET | ?wxPAPER_ESHEET | ?wxPAPER_LETTERSMALL | ?wxPAPER_TABLOID | ?wxPAPER_LEDGER | ?wxPAPER_STATEMENT | ?wxPAPER_EXECUTIVE | ?wxPAPER_A3 | ?wxPAPER_A4SMALL | ?wxPAPER_A5 | ?wxPAPER_B4 | ?wxPAPER_B5 | ?wxPAPER_FOLIO | ?wxPAPER_QUARTO | ?wxPAPER_10X14 | ?wxPAPER_11X17 | ?wxPAPER_NOTE | ?wxPAPER_ENV_9 | ?wxPAPER_ENV_10 | ?wxPAPER_ENV_11 | ?wxPAPER_ENV_12 | ?wxPAPER_ENV_14 | ?wxPAPER_ENV_DL | ?wxPAPER_ENV_C5 | ?wxPAPER_ENV_C3 | ?wxPAPER_ENV_C4 | ?wxPAPER_ENV_C6 | ?wxPAPER_ENV_C65 | ?wxPAPER_ENV_B4 | ?wxPAPER_ENV_B5 | ?wxPAPER_ENV_B6 | ?wxPAPER_ENV_ITALY | ?wxPAPER_ENV_MONARCH | ?wxPAPER_ENV_PERSONAL | ?wxPAPER_FANFOLD_US | ?wxPAPER_FANFOLD_STD_GERMAN | ?wxPAPER_FANFOLD_LGL_GERMAN | ?wxPAPER_ISO_B4 | ?wxPAPER_JAPANESE_POSTCARD | ?wxPAPER_9X11 | ?wxPAPER_10X11 | ?wxPAPER_15X11 | ?wxPAPER_ENV_INVITE | ?wxPAPER_LETTER_EXTRA | ?wxPAPER_LEGAL_EXTRA | ?wxPAPER_TABLOID_EXTRA | ?wxPAPER_A4_EXTRA | ?wxPAPER_LETTER_TRANSVERSE | ?wxPAPER_A4_TRANSVERSE | ?wxPAPER_LETTER_EXTRA_TRANSVERSE | ?wxPAPER_A_PLUS | ?wxPAPER_B_PLUS | ?wxPAPER_LETTER_PLUS | ?wxPAPER_A4_PLUS | ?wxPAPER_A5_TRANSVERSE | ?wxPAPER_B5_TRANSVERSE | ?wxPAPER_A3_EXTRA | ?wxPAPER_A5_EXTRA | ?wxPAPER_B5_EXTRA | ?wxPAPER_A2 | ?wxPAPER_A3_TRANSVERSE | ?wxPAPER_A3_EXTRA_TRANSVERSE | ?wxPAPER_DBL_JAPANESE_POSTCARD | ?wxPAPER_A6 | ?wxPAPER_JENV_KAKU2 | ?wxPAPER_JENV_KAKU3 | ?wxPAPER_JENV_CHOU3 | ?wxPAPER_JENV_CHOU4 | ?wxPAPER_LETTER_ROTATED | ?wxPAPER_A3_ROTATED | ?wxPAPER_A4_ROTATED | ?wxPAPER_A5_ROTATED | ?wxPAPER_B4_JIS_ROTATED | ?wxPAPER_B5_JIS_ROTATED | ?wxPAPER_JAPANESE_POSTCARD_ROTATED | ?wxPAPER_DBL_JAPANESE_POSTCARD_ROTATED | ?wxPAPER_A6_ROTATED | ?wxPAPER_JENV_KAKU2_ROTATED | ?wxPAPER_JENV_KAKU3_ROTATED | ?wxPAPER_JENV_CHOU3_ROTATED | ?wxPAPER_JENV_CHOU4_ROTATED | ?wxPAPER_B6_JIS | ?wxPAPER_B6_JIS_ROTATED | ?wxPAPER_12X11 | ?wxPAPER_JENV_YOU4 | ?wxPAPER_JENV_YOU4_ROTATED | ?wxPAPER_P16K | ?wxPAPER_P32K | ?wxPAPER_P32KBIG | ?wxPAPER_PENV_1 | ?wxPAPER_PENV_2 | ?wxPAPER_PENV_3 | ?wxPAPER_PENV_4 | ?wxPAPER_PENV_5 | ?wxPAPER_PENV_6 | ?wxPAPER_PENV_7 | ?wxPAPER_PENV_8 | ?wxPAPER_PENV_9 | ?wxPAPER_PENV_10 | ?wxPAPER_P16K_ROTATED | ?wxPAPER_P32K_ROTATED | ?wxPAPER_P32KBIG_ROTATED | ?wxPAPER_PENV_1_ROTATED | ?wxPAPER_PENV_2_ROTATED | ?wxPAPER_PENV_3_ROTATED | ?wxPAPER_PENV_4_ROTATED | ?wxPAPER_PENV_5_ROTATED | ?

wxPAPER_PENV_6_ROTATED | ?wxPAPER_PENV_7_ROTATED | ?wxPAPER_PENV_8_ROTATED | ?wxPAPER_PENV_9_ROTATED | ?wxPAPER_PENV_10_ROTATED

`getPrinterName(This) -> unicode:charlist()`

Types:

**This = *wxPrintData()***

See **external documentation**.

`getQuality(This) -> integer()`

Types:

**This = *wxPrintData()***

See **external documentation**.

`isOk(This) -> boolean()`

Types:

**This = *wxPrintData()***

See **external documentation**.

`setBin(This, Bin) -> ok`

Types:

**This = *wxPrintData()***

**Bin = *wx:wx_enum()***

See **external documentation**.

Bin = ?wxPRINTBIN_DEFAULT | ?wxPRINTBIN_ONLYONE | ?wxPRINTBIN_LOWER | ?wxPRINTBIN_MIDDLE | ?wxPRINTBIN_MANUAL | ?wxPRINTBIN_ENVELOPE | ?wxPRINTBIN_ENVMANUAL | ?wxPRINTBIN_AUTO | ?wxPRINTBIN_TRACTOR | ?wxPRINTBIN_SMALLFMT | ?wxPRINTBIN_LARGEFMT | ?wxPRINTBIN_LARGECAPACITY | ?wxPRINTBIN_CASSETTE | ?wxPRINTBIN_FORMSOURCE | ?wxPRINTBIN_USER

`setCollate(This, Flag) -> ok`

Types:

**This = *wxPrintData()***

**Flag = boolean()**

See **external documentation**.

`setColour(This, Colour) -> ok`

Types:

**This = *wxPrintData()***

**Colour = boolean()**

See **external documentation**.

`setDuplex(This, Duplex) -> ok`

Types:

**This = *wxPrintData()***

**Duplex = *wx:wx_enum()***

See **external documentation**.
Duplex = ?wxDUPLEX_SIMPLEX | ?wxDUPLEX_HORIZONTAL | ?wxDUPLEX_VERTICAL

`setNoCopies(This, V) -> ok`

Types:

**This = *wxPrintData()***
**V = integer()**

See **external documentation**.

`setOrientation(This, Orient) -> ok`

Types:

**This = *wxPrintData()***
**Orient = integer()**

See **external documentation**.

`setPaperId(This, SizeId) -> ok`

Types:

**This = *wxPrintData()***
**SizeId = *wx:wx_enum()***

See **external documentation**.
SizeId = ?wxPAPER_NONE | ?wxPAPER_LETTER | ?wxPAPER_LEGAL | ?wxPAPER_A4 | ?wxPAPER_CSHEET | ?wxPAPER_DSHEET | ?wxPAPER_ESHEET | ?wxPAPER_LETTERSMALL | ?wxPAPER_TABLOID | ?wxPAPER_LEDGER | ?wxPAPER_STATEMENT | ?wxPAPER_EXECUTIVE | ?wxPAPER_A3 | ?wxPAPER_A4SMALL | ?wxPAPER_A5 | ?wxPAPER_B4 | ?wxPAPER_B5 | ?wxPAPER_FOLIO | ?wxPAPER_QUARTO | ?wxPAPER_10X14 | ?wxPAPER_11X17 | ?wxPAPER_NOTE | ?wxPAPER_ENV_9 | ?wxPAPER_ENV_10 | ?wxPAPER_ENV_11 | ?wxPAPER_ENV_12 | ?wxPAPER_ENV_14 | ?wxPAPER_ENV_DL | ?wxPAPER_ENV_C5 | ?wxPAPER_ENV_C3 | ?wxPAPER_ENV_C4 | ?wxPAPER_ENV_C6 | ?wxPAPER_ENV_C65 | ?wxPAPER_ENV_B4 | ?wxPAPER_ENV_B5 | ?wxPAPER_ENV_B6 | ?wxPAPER_ENV_ITALY | ?wxPAPER_ENV_MONARCH | ?wxPAPER_ENV_PERSONAL | ?wxPAPER_FANFOLD_US | ?wxPAPER_FANFOLD_STD_GERMAN | ?wxPAPER_FANFOLD_LGL_GERMAN | ?wxPAPER_ISO_B4 | ?wxPAPER_JAPANESE_POSTCARD | ?wxPAPER_9X11 | ?wxPAPER_10X11 | ?wxPAPER_15X11 | ?wxPAPER_ENV_INVITE | ?wxPAPER_LETTER_EXTRA | ?wxPAPER_LEGAL_EXTRA | ?wxPAPER_TABLOID_EXTRA | ?wxPAPER_A4_EXTRA | ?wxPAPER_LETTER_TRANSVERSE | ?wxPAPER_A4_TRANSVERSE | ?wxPAPER_LETTER_EXTRA_TRANSVERSE | ?wxPAPER_A_PLUS | ?wxPAPER_B_PLUS | ?wxPAPER_LETTER_PLUS | ?wxPAPER_A4_PLUS | ?wxPAPER_A5_TRANSVERSE | ?wxPAPER_B5_TRANSVERSE | ?wxPAPER_A3_EXTRA | ?wxPAPER_A5_EXTRA | ?wxPAPER_B5_EXTRA | ?wxPAPER_A2 | ?wxPAPER_A3_TRANSVERSE | ?wxPAPER_A3_EXTRA_TRANSVERSE | ?wxPAPER_DBL_JAPANESE_POSTCARD | ?wxPAPER_A6 | ?wxPAPER_JENV_KAKU2 | ?wxPAPER_JENV_KAKU3 | ?wxPAPER_JENV_CHOU3 | ?wxPAPER_JENV_CHOU4 | ?wxPAPER_LETTER_ROTATED | ?wxPAPER_A3_ROTATED | ?wxPAPER_A4_ROTATED | ?wxPAPER_A5_ROTATED | ?wxPAPER_B4_JIS_ROTATED | ?wxPAPER_B5_JIS_ROTATED | ?wxPAPER_JAPANESE_POSTCARD_ROTATED | ?wxPAPER_DBL_JAPANESE_POSTCARD_ROTATED | ?wxPAPER_A6_ROTATED | ?wxPAPER_JENV_KAKU2_ROTATED | ?wxPAPER_JENV_KAKU3_ROTATED | ?wxPAPER_JENV_CHOU3_ROTATED | ?wxPAPER_JENV_CHOU4_ROTATED | ?wxPAPER_B6_JIS | ?wxPAPER_B6_JIS_ROTATED | ?wxPAPER_12X11 | ?wxPAPER_JENV_YOU4 | ?wxPAPER_JENV_YOU4_ROTATED | ?wxPAPER_P16K | ?wxPAPER_P32K | ?wxPAPER_P32KBIG | ?wxPAPER_PENV_1 | ?wxPAPER_PENV_2 | ?wxPAPER_PENV_3 | ?wxPAPER_PENV_4 | ?

wxPAPER_PENV_5 | ?wxPAPER_PENV_6 | ?wxPAPER_PENV_7 | ?wxPAPER_PENV_8 | ?wxPAPER_PENV_9 | ?wxPAPER_PENV_10 | ?wxPAPER_P16K_ROTATED | ?wxPAPER_P32K_ROTATED | ?wxPAPER_P32KBIG_ROTATED | ?wxPAPER_PENV_1_ROTATED | ?wxPAPER_PENV_2_ROTATED | ?wxPAPER_PENV_3_ROTATED | ?wxPAPER_PENV_4_ROTATED | ?wxPAPER_PENV_5_ROTATED | ?wxPAPER_PENV_6_ROTATED | ?wxPAPER_PENV_7_ROTATED | ?wxPAPER_PENV_8_ROTATED | ?wxPAPER_PENV_9_ROTATED | ?wxPAPER_PENV_10_ROTATED

```
setPrinterName(This, Name) -> ok
```

Types:

**This = *wxPrintData()***

**Name = *unicode:chardata()***

See **external documentation**.

```
setQuality(This, Quality) -> ok
```

Types:

**This = *wxPrintData()***

**Quality = integer()**

See **external documentation**.

```
destroy(This::wxPrintData()) -> ok
```

Destroys this object, do not use object again

# wxPrintDialogData

Erlang module

See external documentation: **wxPrintDialogData**.

## DATA TYPES

wxPrintDialogData()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxPrintDialogData()
```

See **external documentation**.

```
new(DialogData) -> wxPrintDialogData()
```

Types:

**DialogData = *wxPrintDialogData()* | *wxPrintData:wxPrintData()***

See **external documentation**.

```
enableHelp(This, Flag) -> ok
```

Types:

**This = *wxPrintDialogData()***
**Flag = boolean()**

See **external documentation**.

```
enablePageNumbers(This, Flag) -> ok
```

Types:

**This = *wxPrintDialogData()***
**Flag = boolean()**

See **external documentation**.

```
enablePrintToFile(This, Flag) -> ok
```

Types:

**This = *wxPrintDialogData()***
**Flag = boolean()**

See **external documentation**.

```
enableSelection(This, Flag) -> ok
```

Types:

**This = *wxPrintDialogData()***
**Flag = boolean()**

See **external documentation**.

```
getAllPages(This) -> boolean()
```

Types:

**This = *wxPrintDialogData()***

See **external documentation**.

```
getCollate(This) -> boolean()
```

Types:

**This = *wxPrintDialogData()***

See **external documentation**.

```
getFromPage(This) -> integer()
```

Types:

**This = *wxPrintDialogData()***

See **external documentation**.

```
getMaxPage(This) -> integer()
```

Types:

**This = *wxPrintDialogData()***

See **external documentation**.

```
getMinPage(This) -> integer()
```

Types:

**This = *wxPrintDialogData()***

See **external documentation**.

```
getNoCopies(This) -> integer()
```

Types:

**This = *wxPrintDialogData()***

See **external documentation**.

```
getPrintData(This) -> wxPrintData:wxPrintData()
```

Types:

**This = *wxPrintDialogData()***

See **external documentation**.

```
getPrintToFile(This) -> boolean()
```

Types:

**This = *wxPrintDialogData()***

See **external documentation**.

```
getSelection(This) -> boolean()
```

Types:

**This = *wxPrintDialogData()***

See **external documentation**.

```
getToPage(This) -> integer()
```

Types:

**This = *wxPrintDialogData()***

See **external documentation**.

```
isOk(This) -> boolean()
```

Types:

**This = *wxPrintDialogData()***

See **external documentation**.

```
setCollate(This, Flag) -> ok
```

Types:

**This = *wxPrintDialogData()***

**Flag = boolean()**

See **external documentation**.

```
setFromPage(This, V) -> ok
```

Types:

**This = *wxPrintDialogData()***

**V = integer()**

See **external documentation**.

```
setMaxPage(This, V) -> ok
```

Types:

**This = *wxPrintDialogData()***

**V = integer()**

See **external documentation**.

```
setMinPage(This, V) -> ok
```

Types:

**This = *wxPrintDialogData()***

**V = integer()**

See **external documentation**.

```
setNoCopies(This, V) -> ok
```

Types:

**This = *wxPrintDialogData()***

**V = integer()**

See **external documentation**.

`setPrintData(This, PrintData) -> ok`

Types:

**This = *wxPrintDialogData()***

**PrintData = *wxPrintData:wxPrintData()***

See **external documentation**.

`setPrintToFile(This, Flag) -> ok`

Types:

**This = *wxPrintDialogData()***

**Flag = boolean()**

See **external documentation**.

`setSelection(This, Flag) -> ok`

Types:

**This = *wxPrintDialogData()***

**Flag = boolean()**

See **external documentation**.

`setToPage(This, V) -> ok`

Types:

**This = *wxPrintDialogData()***

**V = integer()**

See **external documentation**.

`destroy(This::wxPrintDialogData()) -> ok`

Destroys this object, do not use object again

# wxPrintDialog

Erlang module

See external documentation: **wxPrintDialog**.

This class is derived (and can use functions) from:
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxPrintDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Parent) -> wxPrintDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxPrintDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Option = {data, *wxPrintDialogData:wxPrintDialogData()*}**

See **external documentation**.
Also:
new(Parent, Data) -> wxPrintDialog() when
Parent::wxWindow:wxWindow(), Data::wxPrintData:wxPrintData().

```
getPrintDialogData(This) -> wxPrintDialogData:wxPrintDialogData()
```

Types:

**This = *wxPrintDialog()***

See **external documentation**.

```
getPrintDC(This) -> wxDC:wxDC()
```

Types:

**This = *wxPrintDialog()***

See **external documentation**.

```
destroy(This::wxPrintDialog()) -> ok
```

Destroys this object, do not use object again

# wxPrinter

Erlang module

See external documentation: **wxPrinter**.

## DATA TYPES

wxPrinter()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxPrinter()`

Equivalent to *new([])*.

`new(Options::[Option]) -> wxPrinter()`

Types:

**Option = {data, *wxPrintDialogData:wxPrintDialogData()*}**

See **external documentation**.

`createAbortWindow(This, Parent, Printout) -> wxWindow:wxWindow()`

Types:

**This = *wxPrinter()***
**Parent = *wxWindow:wxWindow()***
**Printout = *wxPrintout:wxPrintout()***

See **external documentation**.

`getAbort(This) -> boolean()`

Types:

**This = *wxPrinter()***

See **external documentation**.

`getLastError() -> wx:wx_enum()`

See **external documentation**.
Res = ?wxPRINTER_NO_ERROR | ?wxPRINTER_CANCELLED | ?wxPRINTER_ERROR

`getPrintDialogData(This) -> wxPrintDialogData:wxPrintDialogData()`

Types:

**This = *wxPrinter()***

See **external documentation**.

```
print(This, Parent, Printout) -> boolean()
```

Types:

**This = *wxPrinter()***
**Parent = *wxWindow:wxWindow()***
**Printout = *wxPrintout:wxPrintout()***

Equivalent to *print(This, Parent, Printout, [])*.

```
print(This, Parent, Printout, Options::[Option]) -> boolean()
```

Types:

**This = *wxPrinter()***
**Parent = *wxWindow:wxWindow()***
**Printout = *wxPrintout:wxPrintout()***
**Option = {prompt, boolean()}**

See **external documentation**.

```
printDialog(This, Parent) -> wxDC:wxDC()
```

Types:

**This = *wxPrinter()***
**Parent = *wxWindow:wxWindow()***

See **external documentation**.

```
reportError(This, Parent, Printout, Message) -> ok
```

Types:

**This = *wxPrinter()***
**Parent = *wxWindow:wxWindow()***
**Printout = *wxPrintout:wxPrintout()***
**Message = *unicode:chardata()***

See **external documentation**.

```
setup(This, Parent) -> boolean()
```

Types:

**This = *wxPrinter()***
**Parent = *wxWindow:wxWindow()***

See **external documentation**.

```
destroy(This::wxPrinter()) -> ok
```

Destroys this object, do not use object again

# wxPrintout

Erlang module

See external documentation: **wxPrintout**.

## DATA TYPES

wxPrintout()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new(Title::string(), OnPrintPage::function()) -> wxPrintout:wxPrintout()`

@equiv new(Title, OnPrintPage, [])

`new(Title::string(), OnPrintPage::function(), Opts::[Option]) -> wxPrintout:wxPrintout()`

Types:

**Option = {onPreparePrinting, OnPreparePrinting::function()} | {onBeginPrinting, OnBeginPrinting::function()} | {onEndPrinting, OnEndPrinting::function()} | {onBeginDocument, OnBeginDocument::function()} | {onEndDocument, OnEndDocument::function()} | {hasPage, HasPage::function()} | {getPageInfo, GetPageInfo::function()}**

Creates a wxPrintout object with a callback fun and optionally other callback funs.

```
OnPrintPage(This,Page) -> boolean()
```

```
OnPreparePrinting(This) -> term()
```

```
OnBeginPrinting(This) -> term()
```

```
OnEndPrinting(This) -> term()
```

```
OnBeginDocument(This,StartPage,EndPage) -> boolean()
```

```
OnEndDocument(This) -> term()
```

```
HasPage(This,Page)} -> boolean()
```

```
GetPageInfo(This) -> {MinPage::integer(), MaxPage::integer(),
                      PageFrom::integer(), PageTo::integer()}
```

The **This** argument is the wxPrintout object reference to this object
NOTE: The callbacks may not call other processes.

`getDC(This) -> wxDC:wxDC()`

Types:

**This = *wxPrintout()***

See **external documentation**.

```
getPageSizeMM(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
getPageSizePixels(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
getPaperRectPixels(This) -> {X::integer(), Y::integer(), W::integer(),
H::integer()}
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
getPPIPrinter(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
getPPIScreen(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
getTitle(This) -> unicode:charlist()
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
isPreview(This) -> boolean()
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
fitThisSizeToPaper(This, ImageSize) -> ok
```

Types:

**This = *wxPrintout()***

**ImageSize = {W::integer(), H::integer()}**

See **external documentation**.

```
fitThisSizeToPage(This, ImageSize) -> ok
```

Types:

**This = *wxPrintout()***

**ImageSize = {W::integer(), H::integer()}**

See **external documentation**.

```
fitThisSizeToPageMargins(This, ImageSize, PageSetupData) -> ok
```

Types:

**This = *wxPrintout()***

**ImageSize = {W::integer(), H::integer()}**

**PageSetupData = *wxPageSetupDialogData:wxPageSetupDialogData()***

See **external documentation**.

```
mapScreenSizeToPaper(This) -> ok
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
mapScreenSizeToPage(This) -> ok
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
mapScreenSizeToPageMargins(This, PageSetupData) -> ok
```

Types:

**This = *wxPrintout()***

**PageSetupData = *wxPageSetupDialogData:wxPageSetupDialogData()***

See **external documentation**.

```
mapScreenSizeToDevice(This) -> ok
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
getLogicalPaperRect(This) -> {X::integer(), Y::integer(), W::integer(),
H::integer()}
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
getLogicalPageRect(This) -> {X::integer(), Y::integer(), W::integer(),
H::integer()}
```

Types:

**This = *wxPrintout()***

See **external documentation**.

```
getLogicalPageMarginsRect(This, PageSetupData) -> {X::integer(),
Y::integer(), W::integer(), H::integer()}
```

Types:

**This = *wxPrintout()***

**PageSetupData = *wxPageSetupDialogData:wxPageSetupDialogData()***

See **external documentation**.

```
setLogicalOrigin(This, X, Y) -> ok
```

Types:

**This = *wxPrintout()***

**X = integer()**

**Y = integer()**

See **external documentation**.

```
offsetLogicalOrigin(This, Xoff, Yoff) -> ok
```

Types:

**This = *wxPrintout()***

**Xoff = integer()**

**Yoff = integer()**

See **external documentation**.

```
destroy(This::wxPrintout()) -> ok
```

Destroys this object, do not use object again

# wxPrintPreview

Erlang module

See external documentation: **wxPrintPreview**.

## DATA TYPES

wxPrintPreview()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Printout) -> wxPrintPreview()
```

Types:

**Printout = *wxPrintout:wxPrintout()***

Equivalent to *new(Printout, [])*.

```
new(Printout, Options::[Option]) -> wxPrintPreview()
```

Types:

**Printout = *wxPrintout:wxPrintout()***

**Option = {printoutForPrinting, *wxPrintout:wxPrintout()*} | {data, *wxPrintDialogData:wxPrintDialogData()*}**

See **external documentation**.

```
new(Printout, PrintoutForPrinting, Data) -> wxPrintPreview()
```

Types:

**Printout = *wxPrintout:wxPrintout()***

**PrintoutForPrinting = *wxPrintout:wxPrintout()***

**Data = *wxPrintData:wxPrintData()***

See **external documentation**.

```
getCanvas(This) -> wxPreviewCanvas:wxPreviewCanvas()
```

Types:

**This = *wxPrintPreview()***

See **external documentation**.

```
getCurrentPage(This) -> integer()
```

Types:

**This = *wxPrintPreview()***

See **external documentation**.

```
getFrame(This) -> wxFrame:wxFrame()
```
Types:
**This = *wxPrintPreview()***

See **external documentation**.

```
getMaxPage(This) -> integer()
```
Types:
**This = *wxPrintPreview()***

See **external documentation**.

```
getMinPage(This) -> integer()
```
Types:
**This = *wxPrintPreview()***

See **external documentation**.

```
getPrintout(This) -> wxPrintout:wxPrintout()
```
Types:
**This = *wxPrintPreview()***

See **external documentation**.

```
getPrintoutForPrinting(This) -> wxPrintout:wxPrintout()
```
Types:
**This = *wxPrintPreview()***

See **external documentation**.

```
isOk(This) -> boolean()
```
Types:
**This = *wxPrintPreview()***

See **external documentation**.

```
paintPage(This, Canvas, Dc) -> boolean()
```
Types:
**This = *wxPrintPreview()***
**Canvas = *wxPreviewCanvas:wxPreviewCanvas()***
**Dc = *wxDC:wxDC()***

See **external documentation**.

```
print(This, Interactive) -> boolean()
```
Types:
**This = *wxPrintPreview()***
**Interactive = boolean()**

See **external documentation**.

```
renderPage(This, PageNum) -> boolean()
```

Types:

**This = *wxPrintPreview()***
**PageNum = integer()**

See **external documentation**.

```
setCanvas(This, Canvas) -> ok
```

Types:

**This = *wxPrintPreview()***
**Canvas = *wxPreviewCanvas:wxPreviewCanvas()***

See **external documentation**.

```
setCurrentPage(This, PageNum) -> boolean()
```

Types:

**This = *wxPrintPreview()***
**PageNum = integer()**

See **external documentation**.

```
setFrame(This, Frame) -> ok
```

Types:

**This = *wxPrintPreview()***
**Frame = *wxFrame:wxFrame()***

See **external documentation**.

```
setPrintout(This, Printout) -> ok
```

Types:

**This = *wxPrintPreview()***
**Printout = *wxPrintout:wxPrintout()***

See **external documentation**.

```
setZoom(This, Percent) -> ok
```

Types:

**This = *wxPrintPreview()***
**Percent = integer()**

See **external documentation**.

```
destroy(This::wxPrintPreview()) -> ok
```

Destroys this object, do not use object again

# wxProgressDialog

Erlang module

See external documentation: **wxProgressDialog**.

This class is derived (and can use functions) from:
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxProgressDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new(Title, Message) -> wxProgressDialog()`

Types:

**Title = *unicode:chardata()***
**Message = *unicode:chardata()***

Equivalent to *new(Title, Message, [])*.

`new(Title, Message, Options::[Option]) -> wxProgressDialog()`

Types:

**Title = *unicode:chardata()***
**Message = *unicode:chardata()***
**Option = {maximum, integer()} | {parent, *wxWindow:wxWindow()*} | {style, integer()}**

See **external documentation**.

`resume(This) -> ok`

Types:

**This = *wxProgressDialog()***

See **external documentation**.

`update(This) -> ok`

Types:

**This = *wxProgressDialog()***

See **external documentation**.

```
update(This, Value) -> boolean()
```

Types:

**This = *wxProgressDialog()***
**Value = integer()**

Equivalent to *update(This, Value, [])*.

```
update(This, Value, Options::[Option]) -> boolean()
```

Types:

**This = *wxProgressDialog()***
**Value = integer()**
**Option = {newmsg, *unicode:chardata()*}**

See **external documentation**.

```
destroy(This::wxProgressDialog()) -> ok
```

Destroys this object, do not use object again

# wxQueryNewPaletteEvent

Erlang module

See external documentation: **wxQueryNewPaletteEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**query_new_palette**

See also the message variant *#wxQueryNewPalette{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxQueryNewPaletteEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
setPaletteRealized(This, Realized) -> ok
```

Types:

**This = *wxQueryNewPaletteEvent()***
**Realized = boolean()**

See **external documentation**.

```
getPaletteRealized(This) -> boolean()
```

Types:

**This = *wxQueryNewPaletteEvent()***

See **external documentation**.

# wxRadioBox

Erlang module

See external documentation: **wxRadioBox**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxRadioBox()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Parent, Id, Title, Pos, Size, Choices) -> wxRadioBox()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***
**Pos = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**
**Choices = [*unicode:chardata()*]**

Equivalent to *new(Parent, Id, Title, Pos, Size, Choices, [])*.

```
new(Parent, Id, Title, Pos, Size, Choices, Options::[Option]) -> wxRadioBox()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***
**Pos = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**
**Choices = [*unicode:chardata()*]**
**Option = {majorDim, integer()} | {style, integer()} | {val, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id, Title, Pos, Size, Choices) -> boolean()
```

Types:

**This = *wxRadioBox()***
**Parent = *wxWindow:wxWindow()***

**Id = integer()**
**Title = *unicode:chardata()***
**Pos = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**
**Choices = [*unicode:chardata()*]**

Equivalent to *create(This, Parent, Id, Title, Pos, Size, Choices, [])*.

```
create(This, Parent, Id, Title, Pos, Size, Choices, Options::[Option]) ->
boolean()
```

Types:

**This = *wxRadioBox()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Title = *unicode:chardata()***
**Pos = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**
**Choices = [*unicode:chardata()*]**
**Option = {majorDim, integer()} | {style, integer()} | {val, *wx:wx_object()*}**

See **external documentation**.

```
enable(This) -> boolean()
```

Types:

**This = *wxRadioBox()***

Equivalent to *enable(This, [])*.

```
enable(This, N) -> boolean()
```

Types:

**This = *wxRadioBox()***
**N = integer()**

See **external documentation**.
Also:
enable(This, [Option]) -> boolean() when
This::wxRadioBox(),
Option :: {'enable', boolean()}.

```
enable(This, N, Options::[Option]) -> boolean()
```

Types:

**This = *wxRadioBox()***
**N = integer()**
**Option = {enable, boolean()}**

See **external documentation**.

```
getSelection(This) -> integer()
```

Types:

**This = *wxRadioBox()***

See **external documentation**.

```
getString(This, N) -> unicode:charlist()
```

Types:

**This = *wxRadioBox()***

**N = integer()**

See **external documentation**.

```
setSelection(This, N) -> ok
```

Types:

**This = *wxRadioBox()***

**N = integer()**

See **external documentation**.

```
show(This) -> boolean()
```

Types:

**This = *wxRadioBox()***

Equivalent to *show(This, [])*.

```
show(This, N) -> boolean()
```

Types:

**This = *wxRadioBox()***

**N = integer()**

See **external documentation**.
Also:
show(This, [Option]) -> boolean() when
This::wxRadioBox(),
Option :: {'show', boolean()}.

```
show(This, N, Options::[Option]) -> boolean()
```

Types:

**This = *wxRadioBox()***

**N = integer()**

**Option = {show, boolean()}**

See **external documentation**.

```
getColumnCount(This) -> integer()
```

Types:

**This = *wxRadioBox()***

See **external documentation**.

```
getItemHelpText(This, N) -> unicode:charlist()
```

Types:

**This = *wxRadioBox()***
**N = integer()**

See **external documentation**.

```
getItemToolTip(This, Item) -> wxToolTip:wxToolTip()
```

Types:

**This = *wxRadioBox()***
**Item = integer()**

See **external documentation**.

```
getItemFromPoint(This, Pt) -> integer()
```

Types:

**This = *wxRadioBox()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
getRowCount(This) -> integer()
```

Types:

**This = *wxRadioBox()***

See **external documentation**.

```
isItemEnabled(This, N) -> boolean()
```

Types:

**This = *wxRadioBox()***
**N = integer()**

See **external documentation**.

```
isItemShown(This, N) -> boolean()
```

Types:

**This = *wxRadioBox()***
**N = integer()**

See **external documentation**.

```
setItemHelpText(This, N, HelpText) -> ok
```

Types:

**This = *wxRadioBox()***
**N = integer()**
**HelpText = *unicode:chardata()***

See **external documentation**.

```
setItemToolTip(This, Item, Text) -> ok
```

Types:

**This = *wxRadioBox()***
**Item = integer()**
**Text = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxRadioBox()) -> ok
```

Destroys this object, do not use object again

# wxRadioButton

Erlang module

See external documentation: **wxRadioButton**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxRadioButton()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxRadioButton()
```

See **external documentation**.

```
new(Parent, Id, Label) -> wxRadioButton()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***

Equivalent to *new(Parent, Id, Label, [])*.

```
new(Parent, Id, Label, Options::[Option]) -> wxRadioButton()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id, Label) -> boolean()
```

Types:

**This = *wxRadioButton()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***

Equivalent to *create(This, Parent, Id, Label, [])*.

```
create(This, Parent, Id, Label, Options::[Option]) -> boolean()
```

Types:

**This = *wxRadioButton()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Label = *unicode:chardata()***

**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getValue(This) -> boolean()
```

Types:

**This = *wxRadioButton()***

See **external documentation**.

```
setValue(This, Val) -> ok
```

Types:

**This = *wxRadioButton()***

**Val = boolean()**

See **external documentation**.

```
destroy(This::wxRadioButton()) -> ok
```

Destroys this object, do not use object again

# wxRegion

Erlang module

See external documentation: **wxRegion**.

## DATA TYPES

wxRegion()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxRegion()`

See **external documentation**.

`new(Bmp) -> wxRegion()`

Types:

**Bmp = *wxBitmap:wxBitmap()***

See **external documentation**.
Also:
new(Rect) -> wxRegion() when
Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}.

`new(TopLeft, BottomRight) -> wxRegion()`

Types:

**TopLeft = {X::integer(), Y::integer()}**
**BottomRight = {X::integer(), Y::integer()}**

See **external documentation**.

`new(X, Y, W, H) -> wxRegion()`

Types:

**X = integer()**
**Y = integer()**
**W = integer()**
**H = integer()**

See **external documentation**.

`clear(This) -> ok`

Types:

**This = *wxRegion()***

See **external documentation**.

```
contains(This, Pt) -> wx:wx_enum()
```

Types:

**This = *wxRegion()***

**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

Also:

contains(This, Rect) -> wx:wx_enum() when

This::wxRegion(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}.

Res = ?wxOutRegion | ?wxPartRegion | ?wxInRegion

```
contains(This, X, Y) -> wx:wx_enum()
```

Types:

**This = *wxRegion()***

**X = integer()**

**Y = integer()**

See **external documentation**.

Res = ?wxOutRegion | ?wxPartRegion | ?wxInRegion

```
contains(This, X, Y, W, H) -> wx:wx_enum()
```

Types:

**This = *wxRegion()***

**X = integer()**

**Y = integer()**

**W = integer()**

**H = integer()**

See **external documentation**.

Res = ?wxOutRegion | ?wxPartRegion | ?wxInRegion

```
convertToBitmap(This) -> wxBitmap:wxBitmap()
```

Types:

**This = *wxRegion()***

See **external documentation**.

```
getBox(This) -> {X::integer(), Y::integer(), W::integer(), H::integer()}
```

Types:

**This = *wxRegion()***

See **external documentation**.

```
intersect(This, Region) -> boolean()
```

Types:

**This = *wxRegion()***

**Region = *wxRegion()***

See **external documentation**.

Also:

intersect(This, Rect) -> boolean() when
This::wxRegion(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}.

```
intersect(This, X, Y, W, H) -> boolean()
```

Types:

**This = *wxRegion()***
**X = integer()**
**Y = integer()**
**W = integer()**
**H = integer()**

See **external documentation**.

```
isEmpty(This) -> boolean()
```

Types:

**This = *wxRegion()***

See **external documentation**.

```
subtract(This, Region) -> boolean()
```

Types:

**This = *wxRegion()***
**Region = *wxRegion()***

See **external documentation**.
Also:
subtract(This, Rect) -> boolean() when
This::wxRegion(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}.

```
subtract(This, X, Y, W, H) -> boolean()
```

Types:

**This = *wxRegion()***
**X = integer()**
**Y = integer()**
**W = integer()**
**H = integer()**

See **external documentation**.

```
offset(This, Pt) -> boolean()
```

Types:

**This = *wxRegion()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
offset(This, X, Y) -> boolean()
```

Types:

**This = *wxRegion()***

**X = integer()**
**Y = integer()**

See **external documentation**.

`union(This, Region) -> boolean()`

Types:

**This = *wxRegion()***
**Region = *wxRegion()* | *wxBitmap:wxBitmap()***

See **external documentation**.
Also:
union(This, Rect) -> boolean() when
This::wxRegion(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}.

`union(This, Bmp, Transp) -> boolean()`

Types:

**This = *wxRegion()***
**Bmp = *wxBitmap:wxBitmap()***
**Transp = *wx:wx_colour()***

Equivalent to *union(This, Bmp, Transp, [])*.

`union(This, Bmp, Transp, Options::[Option]) -> boolean()`

Types:

**This = *wxRegion()***
**Bmp = *wxBitmap:wxBitmap()***
**Transp = *wx:wx_colour()***
**Option = {tolerance, integer()}**

See **external documentation**.

`union(This, X, Y, W, H) -> boolean()`

Types:

**This = *wxRegion()***
**X = integer()**
**Y = integer()**
**W = integer()**
**H = integer()**

See **external documentation**.

`Xor(This, Region) -> boolean()`

Types:

**This = *wxRegion()***
**Region = *wxRegion()***

See **external documentation**.
Also:
'Xor'(This, Rect) -> boolean() when

This::wxRegion(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}.

`Xor(This, X, Y, W, H) -> boolean()`

Types:

**This = *wxRegion()***
**X = integer()**
**Y = integer()**
**W = integer()**
**H = integer()**

See **external documentation**.

`destroy(This::wxRegion()) -> ok`

Destroys this object, do not use object again

# wxSashEvent

Erlang module

See external documentation: **wxSashEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**sash_dragged**

See also the message variant *#wxSash{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxSashEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getEdge(This) -> wx:wx_enum()`

Types:

**This = *wxSashEvent()***

See **external documentation**.
Res = ?wxSASH_TOP | ?wxSASH_RIGHT | ?wxSASH_BOTTOM | ?wxSASH_LEFT | ?wxSASH_NONE

`getDragRect(This) -> {X::integer(), Y::integer(), W::integer(), H::integer()}`

Types:

**This = *wxSashEvent()***

See **external documentation**.

`getDragStatus(This) -> wx:wx_enum()`

Types:

**This = *wxSashEvent()***

See **external documentation**.
Res = ?wxSASH_STATUS_OK | ?wxSASH_STATUS_OUT_OF_RANGE

# wxSashLayoutWindow

Erlang module

See external documentation: **wxSashLayoutWindow**.

This class is derived (and can use functions) from:
*wxSashWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxSashLayoutWindow()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxSashLayoutWindow()
```

See **external documentation**.

```
new(Parent) -> wxSashLayoutWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxSashLayoutWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
create(This, Parent) -> boolean()
```

Types:

**This = *wxSashLayoutWindow()***

**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

```
create(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxSashLayoutWindow()***

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`getAlignment(This) -> wx:wx_enum()`

Types:

**This = *wxSashLayoutWindow()***

See **external documentation**.
Res = ?wxLAYOUT_NONE | ?wxLAYOUT_TOP | ?wxLAYOUT_LEFT | ?wxLAYOUT_RIGHT | ?wxLAYOUT_BOTTOM

`getOrientation(This) -> wx:wx_enum()`

Types:

**This = *wxSashLayoutWindow()***

See **external documentation**.
Res = ?wxLAYOUT_HORIZONTAL | ?wxLAYOUT_VERTICAL

`setAlignment(This, Align) -> ok`

Types:

**This = *wxSashLayoutWindow()***

**Align = *wx:wx_enum()***

See **external documentation**.
Align = ?wxLAYOUT_NONE | ?wxLAYOUT_TOP | ?wxLAYOUT_LEFT | ?wxLAYOUT_RIGHT | ?wxLAYOUT_BOTTOM

`setDefaultSize(This, Size) -> ok`

Types:

**This = *wxSashLayoutWindow()***

**Size = {W::integer(), H::integer()}**

See **external documentation**.

`setOrientation(This, Orient) -> ok`

Types:

**This = *wxSashLayoutWindow()***

**Orient = *wx:wx_enum()***

See **external documentation**.
Orient = ?wxLAYOUT_HORIZONTAL | ?wxLAYOUT_VERTICAL

`destroy(This::wxSashLayoutWindow()) -> ok`

Destroys this object, do not use object again

# wxSashWindow

Erlang module

See external documentation: **wxSashWindow**.

This class is derived (and can use functions) from:
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxSashWindow()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxSashWindow()`

See **external documentation**.

`new(Parent) -> wxSashWindow()`

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

`new(Parent, Options::[Option]) -> wxSashWindow()`

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`getSashVisible(This, Edge) -> boolean()`

Types:

**This = *wxSashWindow()***

**Edge = *wx:wx_enum()***

See **external documentation**.
Edge = ?wxSASH_TOP | ?wxSASH_RIGHT | ?wxSASH_BOTTOM | ?wxSASH_LEFT | ?wxSASH_NONE

`getMaximumSizeX(This) -> integer()`

Types:

**This = *wxSashWindow()***

See **external documentation**.

```
getMaximumSizeY(This) -> integer()
```

Types:

**This = *wxSashWindow()***

See **external documentation**.

```
getMinimumSizeX(This) -> integer()
```

Types:

**This = *wxSashWindow()***

See **external documentation**.

```
getMinimumSizeY(This) -> integer()
```

Types:

**This = *wxSashWindow()***

See **external documentation**.

```
setMaximumSizeX(This, Max) -> ok
```

Types:

**This = *wxSashWindow()***
**Max = integer()**

See **external documentation**.

```
setMaximumSizeY(This, Max) -> ok
```

Types:

**This = *wxSashWindow()***
**Max = integer()**

See **external documentation**.

```
setMinimumSizeX(This, Min) -> ok
```

Types:

**This = *wxSashWindow()***
**Min = integer()**

See **external documentation**.

```
setMinimumSizeY(This, Min) -> ok
```

Types:

**This = *wxSashWindow()***
**Min = integer()**

See **external documentation**.

```
setSashVisible(This, Edge, Sash) -> ok
```

Types:

**This = *wxSashWindow()***
**Edge = *wx:wx_enum()***

**Sash = boolean()**

See **external documentation**.
Edge = ?wxSASH_TOP | ?wxSASH_RIGHT | ?wxSASH_BOTTOM | ?wxSASH_LEFT | ?wxSASH_NONE

`destroy(This::wxSashWindow()) -> ok`

Destroys this object, do not use object again

# wxScreenDC

Erlang module

See external documentation: **wxScreenDC**.

This class is derived (and can use functions) from:
*wxDC*

## DATA TYPES

wxScreenDC()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxScreenDC()
```

See **external documentation**.

```
destroy(This::wxScreenDC()) -> ok
```

Destroys this object, do not use object again

# wxScrollBar

Erlang module

See external documentation: **wxScrollBar**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxScrollBar()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxScrollBar()
```

See **external documentation**.

```
new(Parent, Id) -> wxScrollBar()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxScrollBar()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id) -> boolean()
```

Types:

**This = *wxScrollBar()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

```
create(This, Parent, Id, Options::[Option]) -> boolean()
```

Types:

**This = *wxScrollBar()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

`getRange(This) -> integer()`

Types:

**This = *wxScrollBar()***

See **external documentation**.

`getPageSize(This) -> integer()`

Types:

**This = *wxScrollBar()***

See **external documentation**.

`getThumbPosition(This) -> integer()`

Types:

**This = *wxScrollBar()***

See **external documentation**.

`getThumbSize(This) -> integer()`

Types:

**This = *wxScrollBar()***

See **external documentation**.

`setThumbPosition(This, ViewStart) -> ok`

Types:

**This = *wxScrollBar()***
**ViewStart = integer()**

See **external documentation**.

`setScrollbar(This, Position, ThumbSize, Range, PageSize) -> ok`

Types:

**This = *wxScrollBar()***
**Position = integer()**
**ThumbSize = integer()**
**Range = integer()**
**PageSize = integer()**

Equivalent to *setScrollbar(This, Position, ThumbSize, Range, PageSize, [])*.

```
setScrollbar(This, Position, ThumbSize, Range, PageSize, Options::[Option]) -
> ok
```

Types:

**This = *wxScrollBar()***
**Position = integer()**
**ThumbSize = integer()**
**Range = integer()**
**PageSize = integer()**
**Option = {refresh, boolean()}**

See **external documentation**.

```
destroy(This::wxScrollBar()) -> ok
```

Destroys this object, do not use object again

# wxScrolledWindow

Erlang module

See external documentation: **wxScrolledWindow**.

This class is derived (and can use functions) from:
*wxPanel*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxScrolledWindow()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxScrolledWindow()
```

See **external documentation**.

```
new(Parent) -> wxScrolledWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxScrolledWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {winid, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
calcScrolledPosition(This, Pt) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxScrolledWindow()***

**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
calcScrolledPosition(This, X, Y) -> {Xx::integer(), Yy::integer()}
```

Types:

**This = *wxScrolledWindow()***

**X = integer()**

**Y = integer()**

See **external documentation**.

```
calcUnscrolledPosition(This, Pt) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxScrolledWindow()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
calcUnscrolledPosition(This, X, Y) -> {Xx::integer(), Yy::integer()}
```

Types:

**This = *wxScrolledWindow()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
enableScrolling(This, X_scrolling, Y_scrolling) -> ok
```

Types:

**This = *wxScrolledWindow()***
**X_scrolling = boolean()**
**Y_scrolling = boolean()**

See **external documentation**.

```
getScrollPixelsPerUnit(This) -> {PixelsPerUnitX::integer(),
PixelsPerUnitY::integer()}
```

Types:

**This = *wxScrolledWindow()***

See **external documentation**.

```
getViewStart(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxScrolledWindow()***

See **external documentation**.

```
doPrepareDC(This, Dc) -> ok
```

Types:

**This = *wxScrolledWindow()***
**Dc = *wxDC:wxDC()***

See **external documentation**.

```
prepareDC(This, Dc) -> ok
```

Types:

**This = *wxScrolledWindow()***
**Dc = *wxDC:wxDC()***

See **external documentation**.

```
scroll(This, X, Y) -> ok
```

Types:

**This = *wxScrolledWindow()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
setScrollbars(This, PixelsPerUnitX, PixelsPerUnitY, NoUnitsX, NoUnitsY) -> ok
```

Types:

**This = *wxScrolledWindow()***
**PixelsPerUnitX = integer()**
**PixelsPerUnitY = integer()**
**NoUnitsX = integer()**
**NoUnitsY = integer()**

Equivalent to *setScrollbars(This, PixelsPerUnitX, PixelsPerUnitY, NoUnitsX, NoUnitsY, [])*.

```
setScrollbars(This, PixelsPerUnitX, PixelsPerUnitY, NoUnitsX, NoUnitsY,
Options::[Option]) -> ok
```

Types:

**This = *wxScrolledWindow()***
**PixelsPerUnitX = integer()**
**PixelsPerUnitY = integer()**
**NoUnitsX = integer()**
**NoUnitsY = integer()**
**Option = {xPos, integer()} | {yPos, integer()} | {noRefresh, boolean()}**

See **external documentation**.

```
setScrollRate(This, Xstep, Ystep) -> ok
```

Types:

**This = *wxScrolledWindow()***
**Xstep = integer()**
**Ystep = integer()**

See **external documentation**.

```
setTargetWindow(This, Target) -> ok
```

Types:

**This = *wxScrolledWindow()***
**Target = *wxWindow:wxWindow()***

See **external documentation**.

```
destroy(This::wxScrolledWindow()) -> ok
```

Destroys this object, do not use object again

# wxScrollEvent

Erlang module

See external documentation: **wxScrollEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**scroll_top**, **scroll_bottom**, **scroll_lineup**, **scroll_linedown**, **scroll_pageup**, **scroll_pagedown**, **scroll_thumbtrack**, **scroll_thumbrelease**, **scroll_changed**

See also the message variant *#wxScroll{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxScrollEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getOrientation(This) -> integer()
```

Types:

**This = *wxScrollEvent()***

See **external documentation**.

```
getPosition(This) -> integer()
```

Types:

**This = *wxScrollEvent()***

See **external documentation**.

# wxScrollWinEvent

Erlang module

See external documentation: **wxScrollWinEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**scrollwin_top**, **scrollwin_bottom**, **scrollwin_lineup**, **scrollwin_linedown**, **scrollwin_pageup**, **scrollwin_pagedown**, **scrollwin_thumbtrack**, **scrollwin_thumbrelease**

See also the message variant *#wxScrollWin{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxScrollWinEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getOrientation(This) -> integer()
```

Types:

**This = *wxScrollWinEvent()***

See **external documentation**.

```
getPosition(This) -> integer()
```

Types:

**This = *wxScrollWinEvent()***

See **external documentation**.

# wxSetCursorEvent

Erlang module

See external documentation: **wxSetCursorEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**set_cursor**

See also the message variant *#wxSetCursor{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxSetCursorEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getCursor(This) -> wxCursor:wxCursor()`

Types:

**This = *wxSetCursorEvent()***

See **external documentation**.

`getX(This) -> integer()`

Types:

**This = *wxSetCursorEvent()***

See **external documentation**.

`getY(This) -> integer()`

Types:

**This = *wxSetCursorEvent()***

See **external documentation**.

`hasCursor(This) -> boolean()`

Types:

**This = *wxSetCursorEvent()***

See **external documentation**.

`setCursor(This, Cursor) -> ok`

Types:

**This = *wxSetCursorEvent()***
**Cursor = *wxCursor:wxCursor()***

See **external documentation**.

# wxShowEvent

Erlang module

See external documentation: **wxShowEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**show**

See also the message variant *#wxShow{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxShowEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`setShow(This, Show) -> ok`

Types:

**This = *wxShowEvent()***
**Show = boolean()**

See **external documentation**.

`getShow(This) -> boolean()`

Types:

**This = *wxShowEvent()***

See **external documentation**.

# wxSingleChoiceDialog

Erlang module

See external documentation: **wxSingleChoiceDialog**.

This class is derived (and can use functions) from:
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxSingleChoiceDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxSingleChoiceDialog()
```

See **external documentation**.

```
new(Parent, Message, Caption, Choices) -> wxSingleChoiceDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Message = *unicode:chardata()***
**Caption = *unicode:chardata()***
**Choices = [*unicode:chardata()*]**

Equivalent to *new(Parent, Message, Caption, Choices, [])*.

```
new(Parent, Message, Caption, Choices, Options::[Option]) ->
wxSingleChoiceDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Message = *unicode:chardata()***
**Caption = *unicode:chardata()***
**Choices = [*unicode:chardata()*]**
**Option = {style, integer()} | {pos, {X::integer(), Y::integer()}}**

See **external documentation**.

```
getSelection(This) -> integer()
```

Types:

**This = *wxSingleChoiceDialog()***

See **external documentation**.

```
getStringSelection(This) -> unicode:charlist()
```

Types:

**This = *wxSingleChoiceDialog()***

See **external documentation**.

```
setSelection(This, Sel) -> ok
```

Types:

**This = *wxSingleChoiceDialog()***

**Sel = integer()**

See **external documentation**.

```
destroy(This::wxSingleChoiceDialog()) -> ok
```

Destroys this object, do not use object again

# wxSizeEvent

Erlang module

See external documentation: **wxSizeEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**size**

See also the message variant *#wxSize{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxSizeEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxSizeEvent()***

See **external documentation**.

# wxSizer

Erlang module

See external documentation: **wxSizer**.

## DATA TYPES

wxSizer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`add(This, Window) -> wxSizerItem:wxSizerItem()`

Types:

**This = *wxSizer()***
**Window = *wxWindow:wxWindow()* | *wxSizer()***

Equivalent to *add(This, Window, [])*.

`add(This, Width, Height) -> wxSizerItem:wxSizerItem()`

Types:

**This = *wxSizer()***
**Width = integer()**
**Height = integer()**

See **external documentation**.
Also:
add(This, Window, [Option]) -> wxSizerItem:wxSizerItem() when
This::wxSizer(), Window::wxWindow:wxWindow() | wxSizer(),
Option :: {'proportion', integer()}
| {'flag', integer()}
| {'border', integer()}
| {'userData', wx:wx_object()};
(This, Window, Flags) -> wxSizerItem:wxSizerItem() when
This::wxSizer(), Window::wxWindow:wxWindow() | wxSizer(), Flags::wxSizerFlags:wxSizerFlags().

`add(This, Width, Height, Options::[Option]) -> wxSizerItem:wxSizerItem()`

Types:

**This = *wxSizer()***
**Width = integer()**
**Height = integer()**
**Option = {proportion, integer()} | {flag, integer()} | {border, integer()} | {userData, *wx:wx_object()*}**

See **external documentation**.

```
addSpacer(This, Size) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***
**Size = integer()**

See **external documentation**.

```
addStretchSpacer(This) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***

Equivalent to *addStretchSpacer(This, [])*.

```
addStretchSpacer(This, Options::[Option]) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***
**Option = {prop, integer()}**

See **external documentation**.

```
calcMin(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxSizer()***

See **external documentation**.

```
clear(This) -> ok
```

Types:

**This = *wxSizer()***

Equivalent to *clear(This, [])*.

```
clear(This, Options::[Option]) -> ok
```

Types:

**This = *wxSizer()***
**Option = {delete_windows, boolean()}**

See **external documentation**.

```
detach(This, Index) -> boolean()
```

Types:

**This = *wxSizer()***
**Index = integer()**

See **external documentation**.
Also:
detach(This, Window) -> boolean() when
This::wxSizer(), Window::wxWindow:wxWindow() | wxSizer().

```
fit(This, Window) -> {W::integer(), H::integer()}
```

Types:

**This = *wxSizer()***

**Window = *wxWindow:wxWindow()***

See **external documentation**.

```
fitInside(This, Window) -> ok
```

Types:

**This = *wxSizer()***

**Window = *wxWindow:wxWindow()***

See **external documentation**.

```
getChildren(This) -> [wxSizerItem:wxSizerItem()]
```

Types:

**This = *wxSizer()***

See **external documentation**.

```
getItem(This, Window) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***

**Window = *wxWindow:wxWindow()* | *wxSizer()***

See **external documentation**.
Also:
getItem(This, Index) -> wxSizerItem:wxSizerItem() when
This::wxSizer(), Index::integer().

```
getItem(This, Window, Options::[Option]) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***

**Window = *wxWindow:wxWindow()* | *wxSizer()***

**Option = {recursive, boolean()}**

See **external documentation**.

```
getSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxSizer()***

See **external documentation**.

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxSizer()***

See **external documentation**.

```
getMinSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxSizer()***

See **external documentation**.

```
hide(This, Window) -> boolean()
```

Types:

**This = *wxSizer()***

**Window = *wxWindow:wxWindow() | wxSizer()***

See **external documentation**.
Also:
hide(This, Index) -> boolean() when
This::wxSizer(), Index::integer().

```
hide(This, Window, Options::[Option]) -> boolean()
```

Types:

**This = *wxSizer()***

**Window = *wxWindow:wxWindow() | wxSizer()***

**Option = {recursive, boolean()}**

See **external documentation**.

```
insert(This, Index, Item) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***

**Index = integer()**

**Item = *wxSizerItem:wxSizerItem()***

See **external documentation**.

```
insert(This, Index, Width, Height) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***

**Index = integer()**

**Width = integer()**

**Height = integer()**

See **external documentation**.
Also:
insert(This, Index, Window, [Option]) -> wxSizerItem:wxSizerItem() when
This::wxSizer(), Index::integer(), Window::wxWindow:wxWindow() | wxSizer(),
Option :: {'proportion', integer()}
| {'flag', integer()}
| {'border', integer()}
| {'userData', wx:wx_object()};
(This, Index, Window, Flags) -> wxSizerItem:wxSizerItem() when
This::wxSizer(), Index::integer(), Window::wxWindow:wxWindow() | wxSizer(),
Flags::wxSizerFlags:wxSizerFlags().

```
insert(This, Index, Width, Height, Options::[Option]) ->
wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***
**Index = integer()**
**Width = integer()**
**Height = integer()**
**Option = {proportion, integer()} | {flag, integer()} | {border, integer()} | {userData, *wx:wx_object()*}**

See **external documentation**.

```
insertSpacer(This, Index, Size) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***
**Index = integer()**
**Size = integer()**

See **external documentation**.

```
insertStretchSpacer(This, Index) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***
**Index = integer()**

Equivalent to *insertStretchSpacer(This, Index, [])*.

```
insertStretchSpacer(This, Index, Options::[Option]) ->
wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***
**Index = integer()**
**Option = {prop, integer()}**

See **external documentation**.

```
isShown(This, Index) -> boolean()
```

Types:

**This = *wxSizer()***
**Index = integer()**

See **external documentation**.
Also:
isShown(This, Window) -> boolean() when
This::wxSizer(), Window::wxWindow:wxWindow() | wxSizer().

```
layout(This) -> ok
```

Types:

**This = *wxSizer()***

See **external documentation**.

```
prepend(This, Item) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***
**Item = *wxSizerItem:wxSizerItem()***

See **external documentation**.

```
prepend(This, Width, Height) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***
**Width = integer()**
**Height = integer()**

See **external documentation**.
Also:
prepend(This, Window, [Option]) -> wxSizerItem:wxSizerItem() when
This::wxSizer(), Window::wxWindow:wxWindow() | wxSizer(),
Option :: {'proportion', integer()}
| {'flag', integer()}
| {'border', integer()}
| {'userData', wx:wx_object()};
(This, Window, Flags) -> wxSizerItem:wxSizerItem() when
This::wxSizer(), Window::wxWindow:wxWindow() | wxSizer(), Flags::wxSizerFlags:wxSizerFlags().

```
prepend(This, Width, Height, Options::[Option]) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***
**Width = integer()**
**Height = integer()**
**Option = {proportion, integer()} | {flag, integer()} | {border, integer()} | {userData, *wx:wx_object()*}**

See **external documentation**.

```
prependSpacer(This, Size) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***
**Size = integer()**

See **external documentation**.

```
prependStretchSpacer(This) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***

Equivalent to *prependStretchSpacer(This, [])*.

```
prependStretchSpacer(This, Options::[Option]) -> wxSizerItem:wxSizerItem()
```

Types:

**This = *wxSizer()***
**Option = {prop, integer()}**

See **external documentation**.

```
recalcSizes(This) -> ok
```

Types:

**This = *wxSizer()***

See **external documentation**.

```
remove(This, Index) -> boolean()
```

Types:

**This = *wxSizer()***
**Index = integer()**

See **external documentation**.
Also:
remove(This, Sizer) -> boolean() when
This::wxSizer(), Sizer::wxSizer().

```
replace(This, Oldwin, Newwin) -> boolean()
```

Types:

**This = *wxSizer()***
**Oldwin = *wxWindow:wxWindow()* | *wxSizer()***
**Newwin = *wxWindow:wxWindow()* | *wxSizer()***

See **external documentation**.
Also:
replace(This, Index, Newitem) -> boolean() when
This::wxSizer(), Index::integer(), Newitem::wxSizerItem:wxSizerItem().

```
replace(This, Oldwin, Newwin, Options::[Option]) -> boolean()
```

Types:

**This = *wxSizer()***
**Oldwin = *wxWindow:wxWindow()* | *wxSizer()***
**Newwin = *wxWindow:wxWindow()* | *wxSizer()***
**Option = {recursive, boolean()}**

See **external documentation**.

```
setDimension(This, X, Y, Width, Height) -> ok
```

Types:

**This = *wxSizer()***
**X = integer()**
**Y = integer()**
**Width = integer()**

**Height = integer()**

See **external documentation**.

`setMinSize(This, Size) -> ok`

Types:

**This = *wxSizer()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

`setMinSize(This, Width, Height) -> ok`

Types:

**This = *wxSizer()***
**Width = integer()**
**Height = integer()**

See **external documentation**.

`setItemMinSize(This, Index, Size) -> boolean()`

Types:

**This = *wxSizer()***
**Index = integer()**
**Size = {W::integer(), H::integer()}**

See **external documentation**.
Also:
setItemMinSize(This, Window, Size) -> boolean() when
This::wxSizer(), Window::wxWindow:wxWindow() | wxSizer(), Size::{W::integer(), H::integer()}.

`setItemMinSize(This, Index, Width, Height) -> boolean()`

Types:

**This = *wxSizer()***
**Index = integer()**
**Width = integer()**
**Height = integer()**

See **external documentation**.
Also:
setItemMinSize(This, Window, Width, Height) -> boolean() when
This::wxSizer(), Window::wxWindow:wxWindow() | wxSizer(), Width::integer(), Height::integer().

`setSizeHints(This, Window) -> ok`

Types:

**This = *wxSizer()***
**Window = *wxWindow:wxWindow()***

See **external documentation**.

```
setVirtualSizeHints(This, Window) -> ok
```

Types:

**This = *wxSizer()***
**Window = *wxWindow:wxWindow()***

See **external documentation**.

```
show(This, Index) -> boolean()
```

Types:

**This = *wxSizer()***
**Index = integer()**

See **external documentation**.
Also:
show(This, Window) -> boolean() when
This::wxSizer(), Window::wxWindow:wxWindow() | wxSizer();
(This, Show) -> 'ok' when
This::wxSizer(), Show::boolean().

```
show(This, Index, Options::[Option]) -> boolean()
```

Types:

**This = *wxSizer()***
**Index = integer()**
**Option = {show, boolean()}**

See **external documentation**.
Also:
show(This, Window, [Option]) -> boolean() when
This::wxSizer(), Window::wxWindow:wxWindow() | wxSizer(),
Option :: {'show', boolean()}
| {'recursive', boolean()}.

# wxSizerFlags

Erlang module

See external documentation: **wxSizerFlags**.

## DATA TYPES

wxSizerFlags()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxSizerFlags()`

Equivalent to *new([])*.

`new(Options::[Option]) -> wxSizerFlags()`

Types:

**`Option = {proportion, integer()}`**

See **external documentation**.

`align(This, Alignment) -> wxSizerFlags()`

Types:

**`This = wxSizerFlags()`**
**`Alignment = integer()`**

See **external documentation**.

`border(This) -> wxSizerFlags()`

Types:

**`This = wxSizerFlags()`**

Equivalent to *border(This, [])*.

`border(This, Options::[Option]) -> wxSizerFlags()`

Types:

**`This = wxSizerFlags()`**
**`Option = {direction, integer()}`**

See **external documentation**.

`border(This, Direction, BorderInPixels) -> wxSizerFlags()`

Types:

**`This = wxSizerFlags()`**
**`Direction = integer()`**
**`BorderInPixels = integer()`**

See **external documentation**.

```
center(This) -> wxSizerFlags()
```

Types:

**This = *wxSizerFlags()***

See **external documentation**.

```
centre(This) -> wxSizerFlags()
```

Types:

**This = *wxSizerFlags()***

See **external documentation**.

```
expand(This) -> wxSizerFlags()
```

Types:

**This = *wxSizerFlags()***

See **external documentation**.

```
left(This) -> wxSizerFlags()
```

Types:

**This = *wxSizerFlags()***

See **external documentation**.

```
proportion(This, Proportion) -> wxSizerFlags()
```

Types:

**This = *wxSizerFlags()***

**Proportion = integer()**

See **external documentation**.

```
right(This) -> wxSizerFlags()
```

Types:

**This = *wxSizerFlags()***

See **external documentation**.

```
destroy(This::wxSizerFlags()) -> ok
```

Destroys this object, do not use object again

# wxSizerItem

Erlang module

See external documentation: **wxSizerItem**.

## DATA TYPES

wxSizerItem()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxSizerItem()`

See **external documentation**.

`new(Window, Flags) -> wxSizerItem()`

Types:

**Window = *wxWindow:wxWindow() | wxSizer:wxSizer()***

**Flags = *wxSizerFlags:wxSizerFlags()***

See **external documentation**.

`new(Width, Height, Flags) -> wxSizerItem()`

Types:

**Width = integer()**

**Height = integer()**

**Flags = *wxSizerFlags:wxSizerFlags()***

See **external documentation**.

`new(Window, Proportion, Flag, Border, UserData) -> wxSizerItem()`

Types:

**Window = *wxWindow:wxWindow() | wxSizer:wxSizer()***

**Proportion = integer()**

**Flag = integer()**

**Border = integer()**

**UserData = *wx:wx_object()***

See **external documentation**.

`new(Width, Height, Proportion, Flag, Border, UserData) -> wxSizerItem()`

Types:

**Width = integer()**

**Height = integer()**

**Proportion = integer()**

**Flag = integer()**
**Border = integer()**
**UserData = *wx:wx_object()***

See **external documentation**.

```
calcMin(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
deleteWindows(This) -> ok
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
detachSizer(This) -> ok
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getBorder(This) -> integer()
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getFlag(This) -> integer()
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getMinSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getProportion(This) -> integer()
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getRatio(This) -> number()
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getRect(This) -> {X::integer(), Y::integer(), W::integer(), H::integer()}
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getSizer(This) -> wxSizer:wxSizer()
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getSpacer(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getUserData(This) -> wx:wx_object()
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
getWindow(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
isSizer(This) -> boolean()
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
isShown(This) -> boolean()
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
isSpacer(This) -> boolean()
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
isWindow(This) -> boolean()
```

Types:

**This = *wxSizerItem()***

See **external documentation**.

```
setBorder(This, Border) -> ok
```

Types:

**This = *wxSizerItem()***
**Border = integer()**

See **external documentation**.

```
setDimension(This, Pos, Size) -> ok
```

Types:

**This = *wxSizerItem()***
**Pos = {X::integer(), Y::integer()}**
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
setFlag(This, Flag) -> ok
```

Types:

**This = *wxSizerItem()***
**Flag = integer()**

See **external documentation**.

```
setInitSize(This, X, Y) -> ok
```

Types:

**This = *wxSizerItem()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
setMinSize(This, Size) -> ok
```

Types:

**This = *wxSizerItem()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

`setMinSize(This, X, Y) -> ok`

Types:

**This = *wxSizerItem()***
**X = integer()**
**Y = integer()**

See **external documentation**.

`setProportion(This, Proportion) -> ok`

Types:

**This = *wxSizerItem()***
**Proportion = integer()**

See **external documentation**.

`setRatio(This, Ratio) -> ok`

Types:

**This = *wxSizerItem()***
**Ratio = number()**

See **external documentation**.
Also:
setRatio(This, Size) -> 'ok' when
This::wxSizerItem(), Size::{W::integer(), H::integer()}.

`setRatio(This, Width, Height) -> ok`

Types:

**This = *wxSizerItem()***
**Width = integer()**
**Height = integer()**

See **external documentation**.

`setSizer(This, Sizer) -> ok`

Types:

**This = *wxSizerItem()***
**Sizer = *wxSizer:wxSizer()***

See **external documentation**.

`setSpacer(This, Size) -> ok`

Types:

**This = *wxSizerItem()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
setSpacer(This, Width, Height) -> ok
```

Types:

**This = *wxSizerItem()***
**Width = integer()**
**Height = integer()**

See **external documentation**.

```
setWindow(This, Window) -> ok
```

Types:

**This = *wxSizerItem()***
**Window = *wxWindow:wxWindow()***

See **external documentation**.

```
show(This, Show) -> ok
```

Types:

**This = *wxSizerItem()***
**Show = boolean()**

See **external documentation**.

```
destroy(This::wxSizerItem()) -> ok
```

Destroys this object, do not use object again

# wxSlider

Erlang module

See external documentation: **wxSlider**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxSlider()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxSlider()
```

See **external documentation**.

```
new(Parent, Id, Value, MinValue, MaxValue) -> wxSlider()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Value = integer()**
**MinValue = integer()**
**MaxValue = integer()**

Equivalent to *new(Parent, Id, Value, MinValue, MaxValue, [])*.

```
new(Parent, Id, Value, MinValue, MaxValue, Options::[Option]) -> wxSlider()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Value = integer()**
**MinValue = integer()**
**MaxValue = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id, Value, MinValue, MaxValue) -> boolean()
```

Types:

**This = *wxSlider()***

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Value = integer()**
**MinValue = integer()**
**MaxValue = integer()**

Equivalent to *create(This, Parent, Id, Value, MinValue, MaxValue, [])*.

```
create(This, Parent, Id, Value, MinValue, MaxValue, Options::[Option]) ->
boolean()
```

Types:

**This = *wxSlider()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Value = integer()**
**MinValue = integer()**
**MaxValue = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getLineSize(This) -> integer()
```

Types:

**This = *wxSlider()***

See **external documentation**.

```
getMax(This) -> integer()
```

Types:

**This = *wxSlider()***

See **external documentation**.

```
getMin(This) -> integer()
```

Types:

**This = *wxSlider()***

See **external documentation**.

```
getPageSize(This) -> integer()
```

Types:

**This = *wxSlider()***

See **external documentation**.

```
getThumbLength(This) -> integer()
```

Types:

**This = *wxSlider()***

See **external documentation**.

```
getValue(This) -> integer()
```

Types:

**This = *wxSlider()***

See **external documentation**.

```
setLineSize(This, LineSize) -> ok
```

Types:

**This = *wxSlider()***

**LineSize = integer()**

See **external documentation**.

```
setPageSize(This, PageSize) -> ok
```

Types:

**This = *wxSlider()***

**PageSize = integer()**

See **external documentation**.

```
setRange(This, MinValue, MaxValue) -> ok
```

Types:

**This = *wxSlider()***

**MinValue = integer()**

**MaxValue = integer()**

See **external documentation**.

```
setThumbLength(This, LenPixels) -> ok
```

Types:

**This = *wxSlider()***

**LenPixels = integer()**

See **external documentation**.

```
setValue(This, Value) -> ok
```

Types:

**This = *wxSlider()***

**Value = integer()**

See **external documentation**.

```
destroy(This::wxSlider()) -> ok
```

Destroys this object, do not use object again

# wxSpinButton

Erlang module

See external documentation: **wxSpinButton**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxSpinButton()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxSpinButton()
```

See **external documentation**.

```
new(Parent) -> wxSpinButton()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxSpinButton()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
create(This, Parent) -> boolean()
```

Types:

**This = *wxSpinButton()***

**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

```
create(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxSpinButton()***

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`getMax(This) -> integer()`

Types:

**This = *wxSpinButton()***

See **external documentation**.

`getMin(This) -> integer()`

Types:

**This = *wxSpinButton()***

See **external documentation**.

`getValue(This) -> integer()`

Types:

**This = *wxSpinButton()***

See **external documentation**.

`setRange(This, MinVal, MaxVal) -> ok`

Types:

**This = *wxSpinButton()***
**MinVal = integer()**
**MaxVal = integer()**

See **external documentation**.

`setValue(This, Value) -> ok`

Types:

**This = *wxSpinButton()***
**Value = integer()**

See **external documentation**.

`destroy(This::wxSpinButton()) -> ok`

Destroys this object, do not use object again

# wxSpinCtrl

Erlang module

See external documentation: **wxSpinCtrl**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxSpinCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxSpinCtrl()
```

See **external documentation**.

```
new(Parent) -> wxSpinCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxSpinCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {value, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {min, integer()} | {max, integer()} | {initial, integer()}**

See **external documentation**.

```
create(This, Parent) -> boolean()
```

Types:

**This = *wxSpinCtrl()***

**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

```
create(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxSpinCtrl()***

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {value, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {min, integer()} | {max, integer()} | {initial, integer()}**

See **external documentation**.

`setValue(This, Value) -> ok`

Types:

**This = *wxSpinCtrl()***
**Value = integer()**

See **external documentation**.
Also:
setValue(This, Text) -> 'ok' when
This::wxSpinCtrl(), Text::unicode:chardata().

`getValue(This) -> integer()`

Types:

**This = *wxSpinCtrl()***

See **external documentation**.

`setRange(This, MinVal, MaxVal) -> ok`

Types:

**This = *wxSpinCtrl()***
**MinVal = integer()**
**MaxVal = integer()**

See **external documentation**.

`setSelection(This, From, To) -> ok`

Types:

**This = *wxSpinCtrl()***
**From = integer()**
**To = integer()**

See **external documentation**.

`getMin(This) -> integer()`

Types:

**This = *wxSpinCtrl()***

See **external documentation**.

`getMax(This) -> integer()`

Types:

**This = *wxSpinCtrl()***

See **external documentation**.

```
destroy(This::wxSpinCtrl()) -> ok
```

Destroys this object, do not use object again

# wxSpinEvent

Erlang module

See external documentation: **wxSpinEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_spinctrl_updated**, **spin_up**, **spin_down**, **spin**

See also the message variant *#wxSpin{}* event record type.

This class is derived (and can use functions) from:
*wxNotifyEvent*
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxSpinEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getPosition(This) -> integer()`

Types:

**This = *wxSpinEvent()***

See **external documentation**.

`setPosition(This, Pos) -> ok`

Types:

**This = *wxSpinEvent()***
**Pos = integer()**

See **external documentation**.

# wxSplashScreen

Erlang module

See external documentation: **wxSplashScreen**.

This class is derived (and can use functions) from:
*wxFrame*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxSplashScreen()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxSplashScreen()
```

See **external documentation**.

```
new(Bitmap, SplashStyle, Milliseconds, Parent, Id) -> wxSplashScreen()
```

Types:

**Bitmap = *wxBitmap:wxBitmap()***
**SplashStyle = integer()**
**Milliseconds = integer()**
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Bitmap, SplashStyle, Milliseconds, Parent, Id, [])*.

```
new(Bitmap, SplashStyle, Milliseconds, Parent, Id, Options::[Option]) ->
wxSplashScreen()
```

Types:

**Bitmap = *wxBitmap:wxBitmap()***
**SplashStyle = integer()**
**Milliseconds = integer()**
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
getSplashStyle(This) -> integer()
```

Types:

**This = *wxSplashScreen()***

See **external documentation**.

`getTimeout(This) -> integer()`

Types:

**This = *wxSplashScreen()***

See **external documentation**.

`destroy(This::wxSplashScreen()) -> ok`

Destroys this object, do not use object again

# wxSplitterEvent

Erlang module

See external documentation: **wxSplitterEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_splitter_sash_pos_changed**, **command_splitter_sash_pos_changing**, **command_splitter_doubleclicked**, **command_splitter_unsplit**

See also the message variant *#wxSplitter{}* event record type.

This class is derived (and can use functions) from:
*wxNotifyEvent*
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxSplitterEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getSashPosition(This) -> integer()
```

Types:

**This = *wxSplitterEvent()***

See **external documentation**.

```
getX(This) -> integer()
```

Types:

**This = *wxSplitterEvent()***

See **external documentation**.

```
getY(This) -> integer()
```

Types:

**This = *wxSplitterEvent()***

See **external documentation**.

```
getWindowBeingRemoved(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxSplitterEvent()***

See **external documentation**.

```
setSashPosition(This, Pos) -> ok
```

Types:

```
This = wxSplitterEvent()
Pos = integer()
```

See **external documentation**.

# wxSplitterWindow

Erlang module

See external documentation: **wxSplitterWindow**.

This class is derived (and can use functions) from:
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxSplitterWindow()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxSplitterWindow()
```

See **external documentation**.

```
new(Parent) -> wxSplitterWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxSplitterWindow()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
create(This, Parent) -> boolean()
```

Types:

**This = *wxSplitterWindow()***

**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

```
create(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxSplitterWindow()***

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
getMinimumPaneSize(This) -> integer()
```

Types:

**This = *wxSplitterWindow()***

See **external documentation**.

```
getSashGravity(This) -> number()
```

Types:

**This = *wxSplitterWindow()***

See **external documentation**.

```
getSashPosition(This) -> integer()
```

Types:

**This = *wxSplitterWindow()***

See **external documentation**.

```
getSplitMode(This) -> wx:wx_enum()
```

Types:

**This = *wxSplitterWindow()***

See **external documentation**.
Res = ?wxSPLIT_HORIZONTAL | ?wxSPLIT_VERTICAL

```
getWindow1(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxSplitterWindow()***

See **external documentation**.

```
getWindow2(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxSplitterWindow()***

See **external documentation**.

```
initialize(This, Window) -> ok
```

Types:

**This = *wxSplitterWindow()***

**Window = *wxWindow:wxWindow()***

See **external documentation**.

```
isSplit(This) -> boolean()
```

Types:

**This = *wxSplitterWindow()***

See **external documentation**.

```
replaceWindow(This, WinOld, WinNew) -> boolean()
```

Types:

**This = *wxSplitterWindow()***
**WinOld = *wxWindow:wxWindow()***
**WinNew = *wxWindow:wxWindow()***

See **external documentation**.

```
setSashGravity(This, Gravity) -> ok
```

Types:

**This = *wxSplitterWindow()***
**Gravity = number()**

See **external documentation**.

```
setSashPosition(This, Position) -> ok
```

Types:

**This = *wxSplitterWindow()***
**Position = integer()**

Equivalent to *setSashPosition(This, Position, [])*.

```
setSashPosition(This, Position, Options::[Option]) -> ok
```

Types:

**This = *wxSplitterWindow()***
**Position = integer()**
**Option = {redraw, boolean()}**

See **external documentation**.

```
setSashSize(This, Width) -> ok
```

Types:

**This = *wxSplitterWindow()***
**Width = integer()**

See **external documentation**.

```
setMinimumPaneSize(This, Min) -> ok
```

Types:

**This = *wxSplitterWindow()***
**Min = integer()**

See **external documentation**.

```
setSplitMode(This, Mode) -> ok
```

Types:

**This = *wxSplitterWindow()***
**Mode = integer()**

See **external documentation**.

```
splitHorizontally(This, Window1, Window2) -> boolean()
```

Types:

**This = *wxSplitterWindow()***
**Window1 = *wxWindow:wxWindow()***
**Window2 = *wxWindow:wxWindow()***

Equivalent to *splitHorizontally(This, Window1, Window2, [])*.

```
splitHorizontally(This, Window1, Window2, Options::[Option]) -> boolean()
```

Types:

**This = *wxSplitterWindow()***
**Window1 = *wxWindow:wxWindow()***
**Window2 = *wxWindow:wxWindow()***
**Option = {sashPosition, integer()}**

See **external documentation**.

```
splitVertically(This, Window1, Window2) -> boolean()
```

Types:

**This = *wxSplitterWindow()***
**Window1 = *wxWindow:wxWindow()***
**Window2 = *wxWindow:wxWindow()***

Equivalent to *splitVertically(This, Window1, Window2, [])*.

```
splitVertically(This, Window1, Window2, Options::[Option]) -> boolean()
```

Types:

**This = *wxSplitterWindow()***
**Window1 = *wxWindow:wxWindow()***
**Window2 = *wxWindow:wxWindow()***
**Option = {sashPosition, integer()}**

See **external documentation**.

```
unsplit(This) -> boolean()
```

Types:

**This = *wxSplitterWindow()***

Equivalent to *unsplit(This, [])*.

```
unsplit(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxSplitterWindow()***
**Option = {toRemove, *wxWindow:wxWindow()*}**

See **external documentation**.

```
updateSize(This) -> ok
```

Types:

**This = *wxSplitterWindow()***

See **external documentation**.

`destroy(This::wxSplitterWindow()) -> ok`

Destroys this object, do not use object again

# wxStaticBitmap

Erlang module

See external documentation: **wxStaticBitmap**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxStaticBitmap()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxStaticBitmap()`

See **external documentation**.

`new(Parent, Id, Label) -> wxStaticBitmap()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *wxBitmap:wxBitmap()***

Equivalent to *new(Parent, Id, Label, [])*.

`new(Parent, Id, Label, Options::[Option]) -> wxStaticBitmap()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *wxBitmap:wxBitmap()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`create(This, Parent, Id, Label) -> boolean()`

Types:

**This = *wxStaticBitmap()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *wxBitmap:wxBitmap()***

Equivalent to *create(This, Parent, Id, Label, [])*.

```
create(This, Parent, Id, Label, Options::[Option]) -> boolean()
```

Types:

**This = *wxStaticBitmap()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Label = *wxBitmap:wxBitmap()***

**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
getBitmap(This) -> wxBitmap:wxBitmap()
```

Types:

**This = *wxStaticBitmap()***

See **external documentation**.

```
setBitmap(This, Bitmap) -> ok
```

Types:

**This = *wxStaticBitmap()***

**Bitmap = *wxBitmap:wxBitmap()***

See **external documentation**.

```
destroy(This::wxStaticBitmap()) -> ok
```

Destroys this object, do not use object again

# wxStaticBox

Erlang module

See external documentation: **wxStaticBox**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxStaticBox()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxStaticBox()`

See **external documentation**.

`new(Parent, Id, Label) -> wxStaticBox()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***

Equivalent to *new(Parent, Id, Label, [])*.

`new(Parent, Id, Label, Options::[Option]) -> wxStaticBox()`

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`create(This, Parent, Id, Label) -> boolean()`

Types:

**This = *wxStaticBox()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***

Equivalent to *create(This, Parent, Id, Label, [])*.

```
create(This, Parent, Id, Label, Options::[Option]) -> boolean()
```

Types:

**This = *wxStaticBox()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Label = *unicode:chardata()***

**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
destroy(This::wxStaticBox()) -> ok
```

Destroys this object, do not use object again

# wxStaticBoxSizer

Erlang module

See external documentation: **wxStaticBoxSizer**.

This class is derived (and can use functions) from:
*wxBoxSizer*
*wxSizer*

## DATA TYPES

wxStaticBoxSizer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new(Orient, Win) -> wxStaticBoxSizer()`

Types:

**Orient = integer()**
**Win = *wxWindow:wxWindow()***

See **external documentation**.
Also:
new(Box, Orient) -> wxStaticBoxSizer() when
Box::wxStaticBox:wxStaticBox(), Orient::integer().

`new(Orient, Win, Options::[Option]) -> wxStaticBoxSizer()`

Types:

**Orient = integer()**
**Win = *wxWindow:wxWindow()***
**Option = {label, *unicode:chardata()*}**

See **external documentation**.

`getStaticBox(This) -> wxStaticBox:wxStaticBox()`

Types:

**This = *wxStaticBoxSizer()***

See **external documentation**.

`destroy(This::wxStaticBoxSizer()) -> ok`

Destroys this object, do not use object again

# wxStaticLine

Erlang module

See external documentation: **wxStaticLine**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxStaticLine()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxStaticLine()
```

See **external documentation**.

```
new(Parent) -> wxStaticLine()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxStaticLine()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
create(This, Parent) -> boolean()
```

Types:

**This = *wxStaticLine()***

**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

```
create(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxStaticLine()***

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
isVertical(This) -> boolean()
```

Types:

**This = *wxStaticLine()***

See **external documentation**.

```
getDefaultSize() -> integer()
```

See **external documentation**.

```
destroy(This::wxStaticLine()) -> ok
```

Destroys this object, do not use object again

# wxStaticText

Erlang module

See external documentation: **wxStaticText**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxStaticText()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxStaticText()
```

See **external documentation**.

```
new(Parent, Id, Label) -> wxStaticText()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***

Equivalent to *new(Parent, Id, Label, [])*.

```
new(Parent, Id, Label, Options::[Option]) -> wxStaticText()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
create(This, Parent, Id, Label) -> boolean()
```

Types:

**This = *wxStaticText()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***

Equivalent to *create(This, Parent, Id, Label, [])*.

```
create(This, Parent, Id, Label, Options::[Option]) -> boolean()
```

Types:

**This = *wxStaticText()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Label = *unicode:chardata()***

**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
getLabel(This) -> unicode:charlist()
```

Types:

**This = *wxStaticText()***

See **external documentation**.

```
setLabel(This, Label) -> ok
```

Types:

**This = *wxStaticText()***

**Label = *unicode:chardata()***

See **external documentation**.

```
wrap(This, Width) -> ok
```

Types:

**This = *wxStaticText()***

**Width = integer()**

See **external documentation**.

```
destroy(This::wxStaticText()) -> ok
```

Destroys this object, do not use object again

# wxStatusBar

Erlang module

See external documentation: **wxStatusBar**.

This class is derived (and can use functions) from:
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxStatusBar()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxStatusBar()
```

See **external documentation**.

```
new(Parent) -> wxStatusBar()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxStatusBar()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Option = {winid, integer()} | {style, integer()}**

See **external documentation**.

```
create(This, Parent) -> boolean()
```

Types:

**This = *wxStatusBar()***
**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

```
create(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxStatusBar()***
**Parent = *wxWindow:wxWindow()***
**Option = {winid, integer()} | {style, integer()}**

See **external documentation**.

```
getFieldRect(This, I) -> Result
```

Types:

**Result = {Res::boolean(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}}**

**This = *wxStatusBar()***

**I = integer()**

See **external documentation**.

```
getFieldsCount(This) -> integer()
```

Types:

**This = *wxStatusBar()***

See **external documentation**.

```
getStatusText(This) -> unicode:charlist()
```

Types:

**This = *wxStatusBar()***

Equivalent to *getStatusText(This, [])*.

```
getStatusText(This, Options::[Option]) -> unicode:charlist()
```

Types:

**This = *wxStatusBar()***

**Option = {number, integer()}**

See **external documentation**.

```
popStatusText(This) -> ok
```

Types:

**This = *wxStatusBar()***

Equivalent to *popStatusText(This, [])*.

```
popStatusText(This, Options::[Option]) -> ok
```

Types:

**This = *wxStatusBar()***

**Option = {number, integer()}**

See **external documentation**.

```
pushStatusText(This, Text) -> ok
```

Types:

**This = *wxStatusBar()***

**Text = *unicode:chardata()***

Equivalent to *pushStatusText(This, Text, [])*.

```
pushStatusText(This, Text, Options::[Option]) -> ok
```

Types:

**This = *wxStatusBar()***
**Text = *unicode:chardata()***
**Option = {number, integer()}**

See **external documentation**.

`setFieldsCount(This, Number) -> ok`

Types:

**This = *wxStatusBar()***
**Number = integer()**

Equivalent to *setFieldsCount(This, Number, [])*.

`setFieldsCount(This, Number, Options::[Option]) -> ok`

Types:

**This = *wxStatusBar()***
**Number = integer()**
**Option = {widths, [integer()]}**

See **external documentation**.

`setMinHeight(This, Height) -> ok`

Types:

**This = *wxStatusBar()***
**Height = integer()**

See **external documentation**.

`setStatusText(This, Text) -> ok`

Types:

**This = *wxStatusBar()***
**Text = *unicode:chardata()***

Equivalent to *setStatusText(This, Text, [])*.

`setStatusText(This, Text, Options::[Option]) -> ok`

Types:

**This = *wxStatusBar()***
**Text = *unicode:chardata()***
**Option = {number, integer()}**

See **external documentation**.

`setStatusWidths(This, Widths_field) -> ok`

Types:

**This = *wxStatusBar()***
**Widths_field = [integer()]**

See **external documentation**.

```
setStatusStyles(This, Styles) -> ok
```

Types:

**`This = wxStatusBar()`**
**`Styles = [integer()]`**

See **external documentation**.

```
destroy(This::wxStatusBar()) -> ok
```

Destroys this object, do not use object again

# wxStdDialogButtonSizer

Erlang module

See external documentation: **wxStdDialogButtonSizer**.

This class is derived (and can use functions) from:
*wxBoxSizer*
*wxSizer*

## DATA TYPES

wxStdDialogButtonSizer()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxStdDialogButtonSizer()
```

See **external documentation**.

```
addButton(This, Button) -> ok
```

Types:

**This = *wxStdDialogButtonSizer()***
**Button = *wxButton:wxButton()***

See **external documentation**.

```
realize(This) -> ok
```

Types:

**This = *wxStdDialogButtonSizer()***

See **external documentation**.

```
setAffirmativeButton(This, Button) -> ok
```

Types:

**This = *wxStdDialogButtonSizer()***
**Button = *wxButton:wxButton()***

See **external documentation**.

```
setCancelButton(This, Button) -> ok
```

Types:

**This = *wxStdDialogButtonSizer()***
**Button = *wxButton:wxButton()***

See **external documentation**.

```
setNegativeButton(This, Button) -> ok
```

Types:

**This = *wxStdDialogButtonSizer()***

**Button = *wxButton:wxButton()***

See **external documentation**.

```
destroy(This::wxStdDialogButtonSizer()) -> ok
```

Destroys this object, do not use object again

# wxStyledTextCtrl

Erlang module

See external documentation: **wxStyledTextCtrl**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxStyledTextCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxStyledTextCtrl()
```

See **external documentation**.

```
new(Parent) -> wxStyledTextCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

```
new(Parent, Options::[Option]) -> wxStyledTextCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
create(This, Parent) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

```
create(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

addText(This, Text) -> ok

Types:

**This = *wxStyledTextCtrl()***

**Text = *unicode:chardata()***

See **external documentation**.

addStyledText(This, Data) -> ok

Types:

**This = *wxStyledTextCtrl()***

**Data = *wx:wx_object()***

See **external documentation**.

insertText(This, Pos, Text) -> ok

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

**Text = *unicode:chardata()***

See **external documentation**.

clearAll(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

clearDocumentStyle(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

getLength(This) -> integer()

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

getCharAt(This, Pos) -> integer()

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

See **external documentation**.

```
getCurrentPos(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getAnchor(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getStyleAt(This, Pos) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

See **external documentation**.

```
redo(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setUndoCollection(This, CollectUndo) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**CollectUndo = boolean()**

See **external documentation**.

```
selectAll(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setSavePoint(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getStyledText(This, StartPos, EndPos) -> wx:wx_object()
```

Types:

**This = *wxStyledTextCtrl()***

**StartPos = integer()**

**EndPos = integer()**

See **external documentation**.

```
canRedo(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
markerLineFromHandle(This, Handle) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

**Handle = integer()**

See **external documentation**.

```
markerDeleteHandle(This, Handle) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Handle = integer()**

See **external documentation**.

```
getUndoCollection(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getViewWhiteSpace(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setViewWhiteSpace(This, ViewWS) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**ViewWS = integer()**

See **external documentation**.

```
positionFromPoint(This, Pt) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
positionFromPointClose(This, X, Y) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

**X = integer()**

**Y = integer()**

See **external documentation**.

`gotoLine(This, Line) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

See **external documentation**.

`gotoPos(This, Pos) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

See **external documentation**.

`setAnchor(This, PosAnchor) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**PosAnchor = integer()**

See **external documentation**.

`getCurLine(This) -> Result`

Types:

**Result = {Res::*unicode:charlist()*, LinePos::integer()}**

**This = *wxStyledTextCtrl()***

See **external documentation**.

`getEndStyled(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`convertEOLs(This, EolMode) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**EolMode = integer()**

See **external documentation**.

`getEOLMode(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setEOLMode(This, EolMode) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**EolMode = integer()**

See **external documentation**.

```
startStyling(This, Pos, Mask) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Pos = integer()**
**Mask = integer()**

See **external documentation**.

```
setStyling(This, Length, Style) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Length = integer()**
**Style = integer()**

See **external documentation**.

```
getBufferedDraw(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setBufferedDraw(This, Buffered) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Buffered = boolean()**

See **external documentation**.

```
setTabWidth(This, TabWidth) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**TabWidth = integer()**

See **external documentation**.

```
getTabWidth(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setCodePage(This, CodePage) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**CodePage = integer()**

See **external documentation**.

```
markerDefine(This, MarkerNumber, MarkerSymbol) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**MarkerNumber = integer()**
**MarkerSymbol = integer()**

Equivalent to *markerDefine(This, MarkerNumber, MarkerSymbol, [])*.

```
markerDefine(This, MarkerNumber, MarkerSymbol, Options::[Option]) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**MarkerNumber = integer()**
**MarkerSymbol = integer()**
**Option = {foreground, *wx:wx_colour()*} | {background, *wx:wx_colour()*}**

See **external documentation**.

```
markerSetForeground(This, MarkerNumber, Fore) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**MarkerNumber = integer()**
**Fore = *wx:wx_colour()***

See **external documentation**.

```
markerSetBackground(This, MarkerNumber, Back) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**MarkerNumber = integer()**
**Back = *wx:wx_colour()***

See **external documentation**.

```
markerAdd(This, Line, MarkerNumber) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**
**MarkerNumber = integer()**

See **external documentation**.

```
markerDelete(This, Line, MarkerNumber) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**
**MarkerNumber = integer()**

See **external documentation**.

```
markerDeleteAll(This, MarkerNumber) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**MarkerNumber = integer()**

See **external documentation**.

```
markerGet(This, Line) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**

See **external documentation**.

```
markerNext(This, LineStart, MarkerMask) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**LineStart = integer()**
**MarkerMask = integer()**

See **external documentation**.

```
markerPrevious(This, LineStart, MarkerMask) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**LineStart = integer()**
**MarkerMask = integer()**

See **external documentation**.

```
markerDefineBitmap(This, MarkerNumber, Bmp) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**MarkerNumber = integer()**
**Bmp = *wxBitmap:wxBitmap()***

See **external documentation**.

```
markerAddSet(This, Line, Set) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**
**Set = integer()**

See **external documentation**.

markerSetAlpha(This, MarkerNumber, Alpha) -> ok

Types:

**This = *wxStyledTextCtrl()***
**MarkerNumber = integer()**
**Alpha = integer()**

See **external documentation**.

setMarginType(This, Margin, MarginType) -> ok

Types:

**This = *wxStyledTextCtrl()***
**Margin = integer()**
**MarginType = integer()**

See **external documentation**.

getMarginType(This, Margin) -> integer()

Types:

**This = *wxStyledTextCtrl()***
**Margin = integer()**

See **external documentation**.

setMarginWidth(This, Margin, PixelWidth) -> ok

Types:

**This = *wxStyledTextCtrl()***
**Margin = integer()**
**PixelWidth = integer()**

See **external documentation**.

getMarginWidth(This, Margin) -> integer()

Types:

**This = *wxStyledTextCtrl()***
**Margin = integer()**

See **external documentation**.

setMarginMask(This, Margin, Mask) -> ok

Types:

**This = *wxStyledTextCtrl()***
**Margin = integer()**
**Mask = integer()**

See **external documentation**.

```
getMarginMask(This, Margin) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Margin = integer()**

See **external documentation**.

```
setMarginSensitive(This, Margin, Sensitive) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Margin = integer()**
**Sensitive = boolean()**

See **external documentation**.

```
getMarginSensitive(This, Margin) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***
**Margin = integer()**

See **external documentation**.

```
styleClearAll(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
styleSetForeground(This, Style, Fore) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**Fore = *wx:wx_colour()***

See **external documentation**.

```
styleSetBackground(This, Style, Back) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**Back = *wx:wx_colour()***

See **external documentation**.

```
styleSetBold(This, Style, Bold) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**Bold = boolean()**

See **external documentation**.

```
styleSetItalic(This, Style, Italic) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**Italic = boolean()**

See **external documentation**.

```
styleSetSize(This, Style, SizePoints) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**SizePoints = integer()**

See **external documentation**.

```
styleSetFaceName(This, Style, FontName) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**FontName = *unicode:chardata()***

See **external documentation**.

```
styleSetEOLFilled(This, Style, Filled) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**Filled = boolean()**

See **external documentation**.

```
styleResetDefault(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
styleSetUnderline(This, Style, Underline) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**Underline = boolean()**

See **external documentation**.

```
styleSetCase(This, Style, CaseForce) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**CaseForce = integer()**

See **external documentation**.

```
styleSetHotSpot(This, Style, Hotspot) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**Hotspot = boolean()**

See **external documentation**.

```
setSelForeground(This, UseSetting, Fore) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**UseSetting = boolean()**
**Fore = *wx:wx_colour()***

See **external documentation**.

```
setSelBackground(This, UseSetting, Back) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**UseSetting = boolean()**
**Back = *wx:wx_colour()***

See **external documentation**.

```
getSelAlpha(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setSelAlpha(This, Alpha) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Alpha = integer()**

See **external documentation**.

```
setCaretForeground(This, Fore) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Fore = *wx:wx_colour()***

See **external documentation**.

```
cmdKeyAssign(This, Key, Modifiers, Cmd) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Key = integer()**
**Modifiers = integer()**
**Cmd = integer()**

See **external documentation**.

```
cmdKeyClear(This, Key, Modifiers) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Key = integer()**
**Modifiers = integer()**

See **external documentation**.

```
cmdKeyClearAll(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setStyleBytes(This, Length) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Length = integer()**

See **external documentation**.

```
styleSetVisible(This, Style, Visible) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**Visible = boolean()**

See **external documentation**.

```
getCaretPeriod(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setCaretPeriod(This, PeriodMilliseconds) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**PeriodMilliseconds = integer()**

See **external documentation**.

`setWordChars(This, Characters) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**Characters = *unicode:chardata()***

See **external documentation**.

`beginUndoAction(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`endUndoAction(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`indicatorSetStyle(This, Indic, Style) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**Indic = integer()**
**Style = integer()**

See **external documentation**.

`indicatorGetStyle(This, Indic) -> integer()`

Types:

**This = *wxStyledTextCtrl()***
**Indic = integer()**

See **external documentation**.

`indicatorSetForeground(This, Indic, Fore) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**Indic = integer()**
**Fore = *wx:wx_colour()***

See **external documentation**.

`indicatorGetForeground(This, Indic) -> wx:wx_colour4()`

Types:

**This = *wxStyledTextCtrl()***
**Indic = integer()**

See **external documentation**.

```
setWhitespaceForeground(This, UseSetting, Fore) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**UseSetting = boolean()**
**Fore = *wx:wx_colour()***

See **external documentation**.

```
setWhitespaceBackground(This, UseSetting, Back) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**UseSetting = boolean()**
**Back = *wx:wx_colour()***

See **external documentation**.

```
getStyleBits(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setLineState(This, Line, State) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**
**State = integer()**

See **external documentation**.

```
getLineState(This, Line) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**

See **external documentation**.

```
getMaxLineState(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getCaretLineVisible(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setCaretLineVisible(This, Show) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Show = boolean()**

See **external documentation**.

```
getCaretLineBackground(This) -> wx:wx_colour4()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setCaretLineBackground(This, Back) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Back = *wx:wx_colour()***

See **external documentation**.

```
autoCompShow(This, LenEntered, ItemList) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**LenEntered = integer()**

**ItemList = *unicode:chardata()***

See **external documentation**.

```
autoCompCancel(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
autoCompActive(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
autoCompPosStart(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
autoCompComplete(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
autoCompStops(This, CharacterSet) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**CharacterSet = *unicode:chardata()***

See **external documentation**.

```
autoCompSetSeparator(This, SeparatorCharacter) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**SeparatorCharacter = integer()**

See **external documentation**.

```
autoCompGetSeparator(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
autoCompSelect(This, Text) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Text = *unicode:chardata()***

See **external documentation**.

```
autoCompSetCancelAtStart(This, Cancel) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Cancel = boolean()**

See **external documentation**.

```
autoCompGetCancelAtStart(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
autoCompSetFillUps(This, CharacterSet) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**CharacterSet = *unicode:chardata()***

See **external documentation**.

```
autoCompSetChooseSingle(This, ChooseSingle) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**ChooseSingle = boolean()**

See **external documentation**.

`autoCompGetChooseSingle(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`autoCompSetIgnoreCase(This, IgnoreCase) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**IgnoreCase = boolean()**

See **external documentation**.

`autoCompGetIgnoreCase(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`userListShow(This, ListType, ItemList) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**ListType = integer()**

**ItemList = *unicode:chardata()***

See **external documentation**.

`autoCompSetAutoHide(This, AutoHide) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**AutoHide = boolean()**

See **external documentation**.

`autoCompGetAutoHide(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`autoCompSetDropRestOfWord(This, DropRestOfWord) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**DropRestOfWord = boolean()**

See **external documentation**.

```
autoCompGetDropRestOfWord(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
registerImage(This, Type, Bmp) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Type = integer()**
**Bmp = *wxBitmap:wxBitmap()***

See **external documentation**.

```
clearRegisteredImages(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
autoCompGetTypeSeparator(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
autoCompSetTypeSeparator(This, SeparatorCharacter) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**SeparatorCharacter = integer()**

See **external documentation**.

```
autoCompSetMaxWidth(This, CharacterCount) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**CharacterCount = integer()**

See **external documentation**.

```
autoCompGetMaxWidth(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
autoCompSetMaxHeight(This, RowCount) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**RowCount = integer()**

See **external documentation**.

```
autoCompGetMaxHeight(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setIndent(This, IndentSize) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**IndentSize = integer()**

See **external documentation**.

```
getIndent(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setUseTabs(This, UseTabs) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**UseTabs = boolean()**

See **external documentation**.

```
getUseTabs(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setLineIndentation(This, Line, IndentSize) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

**IndentSize = integer()**

See **external documentation**.

```
getLineIndentation(This, Line) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

See **external documentation**.

```
getLineIndentPosition(This, Line) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**

See **external documentation**.

```
getColumn(This, Pos) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Pos = integer()**

See **external documentation**.

```
setUseHorizontalScrollBar(This, Show) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Show = boolean()**

See **external documentation**.

```
getUseHorizontalScrollBar(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setIndentationGuides(This, Show) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Show = boolean()**

See **external documentation**.

```
getIndentationGuides(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setHighlightGuide(This, Column) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Column = integer()**

See **external documentation**.

```
getHighlightGuide(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getLineEndPosition(This, Line) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

See **external documentation**.

```
getCodePage(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getCaretForeground(This) -> wx:wx_colour4()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getReadOnly(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setCurrentPos(This, Pos) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

See **external documentation**.

```
setSelectionStart(This, Pos) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

See **external documentation**.

```
getSelectionStart(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setSelectionEnd(This, Pos) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

See **external documentation**.

`getSelectionEnd(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setPrintMagnification(This, Magnification) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Magnification = integer()**

See **external documentation**.

`getPrintMagnification(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setPrintColourMode(This, Mode) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Mode = integer()**

See **external documentation**.

`getPrintColourMode(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`findText(This, MinPos, MaxPos, Text) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

**MinPos = integer()**

**MaxPos = integer()**

**Text = *unicode:chardata()***

Equivalent to *findText(This, MinPos, MaxPos, Text, [])*.

`findText(This, MinPos, MaxPos, Text, Options::[Option]) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

**MinPos = integer()**

**MaxPos = integer()**

**Text = *unicode:chardata()***
**Option = {flags, integer()}**

See **external documentation**.

formatRange(This, DoDraw, StartPos, EndPos, Draw, Target, RenderRect, PageRect) -> integer()

Types:

**This = *wxStyledTextCtrl()***
**DoDraw = boolean()**
**StartPos = integer()**
**EndPos = integer()**
**Draw = *wxDC:wxDC()***
**Target = *wxDC:wxDC()***
**RenderRect = {X::integer(), Y::integer(), W::integer(), H::integer()}**
**PageRect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

See **external documentation**.

getFirstVisibleLine(This) -> integer()

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

getLine(This, Line) -> unicode:charlist()

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**

See **external documentation**.

getLineCount(This) -> integer()

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

setMarginLeft(This, PixelWidth) -> ok

Types:

**This = *wxStyledTextCtrl()***
**PixelWidth = integer()**

See **external documentation**.

getMarginLeft(This) -> integer()

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setMarginRight(This, PixelWidth) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**PixelWidth = integer()**

See **external documentation**.

```
getMarginRight(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getModify(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setSelection(This, Start, End) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Start = integer()**
**End = integer()**

See **external documentation**.

```
getSelectedText(This) -> unicode:charlist()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getTextRange(This, StartPos, EndPos) -> unicode:charlist()
```

Types:

**This = *wxStyledTextCtrl()***
**StartPos = integer()**
**EndPos = integer()**

See **external documentation**.

```
hideSelection(This, Normal) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Normal = boolean()**

See **external documentation**.

```
lineFromPosition(This, Pos) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Pos = integer()**

See **external documentation**.

`positionFromLine(This, Line) -> integer()`

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**

See **external documentation**.

`lineScroll(This, Columns, Lines) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**Columns = integer()**
**Lines = integer()**

See **external documentation**.

`ensureCaretVisible(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`replaceSelection(This, Text) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**Text = *unicode:chardata()***

See **external documentation**.

`setReadOnly(This, ReadOnly) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**ReadOnly = boolean()**

See **external documentation**.

`canPaste(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`canUndo(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
emptyUndoBuffer(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
undo(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
cut(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
copy(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
paste(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
clear(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setText(This, Text) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Text = *unicode:chardata()***

See **external documentation**.

```
getText(This) -> unicode:charlist()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getTextLength(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`getOvertype(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setCaretWidth(This, PixelWidth) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**PixelWidth = integer()**

See **external documentation**.

`getCaretWidth(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setTargetStart(This, Pos) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

See **external documentation**.

`getTargetStart(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setTargetEnd(This, Pos) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

See **external documentation**.

`getTargetEnd(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`replaceTarget(This, Text) -> integer()`

Types:

**This = *wxStyledTextCtrl()***
**Text = *unicode:chardata()***

See **external documentation**.

`searchInTarget(This, Text) -> integer()`

Types:

**This = *wxStyledTextCtrl()***
**Text = *unicode:chardata()***

See **external documentation**.

`setSearchFlags(This, Flags) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**Flags = integer()**

See **external documentation**.

`getSearchFlags(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`callTipShow(This, Pos, Definition) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**Pos = integer()**
**Definition = *unicode:chardata()***

See **external documentation**.

`callTipCancel(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`callTipActive(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`callTipPosAtStart(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
callTipSetHighlight(This, Start, End) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Start = integer()**
**End = integer()**

See **external documentation**.

```
callTipSetBackground(This, Back) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Back = *wx:wx_colour()***

See **external documentation**.

```
callTipSetForeground(This, Fore) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Fore = *wx:wx_colour()***

See **external documentation**.

```
callTipSetForegroundHighlight(This, Fore) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Fore = *wx:wx_colour()***

See **external documentation**.

```
callTipUseStyle(This, TabSize) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**TabSize = integer()**

See **external documentation**.

```
visibleFromDocLine(This, Line) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**

See **external documentation**.

```
docLineFromVisible(This, LineDisplay) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**LineDisplay = integer()**

See **external documentation**.

```
wrapCount(This, Line) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**

See **external documentation**.

```
setFoldLevel(This, Line, Level) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**
**Level = integer()**

See **external documentation**.

```
getFoldLevel(This, Line) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**

See **external documentation**.

```
getLastChild(This, Line, Level) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**
**Level = integer()**

See **external documentation**.

```
getFoldParent(This, Line) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**

See **external documentation**.

```
showLines(This, LineStart, LineEnd) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**LineStart = integer()**
**LineEnd = integer()**

See **external documentation**.

```
hideLines(This, LineStart, LineEnd) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**LineStart = integer()**

**LineEnd = integer()**

See **external documentation**.

`getLineVisible(This, Line) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

See **external documentation**.

`setFoldExpanded(This, Line, Expanded) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

**Expanded = boolean()**

See **external documentation**.

`getFoldExpanded(This, Line) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

See **external documentation**.

`toggleFold(This, Line) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

See **external documentation**.

`ensureVisible(This, Line) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

See **external documentation**.

`setFoldFlags(This, Flags) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Flags = integer()**

See **external documentation**.

`ensureVisibleEnforcePolicy(This, Line) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

See **external documentation**.

`setTabIndents(This, TabIndents) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**TabIndents = boolean()**

See **external documentation**.

`getTabIndents(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setBackSpaceUnIndents(This, BsUnIndents) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**BsUnIndents = boolean()**

See **external documentation**.

`getBackSpaceUnIndents(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setMouseDwellTime(This, PeriodMilliseconds) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**PeriodMilliseconds = integer()**

See **external documentation**.

`getMouseDwellTime(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`wordStartPosition(This, Pos, OnlyWordCharacters) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

**OnlyWordCharacters = boolean()**

See **external documentation**.

```
wordEndPosition(This, Pos, OnlyWordCharacters) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Pos = integer()**
**OnlyWordCharacters = boolean()**

See **external documentation**.

```
setWrapMode(This, Mode) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Mode = integer()**

See **external documentation**.

```
getWrapMode(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setWrapVisualFlags(This, WrapVisualFlags) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**WrapVisualFlags = integer()**

See **external documentation**.

```
getWrapVisualFlags(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setWrapVisualFlagsLocation(This, WrapVisualFlagsLocation) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**WrapVisualFlagsLocation = integer()**

See **external documentation**.

```
getWrapVisualFlagsLocation(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setWrapStartIndent(This, Indent) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Indent = integer()**

See **external documentation**.

`getWrapStartIndent(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setLayoutCache(This, Mode) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Mode = integer()**

See **external documentation**.

`getLayoutCache(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setScrollWidth(This, PixelWidth) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**PixelWidth = integer()**

See **external documentation**.

`getScrollWidth(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`textWidth(This, Style, Text) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

**Style = integer()**

**Text = *unicode:chardata()***

See **external documentation**.

`getEndAtLastLine(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
textHeight(This, Line) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

See **external documentation**.

```
setUseVerticalScrollBar(This, Show) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Show = boolean()**

See **external documentation**.

```
getUseVerticalScrollBar(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
appendText(This, Text) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Text = *unicode:chardata()***

See **external documentation**.

```
getTwoPhaseDraw(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setTwoPhaseDraw(This, TwoPhase) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**TwoPhase = boolean()**

See **external documentation**.

```
targetFromSelection(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
linesJoin(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
linesSplit(This, PixelWidth) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**PixelWidth = integer()**

See **external documentation**.

```
setFoldMarginColour(This, UseSetting, Back) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**UseSetting = boolean()**
**Back = *wx:wx_colour()***

See **external documentation**.

```
setFoldMarginHiColour(This, UseSetting, Fore) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**UseSetting = boolean()**
**Fore = *wx:wx_colour()***

See **external documentation**.

```
lineDown(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineDownExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineUp(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineUpExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
charLeft(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
charLeftExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
charRight(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
charRightExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordLeft(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordLeftExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordRight(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordRightExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
home(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
homeExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineEnd(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineEndExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
documentStart(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
documentStartExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
documentEnd(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
documentEndExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
pageUp(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
pageUpExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
pageDown(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
pageDownExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
editToggleOvertype(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
cancel(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
deleteBack(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
tab(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
backTab(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
newLine(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

formFeed(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

vCHome(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

vCHomeExtend(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

zoomIn(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

zoomOut(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

delWordLeft(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

delWordRight(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

lineCut(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

lineDelete(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineTranspose(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineDuplicate(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lowerCase(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
upperCase(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineScrollDown(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineScrollUp(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
deleteBackNotLine(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
homeDisplay(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

homeDisplayExtend(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

lineEndDisplay(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

lineEndDisplayExtend(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

homeWrapExtend(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

lineEndWrap(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

lineEndWrapExtend(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

vCHomeWrap(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

vCHomeWrapExtend(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

lineCopy(This) -> ok

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
moveCaretInsideView(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineLength(This, Line) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

See **external documentation**.

```
braceHighlight(This, Pos1, Pos2) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Pos1 = integer()**

**Pos2 = integer()**

See **external documentation**.

```
braceBadLight(This, Pos) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

See **external documentation**.

```
braceMatch(This, Pos) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

**Pos = integer()**

See **external documentation**.

```
getViewEOL(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setViewEOL(This, Visible) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Visible = boolean()**

See **external documentation**.

```
setModEventMask(This, Mask) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Mask = integer()**

See **external documentation**.

```
getEdgeColumn(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setEdgeColumn(This, Column) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Column = integer()**

See **external documentation**.

```
setEdgeMode(This, Mode) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Mode = integer()**

See **external documentation**.

```
getEdgeMode(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getEdgeColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setEdgeColour(This, EdgeColour) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**EdgeColour = *wx:wx_colour()***

See **external documentation**.

```
searchAnchor(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
searchNext(This, Flags, Text) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Flags = integer()**
**Text = *unicode:chardata()***

See **external documentation**.

```
searchPrev(This, Flags, Text) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Flags = integer()**
**Text = *unicode:chardata()***

See **external documentation**.

```
linesOnScreen(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
usePopUp(This, AllowPopUp) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**AllowPopUp = boolean()**

See **external documentation**.

```
selectionIsRectangle(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setZoom(This, Zoom) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Zoom = integer()**

See **external documentation**.

```
getZoom(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getModEventMask(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setSTCFocus(This, Focus) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Focus = boolean()**

See **external documentation**.

`getSTCFocus(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setStatus(This, StatusCode) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**StatusCode = integer()**

See **external documentation**.

`getStatus(This) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setMouseDownCaptures(This, Captures) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Captures = boolean()**

See **external documentation**.

`getMouseDownCaptures(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setSTCCursor(This, CursorType) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**CursorType = integer()**

See **external documentation**.

```
getSTCCursor(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setControlCharSymbol(This, Symbol) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Symbol = integer()**

See **external documentation**.

```
getControlCharSymbol(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordPartLeft(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordPartLeftExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordPartRight(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordPartRightExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setVisiblePolicy(This, VisiblePolicy, VisibleSlop) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**VisiblePolicy = integer()**

**VisibleSlop = integer()**

See **external documentation**.

```
delLineLeft(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
delLineRight(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getXOffset(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
chooseCaretX(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setXCaretPolicy(This, CaretPolicy, CaretSlop) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**CaretPolicy = integer()**
**CaretSlop = integer()**

See **external documentation**.

```
setYCaretPolicy(This, CaretPolicy, CaretSlop) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**CaretPolicy = integer()**
**CaretSlop = integer()**

See **external documentation**.

```
getPrintWrapMode(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setHotspotActiveForeground(This, UseSetting, Fore) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**UseSetting = boolean()**

**Fore = *wx:wx_colour()***

See **external documentation**.

`setHotspotActiveBackground(This, UseSetting, Back) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**UseSetting = boolean()**
**Back = *wx:wx_colour()***

See **external documentation**.

`setHotspotActiveUnderline(This, Underline) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**Underline = boolean()**

See **external documentation**.

`setHotspotSingleLine(This, SingleLine) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**SingleLine = boolean()**

See **external documentation**.

`paraDownExtend(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`paraUp(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`paraUpExtend(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`positionBefore(This, Pos) -> integer()`

Types:

**This = *wxStyledTextCtrl()***
**Pos = integer()**

See **external documentation**.

```
positionAfter(This, Pos) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***
**Pos = integer()**

See **external documentation**.

```
copyRange(This, Start, End) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Start = integer()**
**End = integer()**

See **external documentation**.

```
copyText(This, Length, Text) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Length = integer()**
**Text = *unicode:chardata()***

See **external documentation**.

```
setSelectionMode(This, Mode) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Mode = integer()**

See **external documentation**.

```
getSelectionMode(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineDownRectExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
lineUpRectExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
charLeftRectExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`charRightRectExtend(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`homeRectExtend(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`vCHomeRectExtend(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`lineEndRectExtend(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`pageUpRectExtend(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`pageDownRectExtend(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`stutteredPageUp(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`stutteredPageUpExtend(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
stutteredPageDown(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
stutteredPageDownExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordLeftEnd(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordLeftEndExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordRightEnd(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
wordRightEndExtend(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setWhitespaceChars(This, Characters) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Characters = *unicode:chardata()***

See **external documentation**.

```
setCharsDefault(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
autoCompGetCurrent(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`allocate(This, Bytes) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Bytes = integer()**

See **external documentation**.

`findColumn(This, Line, Column) -> integer()`

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

**Column = integer()**

See **external documentation**.

`getCaretSticky(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setCaretSticky(This, UseCaretStickyBehaviour) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**UseCaretStickyBehaviour = boolean()**

See **external documentation**.

`toggleCaretSticky(This) -> ok`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`setPasteConvertEndings(This, Convert) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Convert = boolean()**

See **external documentation**.

`getPasteConvertEndings(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
selectionDuplicate(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setCaretLineBackAlpha(This, Alpha) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Alpha = integer()**

See **external documentation**.

```
getCaretLineBackAlpha(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
startRecord(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
stopRecord(This) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setLexer(This, Lexer) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Lexer = integer()**

See **external documentation**.

```
getLexer(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
colourise(This, Start, End) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Start = integer()**

**End = integer()**

See **external documentation**.

```
setProperty(This, Key, Value) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Key = *unicode:chardata()***
**Value = *unicode:chardata()***

See **external documentation**.

```
setKeyWords(This, KeywordSet, KeyWords) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**KeywordSet = integer()**
**KeyWords = *unicode:chardata()***

See **external documentation**.

```
setLexerLanguage(This, Language) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Language = *unicode:chardata()***

See **external documentation**.

```
getProperty(This, Key) -> unicode:charlist()
```

Types:

**This = *wxStyledTextCtrl()***
**Key = *unicode:chardata()***

See **external documentation**.

```
getStyleBitsNeeded(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
getCurrentLine(This) -> integer()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
styleSetSpec(This, StyleNum, Spec) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**StyleNum = integer()**
**Spec = *unicode:chardata()***

See **external documentation**.

```
styleSetFont(This, StyleNum, Font) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**StyleNum = integer()**
**Font = *wxFont:wxFont()***

See **external documentation**.

```
styleSetFontAttr(This, StyleNum, Size, FaceName, Bold, Italic, Underline) ->
ok
```

Types:

**This = *wxStyledTextCtrl()***
**StyleNum = integer()**
**Size = integer()**
**FaceName = *unicode:chardata()***
**Bold = boolean()**
**Italic = boolean()**
**Underline = boolean()**

Equivalent to *styleSetFontAttr(This, StyleNum, Size, FaceName, Bold, Italic, Underline, [])*.

```
styleSetFontAttr(This, StyleNum, Size, FaceName, Bold, Italic, Underline,
Options::[Option]) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**StyleNum = integer()**
**Size = integer()**
**FaceName = *unicode:chardata()***
**Bold = boolean()**
**Italic = boolean()**
**Underline = boolean()**
**Option = {encoding, *wx:wx_enum()*}**

See **external documentation**.

Encoding = ?wxFONTENCODING_SYSTEM | ?wxFONTENCODING_DEFAULT | ?wxFONTENCODING_ISO8859_1 | ?wxFONTENCODING_ISO8859_2 | ?wxFONTENCODING_ISO8859_3 | ?wxFONTENCODING_ISO8859_4 | ?wxFONTENCODING_ISO8859_5 | ?wxFONTENCODING_ISO8859_6 | ?wxFONTENCODING_ISO8859_7 | ?wxFONTENCODING_ISO8859_8 | ?wxFONTENCODING_ISO8859_9 | ?wxFONTENCODING_ISO8859_10 | ?wxFONTENCODING_ISO8859_11 | ?wxFONTENCODING_ISO8859_12 | ?wxFONTENCODING_ISO8859_13 | ?wxFONTENCODING_ISO8859_14 | ?wxFONTENCODING_ISO8859_15 | ?wxFONTENCODING_ISO8859_MAX | ?wxFONTENCODING_KOI8 | ?wxFONTENCODING_KOI8_U | ?wxFONTENCODING_ALTERNATIVE | ?wxFONTENCODING_BULGARIAN | ?wxFONTENCODING_CP437 | ?wxFONTENCODING_CP850 | ?wxFONTENCODING_CP852 | ?wxFONTENCODING_CP855 | ?wxFONTENCODING_CP866 | ?wxFONTENCODING_CP874 | ?wxFONTENCODING_CP932 | ?wxFONTENCODING_CP936 | ?wxFONTENCODING_CP949 | ?wxFONTENCODING_CP950 | ?wxFONTENCODING_CP1250 | ?wxFONTENCODING_CP1251 | ?wxFONTENCODING_CP1252 | ?wxFONTENCODING_CP1253 | ?wxFONTENCODING_CP1254 | ?wxFONTENCODING_CP1255 | ?wxFONTENCODING_CP1256 | ?wxFONTENCODING_CP1257 | ?wxFONTENCODING_CP12_MAX | ?wxFONTENCODING_UTF7 | ?wxFONTENCODING_UTF8 | ?

wxFONTENCODING_EUC_JP | ?wxFONTENCODING_UTF16BE | ?wxFONTENCODING_UTF16LE | ?wxFONTENCODING_UTF32BE | ?wxFONTENCODING_UTF32LE | ?wxFONTENCODING_MACROMAN | ?wxFONTENCODING_MACJAPANESE | ?wxFONTENCODING_MACCHINESETRAD | ?wxFONTENCODING_MACKOREAN | ?wxFONTENCODING_MACARABIC | ?wxFONTENCODING_MACHEBREW | ?wxFONTENCODING_MACGREEK | ?wxFONTENCODING_MACCYRILLIC | ?wxFONTENCODING_MACDEVANAGARI | ?wxFONTENCODING_MACGURMUKHI | ?wxFONTENCODING_MACGUJARATI | ?wxFONTENCODING_MACORIYA | ?wxFONTENCODING_MACBENGALI | ?wxFONTENCODING_MACTAMIL | ?wxFONTENCODING_MACTELUGU | ?wxFONTENCODING_MACKANNADA | ?wxFONTENCODING_MACMALAJALAM | ?wxFONTENCODING_MACSINHALESE | ?wxFONTENCODING_MACBURMESE | ?wxFONTENCODING_MACKHMER | ?wxFONTENCODING_MACTHAI | ?wxFONTENCODING_MACLAOTIAN | ?wxFONTENCODING_MACGEORGIAN | ?wxFONTENCODING_MACARMENIAN | ?wxFONTENCODING_MACCHINESESIMP | ?wxFONTENCODING_MACTIBETAN | ?wxFONTENCODING_MACMONGOLIAN | ?wxFONTENCODING_MACETHIOPIC | ?wxFONTENCODING_MACCENTRALEUR | ?wxFONTENCODING_MACVIATNAMESE | ?wxFONTENCODING_MACARABICEXT | ?wxFONTENCODING_MACSYMBOL | ?wxFONTENCODING_MACDINGBATS | ?wxFONTENCODING_MACTURKISH | ?wxFONTENCODING_MACCROATIAN | ?wxFONTENCODING_MACICELANDIC | ?wxFONTENCODING_MACROMANIAN | ?wxFONTENCODING_MACCELTIC | ?wxFONTENCODING_MACGAELIC | ?wxFONTENCODING_MACKEYBOARD | ?wxFONTENCODING_MAX | ?wxFONTENCODING_MACMIN | ?wxFONTENCODING_MACMAX | ?wxFONTENCODING_UTF16 | ?wxFONTENCODING_UTF32 | ?wxFONTENCODING_UNICODE | ?wxFONTENCODING_GB2312 | ?wxFONTENCODING_BIG5 | ?wxFONTENCODING_SHIFT_JIS

```
styleSetCharacterSet(This, Style, CharacterSet) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**CharacterSet = integer()**

See **external documentation**.

```
styleSetFontEncoding(This, Style, Encoding) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Style = integer()**
**Encoding = *wx:wx_enum()***

See **external documentation**.

Encoding = ?wxFONTENCODING_SYSTEM | ?wxFONTENCODING_DEFAULT | ?wxFONTENCODING_ISO8859_1 | ?wxFONTENCODING_ISO8859_2 | ?wxFONTENCODING_ISO8859_3 | ?wxFONTENCODING_ISO8859_4 | ?wxFONTENCODING_ISO8859_5 | ?wxFONTENCODING_ISO8859_6 | ?wxFONTENCODING_ISO8859_7 | ?wxFONTENCODING_ISO8859_8 | ?wxFONTENCODING_ISO8859_9 | ?wxFONTENCODING_ISO8859_10 | ?wxFONTENCODING_ISO8859_11 | ?wxFONTENCODING_ISO8859_12 | ?wxFONTENCODING_ISO8859_13 | ?wxFONTENCODING_ISO8859_14 | ?wxFONTENCODING_ISO8859_15 | ?wxFONTENCODING_ISO8859_MAX | ?wxFONTENCODING_KOI8 | ?wxFONTENCODING_KOI8_U | ?wxFONTENCODING_ALTERNATIVE | ?wxFONTENCODING_BULGARIAN | ?wxFONTENCODING_CP437 | ?wxFONTENCODING_CP850 | ?wxFONTENCODING_CP852 | ?wxFONTENCODING_CP855 | ?wxFONTENCODING_CP866 | ?wxFONTENCODING_CP874 | ?

wxFONTENCODING_CP932 | ?wxFONTENCODING_CP936 | ?wxFONTENCODING_CP949 | ?wxFONTENCODING_CP950 | ?wxFONTENCODING_CP1250 | ?wxFONTENCODING_CP1251 | ?wxFONTENCODING_CP1252 | ?wxFONTENCODING_CP1253 | ?wxFONTENCODING_CP1254 | ?wxFONTENCODING_CP1255 | ?wxFONTENCODING_CP1256 | ?wxFONTENCODING_CP1257 | ?wxFONTENCODING_CP12_MAX | ?wxFONTENCODING_UTF7 | ?wxFONTENCODING_UTF8 | ?wxFONTENCODING_EUC_JP | ?wxFONTENCODING_UTF16BE | ?wxFONTENCODING_UTF16LE | ?wxFONTENCODING_UTF32BE | ?wxFONTENCODING_UTF32LE | ?wxFONTENCODING_MACROMAN | ?wxFONTENCODING_MACJAPANESE | ?wxFONTENCODING_MACCHINESETRAD | ?wxFONTENCODING_MACKOREAN | ?wxFONTENCODING_MACARABIC | ?wxFONTENCODING_MACHEBREW | ?wxFONTENCODING_MACGREEK | ?wxFONTENCODING_MACCYRILLIC | ?wxFONTENCODING_MACDEVANAGARI | ?wxFONTENCODING_MACGURMUKHI | ?wxFONTENCODING_MACGUJARATI | ?wxFONTENCODING_MACORIYA | ?wxFONTENCODING_MACBENGALI | ?wxFONTENCODING_MACTAMIL | ?wxFONTENCODING_MACTELUGU | ?wxFONTENCODING_MACKANNADA | ?wxFONTENCODING_MACMALAJALAM | ?wxFONTENCODING_MACSINHALESE | ?wxFONTENCODING_MACBURMESE | ?wxFONTENCODING_MACKHMER | ?wxFONTENCODING_MACTHAI | ?wxFONTENCODING_MACLAOTIAN | ?wxFONTENCODING_MACGEORGIAN | ?wxFONTENCODING_MACARMENIAN | ?wxFONTENCODING_MACCHINESESIMP | ?wxFONTENCODING_MACTIBETAN | ?wxFONTENCODING_MACMONGOLIAN | ?wxFONTENCODING_MACETHIOPIC | ?wxFONTENCODING_MACCENTRALEUR | ?wxFONTENCODING_MACVIATNAMESE | ?wxFONTENCODING_MACARABICEXT | ?wxFONTENCODING_MACSYMBOL | ?wxFONTENCODING_MACDINGBATS | ?wxFONTENCODING_MACTURKISH | ?wxFONTENCODING_MACCROATIAN | ?wxFONTENCODING_MACICELANDIC | ?wxFONTENCODING_MACROMANIAN | ?wxFONTENCODING_MACCELTIC | ?wxFONTENCODING_MACGAELIC | ?wxFONTENCODING_MACKEYBOARD | ?wxFONTENCODING_MAX | ?wxFONTENCODING_MACMIN | ?wxFONTENCODING_MACMAX | ?wxFONTENCODING_UTF16 | ?wxFONTENCODING_UTF32 | ?wxFONTENCODING_UNICODE | ?wxFONTENCODING_GB2312 | ?wxFONTENCODING_BIG5 | ?wxFONTENCODING_SHIFT_JIS

```
cmdKeyExecute(This, Cmd) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Cmd = integer()**

See **external documentation**.

```
setMargins(This, Left, Right) -> ok
```

Types:

**This = *wxStyledTextCtrl()***

**Left = integer()**

**Right = integer()**

See **external documentation**.

```
getSelection(This) -> {StartPos::integer(), EndPos::integer()}
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
pointFromPosition(This, Pos) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxStyledTextCtrl()***
**Pos = integer()**

See **external documentation**.

```
scrollToLine(This, Line) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Line = integer()**

See **external documentation**.

```
scrollToColumn(This, Column) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Column = integer()**

See **external documentation**.

```
setVScrollBar(This, Bar) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Bar = *wxScrollBar:wxScrollBar()***

See **external documentation**.

```
setHScrollBar(This, Bar) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Bar = *wxScrollBar:wxScrollBar()***

See **external documentation**.

```
getLastKeydownProcessed(This) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

```
setLastKeydownProcessed(This, Val) -> ok
```

Types:

**This = *wxStyledTextCtrl()***
**Val = boolean()**

See **external documentation**.

```
saveFile(This, Filename) -> boolean()
```

Types:

**This = *wxStyledTextCtrl()***
**Filename = *unicode:chardata()***

See **external documentation**.

`loadFile(This, Filename) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***
**Filename = *unicode:chardata()***

See **external documentation**.

`doDragOver(This, X, Y, Def) -> wx:wx_enum()`

Types:

**This = *wxStyledTextCtrl()***
**X = integer()**
**Y = integer()**
**Def = *wx:wx_enum()***

See **external documentation**.
Def = ?wxDragError | ?wxDragNone | ?wxDragCopy | ?wxDragMove | ?wxDragLink | ?wxDragCancel
Res = ?wxDragError | ?wxDragNone | ?wxDragCopy | ?wxDragMove | ?wxDragLink | ?wxDragCancel

`doDropText(This, X, Y, Data) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***
**X = integer()**
**Y = integer()**
**Data = *unicode:chardata()***

See **external documentation**.

`getUseAntiAliasing(This) -> boolean()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`addTextRaw(This, Text) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**Text = binary()**

See **external documentation**.

`insertTextRaw(This, Pos, Text) -> ok`

Types:

**This = *wxStyledTextCtrl()***
**Pos = integer()**

**Text = binary()**

See **external documentation**.

`getCurLineRaw(This) -> Result`

Types:

**Result = {Res::binary(), LinePos::integer()}**

**This = *wxStyledTextCtrl()***

See **external documentation**.

`getLineRaw(This, Line) -> binary()`

Types:

**This = *wxStyledTextCtrl()***

**Line = integer()**

See **external documentation**.

`getSelectedTextRaw(This) -> binary()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`getTextRangeRaw(This, StartPos, EndPos) -> binary()`

Types:

**This = *wxStyledTextCtrl()***

**StartPos = integer()**

**EndPos = integer()**

See **external documentation**.

`setTextRaw(This, Text) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Text = binary()**

See **external documentation**.

`getTextRaw(This) -> binary()`

Types:

**This = *wxStyledTextCtrl()***

See **external documentation**.

`appendTextRaw(This, Text) -> ok`

Types:

**This = *wxStyledTextCtrl()***

**Text = binary()**

See **external documentation**.

```
destroy(This::wxStyledTextCtrl()) -> ok
```

Destroys this object, do not use object again

# wxStyledTextEvent

Erlang module

See external documentation: **wxStyledTextEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**stc_change**, **stc_styleneeded**, **stc_charadded**, **stc_savepointreached**, **stc_savepointleft**, **stc_romodifyattempt**, **stc_key**, **stc_doubleclick**, **stc_updateui**, **stc_modified**, **stc_macrorecord**, **stc_marginclick**, **stc_needshown**, **stc_painted**, **stc_userlistselection**, **stc_uridropped**, **stc_dwellstart**, **stc_dwellend**, **stc_start_drag**, **stc_drag_over**, **stc_do_drop**, **stc_zoom**, **stc_hotspot_click**, **stc_hotspot_dclick**, **stc_calltip_click**, **stc_autocomp_selection**

See also the message variant *#wxStyledText{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxStyledTextEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getPosition(This) -> integer()`

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

`getKey(This) -> integer()`

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

`getModifiers(This) -> integer()`

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

`getModificationType(This) -> integer()`

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

```
getText(This) -> unicode:charlist()
```
Types:
**This = *wxStyledTextEvent()***

See **external documentation**.

```
getLength(This) -> integer()
```
Types:
**This = *wxStyledTextEvent()***

See **external documentation**.

```
getLinesAdded(This) -> integer()
```
Types:
**This = *wxStyledTextEvent()***

See **external documentation**.

```
getLine(This) -> integer()
```
Types:
**This = *wxStyledTextEvent()***

See **external documentation**.

```
getFoldLevelNow(This) -> integer()
```
Types:
**This = *wxStyledTextEvent()***

See **external documentation**.

```
getFoldLevelPrev(This) -> integer()
```
Types:
**This = *wxStyledTextEvent()***

See **external documentation**.

```
getMargin(This) -> integer()
```
Types:
**This = *wxStyledTextEvent()***

See **external documentation**.

```
getMessage(This) -> integer()
```
Types:
**This = *wxStyledTextEvent()***

See **external documentation**.

```
getWParam(This) -> integer()
```
Types:
**This = *wxStyledTextEvent()***

See **external documentation**.

```
getLParam(This) -> integer()
```

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

```
getListType(This) -> integer()
```

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

```
getX(This) -> integer()
```

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

```
getY(This) -> integer()
```

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

```
getDragText(This) -> unicode:charlist()
```

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

```
getDragAllowMove(This) -> boolean()
```

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

```
getDragResult(This) -> wx:wx_enum()
```

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.
Res = ?wxDragError | ?wxDragNone | ?wxDragCopy | ?wxDragMove | ?wxDragLink | ?wxDragCancel

```
getShift(This) -> boolean()
```

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

```
getControl(This) -> boolean()
```

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

```
getAlt(This) -> boolean()
```

Types:

**This = *wxStyledTextEvent()***

See **external documentation**.

# wxSysColourChangedEvent

Erlang module

See external documentation: **wxSysColourChangedEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**sys_colour_changed**

See also the message variant *#wxSysColourChanged{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxSysColourChangedEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxSystemOptions

Erlang module

See external documentation: **wxSystemOptions**.

## DATA TYPES

wxSystemOptions()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getOption(Name) -> unicode:charlist()`

Types:

**Name = *unicode:chardata()***

See **external documentation**.

`getOptionInt(Name) -> integer()`

Types:

**Name = *unicode:chardata()***

See **external documentation**.

`hasOption(Name) -> boolean()`

Types:

**Name = *unicode:chardata()***

See **external documentation**.

`isFalse(Name) -> boolean()`

Types:

**Name = *unicode:chardata()***

See **external documentation**.

`setOption(Name, Value) -> ok`

Types:

**Name = *unicode:chardata()***

**Value = integer()**

See **external documentation**.
Also:
setOption(Name, Value) -> 'ok' when
Name::unicode:chardata(), Value::unicode:chardata().

# wxSystemSettings

Erlang module

See external documentation: **wxSystemSettings**.

## DATA TYPES

wxSystemSettings()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getColour(Index) -> wx:wx_colour4()`

Types:

**Index = *wx:wx_enum()***

See **external documentation**.
Index = ?wxSYS_COLOUR_SCROLLBAR | ?wxSYS_COLOUR_BACKGROUND | ?wxSYS_COLOUR_DESKTOP | ?wxSYS_COLOUR_ACTIVECAPTION | ?wxSYS_COLOUR_INACTIVECAPTION | ?wxSYS_COLOUR_MENU | ?wxSYS_COLOUR_WINDOW | ?wxSYS_COLOUR_WINDOWFRAME | ?wxSYS_COLOUR_MENUTEXT | ?wxSYS_COLOUR_WINDOWTEXT | ?wxSYS_COLOUR_CAPTIONTEXT | ?wxSYS_COLOUR_ACTIVEBORDER | ?wxSYS_COLOUR_INACTIVEBORDER | ?wxSYS_COLOUR_APPWORKSPACE | ?wxSYS_COLOUR_HIGHLIGHT | ?wxSYS_COLOUR_HIGHLIGHTTEXT | ?wxSYS_COLOUR_BTNFACE | ?wxSYS_COLOUR_3DFACE | ?wxSYS_COLOUR_BTNSHADOW | ?wxSYS_COLOUR_3DSHADOW | ?wxSYS_COLOUR_GRAYTEXT | ?wxSYS_COLOUR_BTNTEXT | ?wxSYS_COLOUR_INACTIVECAPTIONTEXT | ?wxSYS_COLOUR_BTNHIGHLIGHT | ?wxSYS_COLOUR_BTNHILIGHT | ?wxSYS_COLOUR_3DHIGHLIGHT | ?wxSYS_COLOUR_3DHILIGHT | ?wxSYS_COLOUR_3DDKSHADOW | ?wxSYS_COLOUR_3DLIGHT | ?wxSYS_COLOUR_INFOTEXT | ?wxSYS_COLOUR_INFOBK | ?wxSYS_COLOUR_LISTBOX | ?wxSYS_COLOUR_HOTLIGHT | ?wxSYS_COLOUR_GRADIENTACTIVECAPTION | ?wxSYS_COLOUR_GRADIENTINACTIVECAPTION | ?wxSYS_COLOUR_MENUHILIGHT | ?wxSYS_COLOUR_MENUBAR | ?wxSYS_COLOUR_LISTBOXTEXT | ?wxSYS_COLOUR_LISTBOXHIGHLIGHTTEXT | ?wxSYS_COLOUR_MAX

`getFont(Index) -> wxFont:wxFont()`

Types:

**Index = *wx:wx_enum()***

See **external documentation**.
Index = ?wxSYS_OEM_FIXED_FONT | ?wxSYS_ANSI_FIXED_FONT | ?wxSYS_ANSI_VAR_FONT | ?wxSYS_SYSTEM_FONT | ?wxSYS_DEVICE_DEFAULT_FONT | ?wxSYS_DEFAULT_PALETTE | ?wxSYS_SYSTEM_FIXED_FONT | ?wxSYS_DEFAULT_GUI_FONT | ?wxSYS_ICONTITLE_FONT

`getMetric(Index) -> integer()`

Types:

**Index = *wx:wx_enum()***

Equivalent to *getMetric(Index, [])*.

```
getMetric(Index, Options::[Option]) -> integer()
```

Types:

**Index = *wx:wx_enum()***

**Option = {win, *wxWindow:wxWindow()*}**

See **external documentation**.
Index = ?wxSYS_MOUSE_BUTTONS | ?wxSYS_BORDER_X | ?wxSYS_BORDER_Y | ?wxSYS_CURSOR_X | ?wxSYS_CURSOR_Y | ?wxSYS_DCLICK_X | ?wxSYS_DCLICK_Y | ?wxSYS_DRAG_X | ?wxSYS_DRAG_Y | ?wxSYS_EDGE_X | ?wxSYS_EDGE_Y | ?wxSYS_HSCROLL_ARROW_X | ?wxSYS_HSCROLL_ARROW_Y | ?wxSYS_HTHUMB_X | ?wxSYS_ICON_X | ?wxSYS_ICON_Y | ?wxSYS_ICONSPACING_X | ?wxSYS_ICONSPACING_Y | ?wxSYS_WINDOWMIN_X | ?wxSYS_WINDOWMIN_Y | ?wxSYS_SCREEN_X | ?wxSYS_SCREEN_Y | ?wxSYS_FRAMESIZE_X | ?wxSYS_FRAMESIZE_Y | ?wxSYS_SMALLICON_X | ?wxSYS_SMALLICON_Y | ?wxSYS_HSCROLL_Y | ?wxSYS_VSCROLL_X | ?wxSYS_VSCROLL_ARROW_X | ?wxSYS_VSCROLL_ARROW_Y | ?wxSYS_VTHUMB_Y | ?wxSYS_CAPTION_Y | ?wxSYS_MENU_Y | ?wxSYS_NETWORK_PRESENT | ?wxSYS_PENWINDOWS_PRESENT | ?wxSYS_SHOW_SOUNDS | ?wxSYS_SWAP_BUTTONS

```
getScreenType() -> wx:wx_enum()
```

See **external documentation**.
Res = ?wxSYS_SCREEN_NONE | ?wxSYS_SCREEN_TINY | ?wxSYS_SCREEN_PDA | ?wxSYS_SCREEN_SMALL | ?wxSYS_SCREEN_DESKTOP

# wxTaskBarIcon

Erlang module

See external documentation: **wxTaskBarIcon**.

This class is derived (and can use functions) from:
*wxEvtHandler*

## DATA TYPES

wxTaskBarIcon()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxTaskBarIcon()`

See **external documentation**.

`popupMenu(This, Menu) -> boolean()`

Types:

**This = *wxTaskBarIcon()***
**Menu = *wxMenu:wxMenu()***

See **external documentation**.

`removeIcon(This) -> boolean()`

Types:

**This = *wxTaskBarIcon()***

See **external documentation**.

`setIcon(This, Icon) -> boolean()`

Types:

**This = *wxTaskBarIcon()***
**Icon = *wxIcon:wxIcon()***

Equivalent to *setIcon(This, Icon, [])*.

`setIcon(This, Icon, Options::[Option]) -> boolean()`

Types:

**This = *wxTaskBarIcon()***
**Icon = *wxIcon:wxIcon()***
**Option = {tooltip, *unicode:chardata()*}**

See **external documentation**.

```
destroy(This::wxTaskBarIcon()) -> ok
```

Destroys this object, do not use object again

# wxTaskBarIconEvent

Erlang module

See external documentation: **wxTaskBarIconEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**taskbar_move**, **taskbar_left_down**, **taskbar_left_up**, **taskbar_right_down**, **taskbar_right_up**, **taskbar_left_dclick**, **taskbar_right_dclick**

See also the message variant *#wxTaskBarIcon{}* event record type.

This class is derived (and can use functions) from:
*wxEvent*

## DATA TYPES

wxTaskBarIconEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxTextAttr

Erlang module

See external documentation: **wxTextAttr**.

## DATA TYPES

wxTextAttr()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxTextAttr()
```

See **external documentation**.

```
new(ColText) -> wxTextAttr()
```

Types:

**ColText = *wx:wx_colour()***

Equivalent to *new(ColText, [])*.

```
new(ColText, Options::[Option]) -> wxTextAttr()
```

Types:

**ColText = *wx:wx_colour()***

**Option = {colBack, *wx:wx_colour()*} | {font, *wxFont:wxFont()*} | {alignment, *wx:wx_enum()*}**

See **external documentation**.

Alignment = ?wxTEXT_ALIGNMENT_DEFAULT | ?wxTEXT_ALIGNMENT_LEFT | ?wxTEXT_ALIGNMENT_CENTRE | ?wxTEXT_ALIGNMENT_CENTER | ?wxTEXT_ALIGNMENT_RIGHT | ?wxTEXT_ALIGNMENT_JUSTIFIED

```
getAlignment(This) -> wx:wx_enum()
```

Types:

**This = *wxTextAttr()***

See **external documentation**.

Res = ?wxTEXT_ALIGNMENT_DEFAULT | ?wxTEXT_ALIGNMENT_LEFT | ?wxTEXT_ALIGNMENT_CENTRE | ?wxTEXT_ALIGNMENT_CENTER | ?wxTEXT_ALIGNMENT_RIGHT | ?wxTEXT_ALIGNMENT_JUSTIFIED

```
getBackgroundColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxTextAttr()***

See **external documentation**.

```
getFont(This) -> wxFont:wxFont()
```
Types:
**This = *wxTextAttr()***

See **external documentation**.

```
getLeftIndent(This) -> integer()
```
Types:
**This = *wxTextAttr()***

See **external documentation**.

```
getLeftSubIndent(This) -> integer()
```
Types:
**This = *wxTextAttr()***

See **external documentation**.

```
getRightIndent(This) -> integer()
```
Types:
**This = *wxTextAttr()***

See **external documentation**.

```
getTabs(This) -> [integer()]
```
Types:
**This = *wxTextAttr()***

See **external documentation**.

```
getTextColour(This) -> wx:wx_colour4()
```
Types:
**This = *wxTextAttr()***

See **external documentation**.

```
hasBackgroundColour(This) -> boolean()
```
Types:
**This = *wxTextAttr()***

See **external documentation**.

```
hasFont(This) -> boolean()
```
Types:
**This = *wxTextAttr()***

See **external documentation**.

```
hasTextColour(This) -> boolean()
```
Types:
**This = *wxTextAttr()***

See **external documentation**.

```
getFlags(This) -> integer()
```

Types:

**This = *wxTextAttr()***

See **external documentation**.

```
isDefault(This) -> boolean()
```

Types:

**This = *wxTextAttr()***

See **external documentation**.

```
setAlignment(This, Alignment) -> ok
```

Types:

**This = *wxTextAttr()***

**Alignment = *wx:wx_enum()***

See **external documentation**.

Alignment = ?wxTEXT_ALIGNMENT_DEFAULT | ?wxTEXT_ALIGNMENT_LEFT | ?wxTEXT_ALIGNMENT_CENTRE | ?wxTEXT_ALIGNMENT_CENTER | ?wxTEXT_ALIGNMENT_RIGHT | ?wxTEXT_ALIGNMENT_JUSTIFIED

```
setBackgroundColour(This, ColBack) -> ok
```

Types:

**This = *wxTextAttr()***

**ColBack = *wx:wx_colour()***

See **external documentation**.

```
setFlags(This, Flags) -> ok
```

Types:

**This = *wxTextAttr()***

**Flags = integer()**

See **external documentation**.

```
setFont(This, Font) -> ok
```

Types:

**This = *wxTextAttr()***

**Font = *wxFont:wxFont()***

Equivalent to *setFont(This, Font, [])*.

```
setFont(This, Font, Options::[Option]) -> ok
```

Types:

**This = *wxTextAttr()***

**Font = *wxFont:wxFont()***

**Option = {flags, integer()}**

See **external documentation**.

`setLeftIndent(This, Indent) -> ok`

Types:

**This = *wxTextAttr()***
**Indent = integer()**

Equivalent to *setLeftIndent(This, Indent, [])*.

`setLeftIndent(This, Indent, Options::[Option]) -> ok`

Types:

**This = *wxTextAttr()***
**Indent = integer()**
**Option = {subIndent, integer()}**

See **external documentation**.

`setRightIndent(This, Indent) -> ok`

Types:

**This = *wxTextAttr()***
**Indent = integer()**

See **external documentation**.

`setTabs(This, Tabs) -> ok`

Types:

**This = *wxTextAttr()***
**Tabs = [integer()]**

See **external documentation**.

`setTextColour(This, ColText) -> ok`

Types:

**This = *wxTextAttr()***
**ColText = *wx:wx_colour()***

See **external documentation**.

`destroy(This::wxTextAttr()) -> ok`

Destroys this object, do not use object again

# wxTextCtrl

Erlang module

See external documentation: **wxTextCtrl**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxTextCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxTextCtrl()
```

See **external documentation**.

```
new(Parent, Id) -> wxTextCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxTextCtrl()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {value, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
appendText(This, Text) -> ok
```

Types:

**This = *wxTextCtrl()***
**Text = *unicode:chardata()***

See **external documentation**.

```
canCopy(This) -> boolean()
```

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`canCut(This) -> boolean()`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`canPaste(This) -> boolean()`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`canRedo(This) -> boolean()`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`canUndo(This) -> boolean()`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`clear(This) -> ok`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`copy(This) -> ok`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`create(This, Parent, Id) -> boolean()`

Types:

**This = *wxTextCtrl()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

`create(This, Parent, Id, Options::[Option]) -> boolean()`

Types:

**This = *wxTextCtrl()***

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {value, *unicode:chardata()*} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
cut(This) -> ok
```

Types:

**This = *wxTextCtrl()***

See **external documentation**.

```
discardEdits(This) -> ok
```

Types:

**This = *wxTextCtrl()***

See **external documentation**.

```
changeValue(This, Value) -> ok
```

Types:

**This = *wxTextCtrl()***
**Value = *unicode:chardata()***

See **external documentation**.

```
emulateKeyPress(This, Event) -> boolean()
```

Types:

**This = *wxTextCtrl()***
**Event = *wxKeyEvent:wxKeyEvent()***

See **external documentation**.

```
getDefaultStyle(This) -> wxTextAttr:wxTextAttr()
```

Types:

**This = *wxTextCtrl()***

See **external documentation**.

```
getInsertionPoint(This) -> integer()
```

Types:

**This = *wxTextCtrl()***

See **external documentation**.

```
getLastPosition(This) -> integer()
```

Types:

**This = *wxTextCtrl()***

See **external documentation**.

```
getLineLength(This, LineNo) -> integer()
```

Types:

**This = *wxTextCtrl()***
**LineNo = integer()**

See **external documentation**.

```
getLineText(This, LineNo) -> unicode:charlist()
```

Types:

**This = *wxTextCtrl()***
**LineNo = integer()**

See **external documentation**.

```
getNumberOfLines(This) -> integer()
```

Types:

**This = *wxTextCtrl()***

See **external documentation**.

```
getRange(This, From, To) -> unicode:charlist()
```

Types:

**This = *wxTextCtrl()***
**From = integer()**
**To = integer()**

See **external documentation**.

```
getSelection(This) -> {From::integer(), To::integer()}
```

Types:

**This = *wxTextCtrl()***

See **external documentation**.

```
getStringSelection(This) -> unicode:charlist()
```

Types:

**This = *wxTextCtrl()***

See **external documentation**.

```
getStyle(This, Position, Style) -> boolean()
```

Types:

**This = *wxTextCtrl()***
**Position = integer()**
**Style = *wxTextAttr:wxTextAttr()***

See **external documentation**.

```
getValue(This) -> unicode:charlist()
```

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`isEditable(This) -> boolean()`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`isModified(This) -> boolean()`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`isMultiLine(This) -> boolean()`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`isSingleLine(This) -> boolean()`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`loadFile(This, File) -> boolean()`

Types:

**This = *wxTextCtrl()***

**File = *unicode:chardata()***

Equivalent to *loadFile(This, File, [])*.

`loadFile(This, File, Options::[Option]) -> boolean()`

Types:

**This = *wxTextCtrl()***

**File = *unicode:chardata()***

**Option = {fileType, integer()}**

See **external documentation**.

`markDirty(This) -> ok`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`paste(This) -> ok`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`positionToXY(This, Pos) -> Result`

Types:

**Result = {Res::boolean(), X::integer(), Y::integer()}**
**This = *wxTextCtrl()***
**Pos = integer()**

See **external documentation**.

`redo(This) -> ok`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`remove(This, From, To) -> ok`

Types:

**This = *wxTextCtrl()***
**From = integer()**
**To = integer()**

See **external documentation**.

`replace(This, From, To, Value) -> ok`

Types:

**This = *wxTextCtrl()***
**From = integer()**
**To = integer()**
**Value = *unicode:chardata()***

See **external documentation**.

`saveFile(This) -> boolean()`

Types:

**This = *wxTextCtrl()***

Equivalent to *saveFile(This, [])*.

`saveFile(This, Options::[Option]) -> boolean()`

Types:

**This = *wxTextCtrl()***
**Option = {file, *unicode:chardata()*} | {fileType, integer()}**

See **external documentation**.

`setDefaultStyle(This, Style) -> boolean()`

Types:

**This = *wxTextCtrl()***
**Style = *wxTextAttr:wxTextAttr()***

See **external documentation**.

`setEditable(This, Editable) -> ok`

Types:

**This = *wxTextCtrl()***
**Editable = boolean()**

See **external documentation**.

`setInsertionPoint(This, Pos) -> ok`

Types:

**This = *wxTextCtrl()***
**Pos = integer()**

See **external documentation**.

`setInsertionPointEnd(This) -> ok`

Types:

**This = *wxTextCtrl()***

See **external documentation**.

`setMaxLength(This, Len) -> ok`

Types:

**This = *wxTextCtrl()***
**Len = integer()**

See **external documentation**.

`setSelection(This, From, To) -> ok`

Types:

**This = *wxTextCtrl()***
**From = integer()**
**To = integer()**

See **external documentation**.

`setStyle(This, Start, End, Style) -> boolean()`

Types:

**This = *wxTextCtrl()***
**Start = integer()**
**End = integer()**
**Style = *wxTextAttr:wxTextAttr()***

See **external documentation**.

```
setValue(This, Value) -> ok
```

Types:

**This = *wxTextCtrl()***
**Value = *unicode:chardata()***

See **external documentation**.

```
showPosition(This, Pos) -> ok
```

Types:

**This = *wxTextCtrl()***
**Pos = integer()**

See **external documentation**.

```
undo(This) -> ok
```

Types:

**This = *wxTextCtrl()***

See **external documentation**.

```
writeText(This, Text) -> ok
```

Types:

**This = *wxTextCtrl()***
**Text = *unicode:chardata()***

See **external documentation**.

```
xYToPosition(This, X, Y) -> integer()
```

Types:

**This = *wxTextCtrl()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
destroy(This::wxTextCtrl()) -> ok
```

Destroys this object, do not use object again

# wxTextDataObject

Erlang module

See external documentation: **wxTextDataObject**.

This class is derived (and can use functions) from:
*wxDataObject*

## DATA TYPES

wxTextDataObject()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxTextDataObject()
```

Equivalent to *new([])*.

```
new(Options::[Option]) -> wxTextDataObject()
```

Types:

**Option = {text, *unicode:chardata()*}**

See **external documentation**.

```
getTextLength(This) -> integer()
```

Types:

**This = *wxTextDataObject()***

See **external documentation**.

```
getText(This) -> unicode:charlist()
```

Types:

**This = *wxTextDataObject()***

See **external documentation**.

```
setText(This, Text) -> ok
```

Types:

**This = *wxTextDataObject()***
**Text = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxTextDataObject()) -> ok
```

Destroys this object, do not use object again

# wxTextEntryDialog

Erlang module

See external documentation: **wxTextEntryDialog**.

This class is derived (and can use functions) from:
*wxDialog*
*wxTopLevelWindow*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxTextEntryDialog()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new(Parent, Message) -> wxTextEntryDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Message = *unicode:chardata()***

Equivalent to *new(Parent, Message, [])*.

```
new(Parent, Message, Options::[Option]) -> wxTextEntryDialog()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Message = *unicode:chardata()***
**Option = {caption, *unicode:chardata()*} | {value, *unicode:chardata()*} | {style, integer()} | {pos, {X::integer(), Y::integer()}}**

See **external documentation**.

```
getValue(This) -> unicode:charlist()
```

Types:

**This = *wxTextEntryDialog()***

See **external documentation**.

```
setValue(This, Val) -> ok
```

Types:

**This = *wxTextEntryDialog()***
**Val = *unicode:chardata()***

See **external documentation**.

```
destroy(This::wxTextEntryDialog()) -> ok
```

Destroys this object, do not use object again

# wxToggleButton

Erlang module

See external documentation: **wxToggleButton**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxToggleButton()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxToggleButton()
```

See **external documentation**.

```
new(Parent, Id, Label) -> wxToggleButton()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***

Equivalent to *new(Parent, Id, Label, [])*.

```
new(Parent, Id, Label, Options::[Option]) -> wxToggleButton()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
create(This, Parent, Id, Label) -> boolean()
```

Types:

**This = *wxToggleButton()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Label = *unicode:chardata()***

Equivalent to *create(This, Parent, Id, Label, [])*.

```
create(This, Parent, Id, Label, Options::[Option]) -> boolean()
```

Types:

**This = *wxToggleButton()***

**Parent = *wxWindow:wxWindow()***

**Id = integer()**

**Label = *unicode:chardata()***

**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
getValue(This) -> boolean()
```

Types:

**This = *wxToggleButton()***

See **external documentation**.

```
setValue(This, State) -> ok
```

Types:

**This = *wxToggleButton()***

**State = boolean()**

See **external documentation**.

```
destroy(This::wxToggleButton()) -> ok
```

Destroys this object, do not use object again

# wxToolBar

Erlang module

See external documentation: **wxToolBar**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxToolBar()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
addControl(This, Control) -> wx:wx_object()
```

Types:

**This = *wxToolBar()***
**Control = *wxControl:wxControl()***

See **external documentation**.

```
addSeparator(This) -> wx:wx_object()
```

Types:

**This = *wxToolBar()***

See **external documentation**.

```
addTool(This, Tool) -> wx:wx_object()
```

Types:

**This = *wxToolBar()***
**Tool = *wx:wx_object()***

See **external documentation**.

```
addTool(This, Toolid, Bitmap) -> wx:wx_object()
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**Bitmap = *wxBitmap:wxBitmap()***

Equivalent to *addTool(This, Toolid, Bitmap, [])*.

```
addTool(This, Toolid, Label, Bitmap) -> wx:wx_object()
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**Label = *unicode:chardata()***
**Bitmap = *wxBitmap:wxBitmap()***

See **external documentation**.
Also:
addTool(This, Toolid, Bitmap, BmpDisabled) -> wx:wx_object() when
This::wxToolBar(), Toolid::integer(), Bitmap::wxBitmap:wxBitmap(), BmpDisabled::wxBitmap:wxBitmap();
(This, Toolid, Bitmap, [Option]) -> wx:wx_object() when
This::wxToolBar(), Toolid::integer(), Bitmap::wxBitmap:wxBitmap(),
Option :: {'shortHelpString', unicode:chardata()}
| {'longHelpString', unicode:chardata()}.

Kind = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

`addTool(This, Toolid, Label, Bitmap, BmpDisabled) -> wx:wx_object()`

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**Label = *unicode:chardata()***
**Bitmap = *wxBitmap:wxBitmap()***
**BmpDisabled = *wxBitmap:wxBitmap()***

See **external documentation**.
Also:
addTool(This, Toolid, Label, Bitmap, [Option]) -> wx:wx_object() when
This::wxToolBar(), Toolid::integer(), Label::unicode:chardata(), Bitmap::wxBitmap:wxBitmap(),
Option :: {'shortHelp', unicode:chardata()}
| {'kind', wx:wx_enum()};
(This, Toolid, Bitmap, BmpDisabled, [Option]) -> wx:wx_object() when
This::wxToolBar(), Toolid::integer(), Bitmap::wxBitmap:wxBitmap(), BmpDisabled::wxBitmap:wxBitmap(),
Option :: {'toggle', boolean()}
| {'clientData', wx:wx_object()}
| {'shortHelpString', unicode:chardata()}
| {'longHelpString', unicode:chardata()}.

Kind = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

`addTool(This, Toolid, Bitmap, BmpDisabled, Toggle, XPos) -> wx:wx_object()`

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**Bitmap = *wxBitmap:wxBitmap()***
**BmpDisabled = *wxBitmap:wxBitmap()***
**Toggle = boolean()**
**XPos = integer()**

See **external documentation**.

Also:
addTool(This, Toolid, Label, Bitmap, BmpDisabled, [Option]) -> wx:wx_object() when
This::wxToolBar(), Toolid::integer(), Label::unicode:chardata(), Bitmap::wxBitmap:wxBitmap(),
BmpDisabled::wxBitmap:wxBitmap(),
Option :: {'kind', wx:wx_enum()}
| {'shortHelp', unicode:chardata()}
| {'longHelp', unicode:chardata()}
| {'data', wx:wx_object()}.

Kind = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

```
addTool(This, Toolid, Bitmap, BmpDisabled, Toggle, XPos, Options::[Option]) -
> wx:wx_object()
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**Bitmap = *wxBitmap:wxBitmap()***
**BmpDisabled = *wxBitmap:wxBitmap()***
**Toggle = boolean()**
**XPos = integer()**
**Option = {yPos, integer()} | {clientData, *wx:wx_object()*} | {shortHelp, *unicode:chardata()*} | {longHelp, *unicode:chardata()*}**

See **external documentation**.

```
addCheckTool(This, Toolid, Label, Bitmap) -> wx:wx_object()
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**Label = *unicode:chardata()***
**Bitmap = *wxBitmap:wxBitmap()***

Equivalent to *addCheckTool(This, Toolid, Label, Bitmap, [])*.

```
addCheckTool(This, Toolid, Label, Bitmap, Options::[Option]) ->
wx:wx_object()
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**Label = *unicode:chardata()***
**Bitmap = *wxBitmap:wxBitmap()***
**Option = {bmpDisabled, *wxBitmap:wxBitmap()*} | {shortHelp, *unicode:chardata()*} | {longHelp, *unicode:chardata()*} | {data, *wx:wx_object()*}**

See **external documentation**.

```
addRadioTool(This, Toolid, Label, Bitmap) -> wx:wx_object()
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**Label = *unicode:chardata()***
**Bitmap = *wxBitmap:wxBitmap()***

Equivalent to *addRadioTool(This, Toolid, Label, Bitmap, [])*.

```
addRadioTool(This, Toolid, Label, Bitmap, Options::[Option]) ->
wx:wx_object()
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**Label = *unicode:chardata()***
**Bitmap = *wxBitmap:wxBitmap()***
**Option = {bmpDisabled, *wxBitmap:wxBitmap()*} | {shortHelp, *unicode:chardata()*} | {longHelp, *unicode:chardata()*} | {data, *wx:wx_object()*}**

See **external documentation**.

```
addStretchableSpace(This) -> wx:wx_object()
```

Types:

**This = *wxToolBar()***

See **external documentation**.

```
insertStretchableSpace(This, Pos) -> wx:wx_object()
```

Types:

**This = *wxToolBar()***
**Pos = integer()**

See **external documentation**.

```
deleteTool(This, Toolid) -> boolean()
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**

See **external documentation**.

```
deleteToolByPos(This, Pos) -> boolean()
```

Types:

**This = *wxToolBar()***
**Pos = integer()**

See **external documentation**.

```
enableTool(This, Toolid, Enable) -> ok
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**Enable = boolean()**

See **external documentation**.

```
findById(This, Toolid) -> wx:wx_object()
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**

See **external documentation**.

```
findControl(This, Toolid) -> wxControl:wxControl()
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**

See **external documentation**.

```
findToolForPosition(This, X, Y) -> wx:wx_object()
```

Types:

**This = *wxToolBar()***
**X = integer()**
**Y = integer()**

See **external documentation**.

```
getToolSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxToolBar()***

See **external documentation**.

```
getToolBitmapSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxToolBar()***

See **external documentation**.

```
getMargins(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxToolBar()***

See **external documentation**.

```
getToolEnabled(This, Toolid) -> boolean()
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**

See **external documentation**.

`getToolLongHelp(This, Toolid) -> unicode:charlist()`

Types:

**This = *wxToolBar()***
**Toolid = integer()**

See **external documentation**.

`getToolPacking(This) -> integer()`

Types:

**This = *wxToolBar()***

See **external documentation**.

`getToolPos(This, Id) -> integer()`

Types:

**This = *wxToolBar()***
**Id = integer()**

See **external documentation**.

`getToolSeparation(This) -> integer()`

Types:

**This = *wxToolBar()***

See **external documentation**.

`getToolShortHelp(This, Toolid) -> unicode:charlist()`

Types:

**This = *wxToolBar()***
**Toolid = integer()**

See **external documentation**.

`getToolState(This, Toolid) -> boolean()`

Types:

**This = *wxToolBar()***
**Toolid = integer()**

See **external documentation**.

`insertControl(This, Pos, Control) -> wx:wx_object()`

Types:

**This = *wxToolBar()***
**Pos = integer()**
**Control = *wxControl:wxControl()***

See **external documentation**.

`insertSeparator(This, Pos) -> wx:wx_object()`

Types:

**This = *wxToolBar()***

**Pos = integer()**

See **external documentation**.

`insertTool(This, Pos, Tool) -> wx:wx_object()`

Types:

**This = *wxToolBar()***

**Pos = integer()**

**Tool = *wx:wx_object()***

See **external documentation**.

`insertTool(This, Pos, Toolid, Bitmap) -> wx:wx_object()`

Types:

**This = *wxToolBar()***

**Pos = integer()**

**Toolid = integer()**

**Bitmap = *wxBitmap:wxBitmap()***

Equivalent to *insertTool(This, Pos, Toolid, Bitmap, [])*.

`insertTool(This, Pos, Toolid, Label, Bitmap) -> wx:wx_object()`

Types:

**This = *wxToolBar()***

**Pos = integer()**

**Toolid = integer()**

**Label = *unicode:chardata()***

**Bitmap = *wxBitmap:wxBitmap()***

See **external documentation**.

Also:

insertTool(This, Pos, Toolid, Bitmap, [Option]) -> wx:wx_object() when
This::wxToolBar(), Pos::integer(), Toolid::integer(), Bitmap::wxBitmap:wxBitmap(),
Option :: {'bmpDisabled', wxBitmap:wxBitmap()}
| {'toggle', boolean()}
| {'clientData', wx:wx_object()}
| {'shortHelp', unicode:chardata()}
| {'longHelp', unicode:chardata()}.

Kind = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

`insertTool(This, Pos, Toolid, Label, Bitmap, Options::[Option]) -> wx:wx_object()`

Types:

**This = *wxToolBar()***
**Pos = integer()**
**Toolid = integer()**
**Label = *unicode:chardata()***
**Bitmap = *wxBitmap:wxBitmap()***
**Option = {bmpDisabled, *wxBitmap:wxBitmap()*} | {kind, *wx:wx_enum()*} | {shortHelp, *unicode:chardata()*} | {longHelp, *unicode:chardata()*} | {clientData, *wx:wx_object()*}**

See **external documentation**.
Kind = ?wxITEM_SEPARATOR | ?wxITEM_NORMAL | ?wxITEM_CHECK | ?wxITEM_RADIO | ?wxITEM_MAX

`realize(This) -> boolean()`

Types:

**This = *wxToolBar()***

See **external documentation**.

`removeTool(This, Toolid) -> wx:wx_object()`

Types:

**This = *wxToolBar()***
**Toolid = integer()**

See **external documentation**.

`setMargins(This, X, Y) -> ok`

Types:

**This = *wxToolBar()***
**X = integer()**
**Y = integer()**

See **external documentation**.

`setToolBitmapSize(This, Size) -> ok`

Types:

**This = *wxToolBar()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

`setToolLongHelp(This, Toolid, HelpString) -> ok`

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**HelpString = *unicode:chardata()***

See **external documentation**.

```
setToolPacking(This, Packing) -> ok
```

Types:

**This = *wxToolBar()***
**Packing = integer()**

See **external documentation**.

```
setToolShortHelp(This, Id, HelpString) -> ok
```

Types:

**This = *wxToolBar()***
**Id = integer()**
**HelpString = *unicode:chardata()***

See **external documentation**.

```
setToolSeparation(This, Separation) -> ok
```

Types:

**This = *wxToolBar()***
**Separation = integer()**

See **external documentation**.

```
toggleTool(This, Toolid, Toggle) -> ok
```

Types:

**This = *wxToolBar()***
**Toolid = integer()**
**Toggle = boolean()**

See **external documentation**.

# wxToolbook

Erlang module

See external documentation: **wxToolbook**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxToolbook()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxToolbook()
```

See **external documentation**.

```
new(Parent, Id) -> wxToolbook()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxToolbook()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
addPage(This, Page, Text) -> boolean()
```

Types:

**This = *wxToolbook()***
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***

Equivalent to *addPage(This, Page, Text, [])*.

```
addPage(This, Page, Text, Options::[Option]) -> boolean()
```

Types:

**This = *wxToolbook()***
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***
**Option = {bSelect, boolean()} | {imageId, integer()}**

See **external documentation**.

`advanceSelection(This) -> ok`

Types:

**This = *wxToolbook()***

Equivalent to *advanceSelection(This, [])*.

`advanceSelection(This, Options::[Option]) -> ok`

Types:

**This = *wxToolbook()***
**Option = {forward, boolean()}**

See **external documentation**.

`assignImageList(This, ImageList) -> ok`

Types:

**This = *wxToolbook()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

`create(This, Parent, Id) -> boolean()`

Types:

**This = *wxToolbook()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

`create(This, Parent, Id, Options::[Option]) -> boolean()`

Types:

**This = *wxToolbook()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`deleteAllPages(This) -> boolean()`

Types:

**This = *wxToolbook()***

See **external documentation**.

```
deletePage(This, N) -> boolean()
```

Types:

**This = *wxToolbook()***

**N = integer()**

See **external documentation**.

```
removePage(This, N) -> boolean()
```

Types:

**This = *wxToolbook()***

**N = integer()**

See **external documentation**.

```
getCurrentPage(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxToolbook()***

See **external documentation**.

```
getImageList(This) -> wxImageList:wxImageList()
```

Types:

**This = *wxToolbook()***

See **external documentation**.

```
getPage(This, N) -> wxWindow:wxWindow()
```

Types:

**This = *wxToolbook()***

**N = integer()**

See **external documentation**.

```
getPageCount(This) -> integer()
```

Types:

**This = *wxToolbook()***

See **external documentation**.

```
getPageImage(This, N) -> integer()
```

Types:

**This = *wxToolbook()***

**N = integer()**

See **external documentation**.

```
getPageText(This, N) -> unicode:charlist()
```

Types:

**This = *wxToolbook()***

**N = integer()**

See **external documentation**.

`getSelection(This) -> integer()`

Types:

**This = *wxToolbook()***

See **external documentation**.

`hitTest(This, Pt) -> Result`

Types:

**Result = {Res::integer(), Flags::integer()}**
**This = *wxToolbook()***
**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

`insertPage(This, N, Page, Text) -> boolean()`

Types:

**This = *wxToolbook()***
**N = integer()**
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***

Equivalent to *insertPage(This, N, Page, Text, [])*.

`insertPage(This, N, Page, Text, Options::[Option]) -> boolean()`

Types:

**This = *wxToolbook()***
**N = integer()**
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***
**Option = {bSelect, boolean()} | {imageId, integer()}**

See **external documentation**.

`setImageList(This, ImageList) -> ok`

Types:

**This = *wxToolbook()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

`setPageSize(This, Size) -> ok`

Types:

**This = *wxToolbook()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
setPageImage(This, N, ImageId) -> boolean()
```

Types:

**This = *wxToolbook()***
**N = integer()**
**ImageId = integer()**

See **external documentation**.

```
setPageText(This, N, StrText) -> boolean()
```

Types:

**This = *wxToolbook()***
**N = integer()**
**StrText = *unicode:chardata()***

See **external documentation**.

```
setSelection(This, N) -> integer()
```

Types:

**This = *wxToolbook()***
**N = integer()**

See **external documentation**.

```
changeSelection(This, N) -> integer()
```

Types:

**This = *wxToolbook()***
**N = integer()**

See **external documentation**.

```
destroy(This::wxToolbook()) -> ok
```

Destroys this object, do not use object again

# wxToolTip

Erlang module

See external documentation: **wxToolTip**.

## DATA TYPES

wxToolTip()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`enable(Flag) -> ok`

Types:

**Flag = boolean()**

See **external documentation**.

`setDelay(Msecs) -> ok`

Types:

**Msecs = integer()**

See **external documentation**.

`new(Tip) -> wxToolTip()`

Types:

**Tip = *unicode:chardata()***

See **external documentation**.

`setTip(This, Tip) -> ok`

Types:

**This = *wxToolTip()***

**Tip = *unicode:chardata()***

See **external documentation**.

`getTip(This) -> unicode:charlist()`

Types:

**This = *wxToolTip()***

See **external documentation**.

`getWindow(This) -> wxWindow:wxWindow()`

Types:

**This = *wxToolTip()***

See **external documentation**.

```
destroy(This::wxToolTip()) -> ok
```

Destroys this object, do not use object again

# wxTopLevelWindow

Erlang module

See external documentation: **wxTopLevelWindow**.

This class is derived (and can use functions) from:
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxTopLevelWindow()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
getIcon(This) -> wxIcon:wxIcon()
```

Types:

**This = *wxTopLevelWindow()***

See **external documentation**.

```
getIcons(This) -> wxIconBundle:wxIconBundle()
```

Types:

**This = *wxTopLevelWindow()***

See **external documentation**.

```
getTitle(This) -> unicode:charlist()
```

Types:

**This = *wxTopLevelWindow()***

See **external documentation**.

```
isActive(This) -> boolean()
```

Types:

**This = *wxTopLevelWindow()***

See **external documentation**.

```
iconize(This) -> ok
```

Types:

**This = *wxTopLevelWindow()***

Equivalent to *iconize(This, [])*.

```
iconize(This, Options::[Option]) -> ok
```

Types:

**This = *wxTopLevelWindow()***
**Option = {iconize, boolean()}**

See **external documentation**.

`isFullScreen(This) -> boolean()`

Types:

**This = *wxTopLevelWindow()***

See **external documentation**.

`isIconized(This) -> boolean()`

Types:

**This = *wxTopLevelWindow()***

See **external documentation**.

`isMaximized(This) -> boolean()`

Types:

**This = *wxTopLevelWindow()***

See **external documentation**.

`maximize(This) -> ok`

Types:

**This = *wxTopLevelWindow()***

Equivalent to *maximize(This, [])*.

`maximize(This, Options::[Option]) -> ok`

Types:

**This = *wxTopLevelWindow()***
**Option = {maximize, boolean()}**

See **external documentation**.

`requestUserAttention(This) -> ok`

Types:

**This = *wxTopLevelWindow()***

Equivalent to *requestUserAttention(This, [])*.

`requestUserAttention(This, Options::[Option]) -> ok`

Types:

**This = *wxTopLevelWindow()***
**Option = {flags, integer()}**

See **external documentation**.

`setIcon(This, Icon) -> ok`

Types:

**This = *wxTopLevelWindow()***
**Icon = *wxIcon:wxIcon()***

See **external documentation**.

`setIcons(This, Icons) -> ok`

Types:

**This = *wxTopLevelWindow()***
**Icons = *wxIconBundle:wxIconBundle()***

See **external documentation**.

`centerOnScreen(This) -> ok`

Types:

**This = *wxTopLevelWindow()***

Equivalent to *centerOnScreen(This, [])*.

`centerOnScreen(This, Options::[Option]) -> ok`

Types:

**This = *wxTopLevelWindow()***
**Option = {dir, integer()}**

See **external documentation**.

`centreOnScreen(This) -> ok`

Types:

**This = *wxTopLevelWindow()***

Equivalent to *centreOnScreen(This, [])*.

`centreOnScreen(This, Options::[Option]) -> ok`

Types:

**This = *wxTopLevelWindow()***
**Option = {dir, integer()}**

See **external documentation**.

`setShape(This, Region) -> boolean()`

Types:

**This = *wxTopLevelWindow()***
**Region = *wxRegion:wxRegion()***

See **external documentation**.

`setTitle(This, Title) -> ok`

Types:

**This = *wxTopLevelWindow()***
**Title = *unicode:chardata()***

See **external documentation**.

```
showFullScreen(This, Show) -> boolean()
```

Types:

**This = *wxTopLevelWindow()***
**Show = boolean()**

Equivalent to *showFullScreen(This, Show, [])*.

```
showFullScreen(This, Show, Options::[Option]) -> boolean()
```

Types:

**This = *wxTopLevelWindow()***
**Show = boolean()**
**Option = {style, integer()}**

See **external documentation**.

# wxTreebook

Erlang module

See external documentation: **wxTreebook**.

This class is derived (and can use functions) from:
*wxControl*
*wxWindow*
*wxEvtHandler*

## DATA TYPES

wxTreebook()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxTreebook()
```

See **external documentation**.

```
new(Parent, Id) -> wxTreebook()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxTreebook()
```

Types:

**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
addPage(This, Page, Text) -> boolean()
```

Types:

**This = *wxTreebook()***
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***

Equivalent to *addPage(This, Page, Text, [])*.

```
addPage(This, Page, Text, Options::[Option]) -> boolean()
```

Types:

**This = *wxTreebook()***
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***
**Option = {bSelect, boolean()} | {imageId, integer()}**

See **external documentation**.

`advanceSelection(This) -> ok`

Types:

**This = *wxTreebook()***

Equivalent to *advanceSelection(This, [])*.

`advanceSelection(This, Options::[Option]) -> ok`

Types:

**This = *wxTreebook()***
**Option = {forward, boolean()}**

See **external documentation**.

`assignImageList(This, ImageList) -> ok`

Types:

**This = *wxTreebook()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

`create(This, Parent, Id) -> boolean()`

Types:

**This = *wxTreebook()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**

Equivalent to *create(This, Parent, Id, [])*.

`create(This, Parent, Id, Options::[Option]) -> boolean()`

Types:

**This = *wxTreebook()***
**Parent = *wxWindow:wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

`deleteAllPages(This) -> boolean()`

Types:

**This = *wxTreebook()***

See **external documentation**.

```
deletePage(This, Pos) -> boolean()
```

Types:

**This = *wxTreebook()***

**Pos = integer()**

See **external documentation**.

```
removePage(This, N) -> boolean()
```

Types:

**This = *wxTreebook()***

**N = integer()**

See **external documentation**.

```
getCurrentPage(This) -> wxWindow:wxWindow()
```

Types:

**This = *wxTreebook()***

See **external documentation**.

```
getImageList(This) -> wxImageList:wxImageList()
```

Types:

**This = *wxTreebook()***

See **external documentation**.

```
getPage(This, N) -> wxWindow:wxWindow()
```

Types:

**This = *wxTreebook()***

**N = integer()**

See **external documentation**.

```
getPageCount(This) -> integer()
```

Types:

**This = *wxTreebook()***

See **external documentation**.

```
getPageImage(This, N) -> integer()
```

Types:

**This = *wxTreebook()***

**N = integer()**

See **external documentation**.

```
getPageText(This, N) -> unicode:charlist()
```

Types:

**This = *wxTreebook()***

**N = integer()**

See **external documentation**.

`getSelection(This) -> integer()`

Types:

**This = *wxTreebook()***

See **external documentation**.

`expandNode(This, Pos) -> boolean()`

Types:

**This = *wxTreebook()***

**Pos = integer()**

Equivalent to *expandNode(This, Pos, [])*.

`expandNode(This, Pos, Options::[Option]) -> boolean()`

Types:

**This = *wxTreebook()***

**Pos = integer()**

**Option = {expand, boolean()}**

See **external documentation**.

`isNodeExpanded(This, Pos) -> boolean()`

Types:

**This = *wxTreebook()***

**Pos = integer()**

See **external documentation**.

`hitTest(This, Pt) -> Result`

Types:

**Result = {Res::integer(), Flags::integer()}**

**This = *wxTreebook()***

**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

`insertPage(This, Pos, Page, Text) -> boolean()`

Types:

**This = *wxTreebook()***

**Pos = integer()**

**Page = *wxWindow:wxWindow()***

**Text = *unicode:chardata()***

Equivalent to *insertPage(This, Pos, Page, Text, [])*.

`insertPage(This, Pos, Page, Text, Options::[Option]) -> boolean()`

Types:

**This = *wxTreebook()***
**Pos = integer()**
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***
**Option = {bSelect, boolean()} | {imageId, integer()}**

See **external documentation**.

`insertSubPage(This, Pos, Page, Text) -> boolean()`

Types:

**This = *wxTreebook()***
**Pos = integer()**
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***

Equivalent to *insertSubPage(This, Pos, Page, Text, [])*.

`insertSubPage(This, Pos, Page, Text, Options::[Option]) -> boolean()`

Types:

**This = *wxTreebook()***
**Pos = integer()**
**Page = *wxWindow:wxWindow()***
**Text = *unicode:chardata()***
**Option = {bSelect, boolean()} | {imageId, integer()}**

See **external documentation**.

`setImageList(This, ImageList) -> ok`

Types:

**This = *wxTreebook()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

`setPageSize(This, Size) -> ok`

Types:

**This = *wxTreebook()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

`setPageImage(This, N, ImageId) -> boolean()`

Types:

**This = *wxTreebook()***
**N = integer()**
**ImageId = integer()**

See **external documentation**.

```
setPageText(This, N, StrText) -> boolean()
```

Types:

**This = *wxTreebook()***
**N = integer()**
**StrText = *unicode:chardata()***

See **external documentation**.

```
setSelection(This, N) -> integer()
```

Types:

**This = *wxTreebook()***
**N = integer()**

See **external documentation**.

```
changeSelection(This, N) -> integer()
```

Types:

**This = *wxTreebook()***
**N = integer()**

See **external documentation**.

```
destroy(This::wxTreebook()) -> ok
```

Destroys this object, do not use object again

# wxTreeCtrl

Erlang module

See external documentation: **wxTreeCtrl**.

Note: The representation of treeItemId() have changed from the original class implementation to be an semi-opaque type,Equality between TreeItemId's can be tested and zero means that the TreeItem is invalid.

## DATA TYPES

wxTreeCtrl()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxTreeCtrl()`

See **external documentation**.

`new(Parent) -> wxTreeCtrl()`

Types:

**Parent = *wxWindow:wxWindow()***

Equivalent to *new(Parent, [])*.

`new(Parent, Options::[Option]) -> wxTreeCtrl()`

Types:

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

`addRoot(This, Text) -> integer()`

Types:

**This = *wxTreeCtrl()***

**Text = *unicode:chardata()***

Equivalent to *addRoot(This, Text, [])*.

`addRoot(This, Text, Options::[Option]) -> integer()`

Types:

**This = *wxTreeCtrl()***

**Text = *unicode:chardata()***

**Option = {image, integer()} | {selectedImage, integer()} | {data, term()}**

See **external documentation**.

```
appendItem(This, Parent, Text) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Parent = integer()**
**Text = *unicode:chardata()***

Equivalent to *appendItem(This, Parent, Text, [])*.

```
appendItem(This, Parent, Text, Options::[Option]) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Parent = integer()**
**Text = *unicode:chardata()***
**Option = {image, integer()} | {selectedImage, integer()} | {data, term()}**

See **external documentation**.

```
assignImageList(This, ImageList) -> ok
```

Types:

**This = *wxTreeCtrl()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

```
assignStateImageList(This, ImageList) -> ok
```

Types:

**This = *wxTreeCtrl()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

```
collapse(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
collapseAndReset(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
create(This, Parent) -> boolean()
```

Types:

**This = *wxTreeCtrl()***
**Parent = *wxWindow:wxWindow()***

Equivalent to *create(This, Parent, [])*.

```
create(This, Parent, Options::[Option]) -> boolean()
```

Types:

**This = *wxTreeCtrl()***

**Parent = *wxWindow:wxWindow()***

**Option = {id, integer()} | {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()} | {validator, *wx:wx_object()*}**

See **external documentation**.

```
delete(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***

**Item = integer()**

See **external documentation**.

```
deleteAllItems(This) -> ok
```

Types:

**This = *wxTreeCtrl()***

See **external documentation**.

```
deleteChildren(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***

**Item = integer()**

See **external documentation**.

```
editLabel(This, Item) -> wxTextCtrl:wxTextCtrl()
```

Types:

**This = *wxTreeCtrl()***

**Item = integer()**

See **external documentation**.

```
ensureVisible(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***

**Item = integer()**

See **external documentation**.

```
expand(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***

**Item = integer()**

See **external documentation**.

`getBoundingRect(This, Item) -> Result`

Types:

**Result = {Res::boolean(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}}**
**This = *wxTreeCtrl()***
**Item = integer()**

Equivalent to *getBoundingRect(This, Item, [])*.

`getBoundingRect(This, Item, Options::[Option]) -> Result`

Types:

**Result = {Res::boolean(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}}**
**This = *wxTreeCtrl()***
**Item = integer()**
**Option = {textOnly, boolean()}**

See **external documentation**.

`getChildrenCount(This, Item) -> integer()`

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

Equivalent to *getChildrenCount(This, Item, [])*.

`getChildrenCount(This, Item, Options::[Option]) -> integer()`

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Option = {recursively, boolean()}**

See **external documentation**.

`getCount(This) -> integer()`

Types:

**This = *wxTreeCtrl()***

See **external documentation**.

`getEditControl(This) -> wxTextCtrl:wxTextCtrl()`

Types:

**This = *wxTreeCtrl()***

See **external documentation**.

```
getFirstChild(This, Item) -> Result
```

Types:

**Result = {Res::integer(), Cookie::integer()}**
**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getNextChild(This, Item, Cookie) -> Result
```

Types:

**Result = {Res::integer(), Cookie::integer()}**
**This = *wxTreeCtrl()***
**Item = integer()**
**Cookie = integer()**

See **external documentation**.

```
getFirstVisibleItem(This) -> integer()
```

Types:

**This = *wxTreeCtrl()***

See **external documentation**.

```
getImageList(This) -> wxImageList:wxImageList()
```

Types:

**This = *wxTreeCtrl()***

See **external documentation**.

```
getIndent(This) -> integer()
```

Types:

**This = *wxTreeCtrl()***

See **external documentation**.

```
getItemBackgroundColour(This, Item) -> wx:wx_colour4()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getItemData(This, Item) -> term()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getItemFont(This, Item) -> wxFont:wxFont()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getItemImage(This, Item) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getItemImage(This, Item, Options::[Option]) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Option = {which, *wx:wx_enum()*}**

See **external documentation**.
Which = ?wxTreeItemIcon_Normal | ?wxTreeItemIcon_Selected | ?wxTreeItemIcon_Expanded | ?wxTreeItemIcon_SelectedExpanded | ?wxTreeItemIcon_Max

```
getItemText(This, Item) -> unicode:charlist()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getItemTextColour(This, Item) -> wx:wx_colour4()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getLastChild(This, Item) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getNextSibling(This, Item) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getNextVisible(This, Item) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getItemParent(This, Item) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getPrevSibling(This, Item) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getPrevVisible(This, Item) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
getRootItem(This) -> integer()
```

Types:

**This = *wxTreeCtrl()***

See **external documentation**.

```
getSelection(This) -> integer()
```

Types:

**This = *wxTreeCtrl()***

See **external documentation**.

```
getSelections(This) -> Result
```

Types:

**Result = {Res::integer(), Val::[integer()]}**
**This = *wxTreeCtrl()***

See **external documentation**.

```
getStateImageList(This) -> wxImageList:wxImageList()
```

Types:

**This = *wxTreeCtrl()***

See **external documentation**.

```
hitTest(This, Point) -> Result
```

Types:

**Result = {Res::integer(), Flags::integer()}**
**This = *wxTreeCtrl()***
**Point = {X::integer(), Y::integer()}**

See **external documentation**.

```
insertItem(This, Parent, Pos, Text) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Parent = integer()**
**Pos = integer()**
**Text = *unicode:chardata()***

Equivalent to *insertItem(This, Parent, Pos, Text, [])*.

```
insertItem(This, Parent, Pos, Text, Options::[Option]) -> integer()
```

Types:

**This = *wxTreeCtrl()***
**Parent = integer()**
**Pos = integer()**
**Text = *unicode:chardata()***
**Option = {image, integer()} | {selImage, integer()} | {data, term()}**

See **external documentation**.

```
isBold(This, Item) -> boolean()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
isExpanded(This, Item) -> boolean()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
isSelected(This, Item) -> boolean()
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

`isVisible(This, Item) -> boolean()`

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

`itemHasChildren(This, Item) -> boolean()`

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

`isTreeItemIdOk(Id) -> boolean()`

Types:

**Id = integer()**

See **external documentation**.

`prependItem(This, Parent, Text) -> integer()`

Types:

**This = *wxTreeCtrl()***
**Parent = integer()**
**Text = *unicode:chardata()***

Equivalent to *prependItem(This, Parent, Text, [])*.

`prependItem(This, Parent, Text, Options::[Option]) -> integer()`

Types:

**This = *wxTreeCtrl()***
**Parent = integer()**
**Text = *unicode:chardata()***
**Option = {image, integer()} | {selectedImage, integer()} | {data, term()}**

See **external documentation**.

`scrollTo(This, Item) -> ok`

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
selectItem(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
selectItem(This, Item, Options::[Option]) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Option = {select, boolean()}**

See **external documentation**.

```
setIndent(This, Indent) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Indent = integer()**

See **external documentation**.

```
setImageList(This, ImageList) -> ok
```

Types:

**This = *wxTreeCtrl()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

```
setItemBackgroundColour(This, Item, Col) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Col = *wx:wx_colour()***

See **external documentation**.

```
setItemBold(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

Equivalent to *setItemBold(This, Item, [])*.

```
setItemBold(This, Item, Options::[Option]) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Option = {bold, boolean()}**

See **external documentation**.

`setItemData(This, Item, Data) -> ok`

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Data = term()**

See **external documentation**.

`setItemDropHighlight(This, Item) -> ok`

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

Equivalent to *setItemDropHighlight(This, Item, [])*.

`setItemDropHighlight(This, Item, Options::[Option]) -> ok`

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Option = {highlight, boolean()}**

See **external documentation**.

`setItemFont(This, Item, Font) -> ok`

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Font = *wxFont:wxFont()***

See **external documentation**.

`setItemHasChildren(This, Item) -> ok`

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

Equivalent to *setItemHasChildren(This, Item, [])*.

`setItemHasChildren(This, Item, Options::[Option]) -> ok`

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Option = {has, boolean()}**

See **external documentation**.

```
setItemImage(This, Item, Image) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Image = integer()**

See **external documentation**.

```
setItemImage(This, Item, Image, Options::[Option]) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Image = integer()**
**Option = {which, *wx:wx_enum()*}**

See **external documentation**.
Which = ?wxTreeItemIcon_Normal | ?wxTreeItemIcon_Selected | ?wxTreeItemIcon_Expanded | ?wxTreeItemIcon_SelectedExpanded | ?wxTreeItemIcon_Max

```
setItemText(This, Item, Text) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Text = *unicode:chardata()***

See **external documentation**.

```
setItemTextColour(This, Item, Col) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**
**Col = *wx:wx_colour()***

See **external documentation**.

```
setStateImageList(This, ImageList) -> ok
```

Types:

**This = *wxTreeCtrl()***
**ImageList = *wxImageList:wxImageList()***

See **external documentation**.

```
setWindowStyle(This, Styles) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Styles = integer()**

See **external documentation**.

```
sortChildren(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
toggle(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
toggleItemSelection(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
unselect(This) -> ok
```

Types:

**This = *wxTreeCtrl()***

See **external documentation**.

```
unselectAll(This) -> ok
```

Types:

**This = *wxTreeCtrl()***

See **external documentation**.

```
unselectItem(This, Item) -> ok
```

Types:

**This = *wxTreeCtrl()***
**Item = integer()**

See **external documentation**.

```
destroy(This::wxTreeCtrl()) -> ok
```

Destroys this object, do not use object again

# wxTreeEvent

Erlang module

See external documentation: **wxTreeEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**command_tree_begin_drag**, **command_tree_begin_rdrag**, **command_tree_begin_label_edit**, **command_tree_end_label_edit**, **command_tree_delete_item**, **command_tree_get_info**, **command_tree_set_info**, **command_tree_item_expanded**, **command_tree_item_expanding**, **command_tree_item_collapsed**, **command_tree_item_collapsing**, **command_tree_sel_changed**, **command_tree_sel_changing**, **command_tree_key_down**, **command_tree_item_activated**, **command_tree_item_right_click**, **command_tree_item_middle_click**, **command_tree_end_drag**, **command_tree_state_image_click**, **command_tree_item_gettooltip**, **command_tree_item_menu**

See also the message variant *#wxTree{}* event record type.

This class is derived (and can use functions) from:
*wxNotifyEvent*
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxTreeEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`getKeyCode(This) -> integer()`

Types:

**This = *wxTreeEvent()***

See **external documentation**.

`getItem(This) -> integer()`

Types:

**This = *wxTreeEvent()***

See **external documentation**.

`getKeyEvent(This) -> wxKeyEvent:wxKeyEvent()`

Types:

**This = *wxTreeEvent()***

See **external documentation**.

`getLabel(This) -> unicode:charlist()`

Types:

**This = *wxTreeEvent()***

See **external documentation**.

```
getOldItem(This) -> integer()
```

Types:

**This = *wxTreeEvent()***

See **external documentation**.

```
getPoint(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxTreeEvent()***

See **external documentation**.

```
isEditCancelled(This) -> boolean()
```

Types:

**This = *wxTreeEvent()***

See **external documentation**.

```
setToolTip(This, ToolTip) -> ok
```

Types:

**This = *wxTreeEvent()***

**ToolTip = *unicode:chardata()***

See **external documentation**.

# wxUpdateUIEvent

Erlang module

See external documentation: **wxUpdateUIEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**update_ui**

See also the message variant *#wxUpdateUI{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxUpdateUIEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
canUpdate(Win) -> boolean()
```

Types:

**Win = *wxWindow:wxWindow()***

See **external documentation**.

```
check(This, Check) -> ok
```

Types:

**This = *wxUpdateUIEvent()***
**Check = boolean()**

See **external documentation**.

```
enable(This, Enable) -> ok
```

Types:

**This = *wxUpdateUIEvent()***
**Enable = boolean()**

See **external documentation**.

```
show(This, Show) -> ok
```

Types:

**This = *wxUpdateUIEvent()***
**Show = boolean()**

See **external documentation**.

```
getChecked(This) -> boolean()
```

Types:

**This = *wxUpdateUIEvent()***

See **external documentation**.

```
getEnabled(This) -> boolean()
```

Types:

**This = *wxUpdateUIEvent()***

See **external documentation**.

```
getShown(This) -> boolean()
```

Types:

**This = *wxUpdateUIEvent()***

See **external documentation**.

```
getSetChecked(This) -> boolean()
```

Types:

**This = *wxUpdateUIEvent()***

See **external documentation**.

```
getSetEnabled(This) -> boolean()
```

Types:

**This = *wxUpdateUIEvent()***

See **external documentation**.

```
getSetShown(This) -> boolean()
```

Types:

**This = *wxUpdateUIEvent()***

See **external documentation**.

```
getSetText(This) -> boolean()
```

Types:

**This = *wxUpdateUIEvent()***

See **external documentation**.

```
getText(This) -> unicode:charlist()
```

Types:

**This = *wxUpdateUIEvent()***

See **external documentation**.

```
getMode() -> wx:wx_enum()
```

See **external documentation**.
Res = ?wxUPDATE_UI_PROCESS_ALL | ?wxUPDATE_UI_PROCESS_SPECIFIED

```
getUpdateInterval() -> integer()
```

See **external documentation**.

```
resetUpdateTime() -> ok
```

See **external documentation**.

```
setMode(Mode) -> ok
```

Types:

**Mode = *wx:wx_enum()***

See **external documentation**.
Mode = ?wxUPDATE_UI_PROCESS_ALL | ?wxUPDATE_UI_PROCESS_SPECIFIED

```
setText(This, Text) -> ok
```

Types:

**This = *wxUpdateUIEvent()***

**Text = *unicode:chardata()***

See **external documentation**.

```
setUpdateInterval(UpdateInterval) -> ok
```

Types:

**UpdateInterval = integer()**

See **external documentation**.

# wxWindowCreateEvent

Erlang module

See external documentation: **wxWindowCreateEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**create**

See also the message variant *#wxWindowCreate{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxWindowCreateEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxWindowDC

Erlang module

See external documentation: **wxWindowDC**.

This class is derived (and can use functions) from:
*wxDC*

## DATA TYPES

wxWindowDC()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxWindowDC()
```

**This function is deprecated:** deprecated function not available in wxWidgets-2.9 and later

See **external documentation**.

```
new(Win) -> wxWindowDC()
```

Types:

**Win = *wxWindow:wxWindow()***

See **external documentation**.

```
destroy(This::wxWindowDC()) -> ok
```

Destroys this object, do not use object again

# wxWindowDestroyEvent

Erlang module

See external documentation: **wxWindowDestroyEvent**.

Use *wxEvtHandler:connect/3* with EventType:

**destroy**

See also the message variant *#wxWindowDestroy{}* event record type.

This class is derived (and can use functions) from:
*wxCommandEvent*
*wxEvent*

## DATA TYPES

wxWindowDestroyEvent()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

# wxWindow

Erlang module

See external documentation: **wxWindow**.

This class is derived (and can use functions) from:
*wxEvtHandler*

## DATA TYPES

wxWindow()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

```
new() -> wxWindow()
```

See **external documentation**.

```
new(Parent, Id) -> wxWindow()
```

Types:

**Parent = *wxWindow()***
**Id = integer()**

Equivalent to *new(Parent, Id, [])*.

```
new(Parent, Id, Options::[Option]) -> wxWindow()
```

Types:

**Parent = *wxWindow()***
**Id = integer()**
**Option = {pos, {X::integer(), Y::integer()}} | {size, {W::integer(), H::integer()}} | {style, integer()}**

See **external documentation**.

```
cacheBestSize(This, Size) -> ok
```

Types:

**This = *wxWindow()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.

```
captureMouse(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
center(This) -> ok
```

Types:

**This = *wxWindow()***

Equivalent to *center(This, [])*.

```
center(This, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***

**Option = {dir, integer()}**

See **external documentation**.

```
centerOnParent(This) -> ok
```

Types:

**This = *wxWindow()***

Equivalent to *centerOnParent(This, [])*.

```
centerOnParent(This, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***

**Option = {dir, integer()}**

See **external documentation**.

```
centre(This) -> ok
```

Types:

**This = *wxWindow()***

Equivalent to *centre(This, [])*.

```
centre(This, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***

**Option = {dir, integer()}**

See **external documentation**.

```
centreOnParent(This) -> ok
```

Types:

**This = *wxWindow()***

Equivalent to *centreOnParent(This, [])*.

```
centreOnParent(This, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***

**Option = {dir, integer()}**

See **external documentation**.

```
clearBackground(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
clientToScreen(This, Pt) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxWindow()***

**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
clientToScreen(This, X, Y) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxWindow()***

**X = integer()**

**Y = integer()**

See **external documentation**.

```
close(This) -> boolean()
```

Types:

**This = *wxWindow()***

Equivalent to *close(This, [])*.

```
close(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxWindow()***

**Option = {force, boolean()}**

See **external documentation**.

```
convertDialogToPixels(This, Sz) -> {W::integer(), H::integer()}
```

Types:

**This = *wxWindow()***

**Sz = {W::integer(), H::integer()}**

See **external documentation**.

```
convertPixelsToDialog(This, Sz) -> {W::integer(), H::integer()}
```

Types:

**This = *wxWindow()***

**Sz = {W::integer(), H::integer()}**

See **external documentation**.

```
Destroy(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

`destroyChildren(This) -> boolean()`

Types:

**This = *wxWindow()***

See **external documentation**.

`disable(This) -> boolean()`

Types:

**This = *wxWindow()***

See **external documentation**.

`dragAcceptFiles(This, Accept) -> ok`

Types:

**This = *wxWindow()***

**Accept = boolean()**

See **external documentation**.

`enable(This) -> boolean()`

Types:

**This = *wxWindow()***

Equivalent to *enable(This, [])*.

`enable(This, Options::[Option]) -> boolean()`

Types:

**This = *wxWindow()***

**Option = {enable, boolean()}**

See **external documentation**.

`findFocus() -> wxWindow()`

See **external documentation**.

`findWindow(This, Winid) -> wxWindow()`

Types:

**This = *wxWindow()***

**Winid = integer()**

See **external documentation**.

Also:

findWindow(This, Name) -> wxWindow() when This::wxWindow(), Name::unicode:chardata().

```
findWindowById(Winid) -> wxWindow()
```

Types:

**Winid = integer()**

Equivalent to *findWindowById(Winid, [])*.

```
findWindowById(Winid, Options::[Option]) -> wxWindow()
```

Types:

**Winid = integer()**

**Option = {parent, *wxWindow()*}**

See **external documentation**.

```
findWindowByName(Name) -> wxWindow()
```

Types:

**Name = *unicode:chardata()***

Equivalent to *findWindowByName(Name, [])*.

```
findWindowByName(Name, Options::[Option]) -> wxWindow()
```

Types:

**Name = *unicode:chardata()***

**Option = {parent, *wxWindow()*}**

See **external documentation**.

```
findWindowByLabel(Label) -> wxWindow()
```

Types:

**Label = *unicode:chardata()***

Equivalent to *findWindowByLabel(Label, [])*.

```
findWindowByLabel(Label, Options::[Option]) -> wxWindow()
```

Types:

**Label = *unicode:chardata()***

**Option = {parent, *wxWindow()*}**

See **external documentation**.

```
fit(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
fitInside(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
freeze(This) -> ok
```
Types:
**This = *wxWindow()***
See **external documentation**.

```
getAcceleratorTable(This) -> wxAcceleratorTable:wxAcceleratorTable()
```
Types:
**This = *wxWindow()***
See **external documentation**.

```
getBackgroundColour(This) -> wx:wx_colour4()
```
Types:
**This = *wxWindow()***
See **external documentation**.

```
getBackgroundStyle(This) -> wx:wx_enum()
```
Types:
**This = *wxWindow()***
See **external documentation**.
Res = ?wxBG_STYLE_SYSTEM | ?wxBG_STYLE_COLOUR | ?wxBG_STYLE_CUSTOM

```
getBestSize(This) -> {W::integer(), H::integer()}
```
Types:
**This = *wxWindow()***
See **external documentation**.

```
getCaret(This) -> wxCaret:wxCaret()
```
Types:
**This = *wxWindow()***
See **external documentation**.

```
getCapture() -> wxWindow()
```
See **external documentation**.

```
getCharHeight(This) -> integer()
```
Types:
**This = *wxWindow()***
See **external documentation**.

```
getCharWidth(This) -> integer()
```
Types:
**This = *wxWindow()***
See **external documentation**.

```
getChildren(This) -> [wxWindow()]
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getClientSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getContainingSizer(This) -> wxSizer:wxSizer()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getCursor(This) -> wxCursor:wxCursor()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getDropTarget(This) -> wx:wx_object()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getEventHandler(This) -> wxEvtHandler:wxEvtHandler()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getExtraStyle(This) -> integer()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getFont(This) -> wxFont:wxFont()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getForegroundColour(This) -> wx:wx_colour4()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getGrandParent(This) -> wxWindow()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getHandle(This) -> integer()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getHelpText(This) -> unicode:charlist()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getId(This) -> integer()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getLabel(This) -> unicode:charlist()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getMaxSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getMinSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getName(This) -> unicode:charlist()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getParent(This) -> wxWindow()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getRect(This) -> {X::integer(), Y::integer(), W::integer(), H::integer()}
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getScreenPosition(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getScreenRect(This) -> {X::integer(), Y::integer(), W::integer(),
H::integer()}
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getScrollPos(This, Orient) -> integer()
```

Types:

**This = *wxWindow()***

**Orient = integer()**

See **external documentation**.

```
getScrollRange(This, Orient) -> integer()
```

Types:

**This = *wxWindow()***

**Orient = integer()**

See **external documentation**.

```
getScrollThumb(This, Orient) -> integer()
```

Types:

**This = *wxWindow()***

**Orient = integer()**

See **external documentation**.

```
getSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getSizer(This) -> wxSizer:wxSizer()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getTextExtent(This, String) -> Result
```

Types:

**Result = {X::integer(), Y::integer(), Descent::integer(), ExternalLeading::integer()}**

**This = *wxWindow()***

**String = *unicode:chardata()***

Equivalent to *getTextExtent(This, String, [])*.

```
getTextExtent(This, String, Options::[Option]) -> Result
```

Types:

**Result = {X::integer(), Y::integer(), Descent::integer(), ExternalLeading::integer()}**

**This = *wxWindow()***

**String = *unicode:chardata()***

**Option = {theFont, *wxFont:wxFont()*}**

See **external documentation**.

```
getToolTip(This) -> wxToolTip:wxToolTip()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getUpdateRegion(This) -> wxRegion:wxRegion()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getVirtualSize(This) -> {W::integer(), H::integer()}
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getWindowStyleFlag(This) -> integer()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
getWindowVariant(This) -> wx:wx_enum()
```

Types:

**This = *wxWindow()***

See **external documentation**.
Res = ?wxWINDOW_VARIANT_NORMAL | ?wxWINDOW_VARIANT_SMALL | ?wxWINDOW_VARIANT_MINI | ?wxWINDOW_VARIANT_LARGE | ?wxWINDOW_VARIANT_MAX

```
hasCapture(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
hasScrollbar(This, Orient) -> boolean()
```

Types:

**This = *wxWindow()***

**Orient = integer()**

See **external documentation**.

```
hasTransparentBackground(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
hide(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
inheritAttributes(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
initDialog(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
invalidateBestSize(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
isEnabled(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
isExposed(This, Pt) -> boolean()
```

Types:

**This = *wxWindow()***

**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

Also:

isExposed(This, Rect) -> boolean() when

This::wxWindow(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}.

```
isExposed(This, X, Y) -> boolean()
```

Types:

**This = *wxWindow()***

**X = integer()**

**Y = integer()**

See **external documentation**.

```
isExposed(This, X, Y, W, H) -> boolean()
```

Types:

**This = *wxWindow()***

**X = integer()**

**Y = integer()**

**W = integer()**

**H = integer()**

See **external documentation**.

```
isRetained(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
isShown(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
isTopLevel(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
layout(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
lineDown(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
lineUp(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
lower(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
makeModal(This) -> ok
```

Types:

**This = *wxWindow()***

Equivalent to *makeModal(This, [])*.

```
makeModal(This, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***

**Option = {modal, boolean()}**

See **external documentation**.

```
move(This, Pt) -> ok
```

Types:

**This = *wxWindow()***

**Pt = {X::integer(), Y::integer()}**

Equivalent to *move(This, Pt, [])*.

```
move(This, X, Y) -> ok
```

Types:

**This = *wxWindow()***
**X = integer()**
**Y = integer()**

See **external documentation**.
Also:
move(This, Pt, [Option]) -> 'ok' when
This::wxWindow(), Pt::{X::integer(), Y::integer()},
Option :: {'flags', integer()}.

```
move(This, X, Y, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***
**X = integer()**
**Y = integer()**
**Option = {flags, integer()}**

See **external documentation**.

```
moveAfterInTabOrder(This, Win) -> ok
```

Types:

**This = *wxWindow()***
**Win = *wxWindow()***

See **external documentation**.

```
moveBeforeInTabOrder(This, Win) -> ok
```

Types:

**This = *wxWindow()***
**Win = *wxWindow()***

See **external documentation**.

```
navigate(This) -> boolean()
```

Types:

**This = *wxWindow()***

Equivalent to *navigate(This, [])*.

```
navigate(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxWindow()***
**Option = {flags, integer()}**

See **external documentation**.

```
pageDown(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

`pageUp(This) -> boolean()`

Types:

**This = *wxWindow()***

See **external documentation**.

`popEventHandler(This) -> wxEvtHandler:wxEvtHandler()`

Types:

**This = *wxWindow()***

Equivalent to *popEventHandler(This, [])*.

`popEventHandler(This, Options::[Option]) -> wxEvtHandler:wxEvtHandler()`

Types:

**This = *wxWindow()***

**Option = {deleteHandler, boolean()}**

See **external documentation**.

`popupMenu(This, Menu) -> boolean()`

Types:

**This = *wxWindow()***

**Menu = *wxMenu:wxMenu()***

Equivalent to *popupMenu(This, Menu, [])*.

`popupMenu(This, Menu, Options::[Option]) -> boolean()`

Types:

**This = *wxWindow()***

**Menu = *wxMenu:wxMenu()***

**Option = {pos, {X::integer(), Y::integer()}}**

See **external documentation**.

`popupMenu(This, Menu, X, Y) -> boolean()`

Types:

**This = *wxWindow()***

**Menu = *wxMenu:wxMenu()***

**X = integer()**

**Y = integer()**

See **external documentation**.

`raise(This) -> ok`

Types:

**This = *wxWindow()***

See **external documentation**.

```
refresh(This) -> ok
```

Types:

**This = *wxWindow()***

Equivalent to *refresh(This, [])*.

```
refresh(This, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***

**Option = {eraseBackground, boolean()} | {rect, {X::integer(), Y::integer(), W::integer(), H::integer()}}**

See **external documentation**.

```
refreshRect(This, Rect) -> ok
```

Types:

**This = *wxWindow()***

**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

Equivalent to *refreshRect(This, Rect, [])*.

```
refreshRect(This, Rect, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***

**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

**Option = {eraseBackground, boolean()}**

See **external documentation**.

```
releaseMouse(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
removeChild(This, Child) -> ok
```

Types:

**This = *wxWindow()***

**Child = *wxWindow()***

See **external documentation**.

```
reparent(This, NewParent) -> boolean()
```

Types:

**This = *wxWindow()***

**NewParent = *wxWindow()***

See **external documentation**.

```
screenToClient(This) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
screenToClient(This, Pt) -> {X::integer(), Y::integer()}
```

Types:

**This = *wxWindow()***

**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
scrollLines(This, Lines) -> boolean()
```

Types:

**This = *wxWindow()***

**Lines = integer()**

See **external documentation**.

```
scrollPages(This, Pages) -> boolean()
```

Types:

**This = *wxWindow()***

**Pages = integer()**

See **external documentation**.

```
scrollWindow(This, Dx, Dy) -> ok
```

Types:

**This = *wxWindow()***

**Dx = integer()**

**Dy = integer()**

Equivalent to *scrollWindow(This, Dx, Dy, [])*.

```
scrollWindow(This, Dx, Dy, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***

**Dx = integer()**

**Dy = integer()**

**Option = {rect, {X::integer(), Y::integer(), W::integer(), H::integer()}}**

See **external documentation**.

```
setAcceleratorTable(This, Accel) -> ok
```

Types:

**This = *wxWindow()***

**Accel = *wxAcceleratorTable:wxAcceleratorTable()***

See **external documentation**.

`setAutoLayout(This, AutoLayout) -> ok`

Types:

**This = *wxWindow()***
**AutoLayout = boolean()**

See **external documentation**.

`setBackgroundColour(This, Colour) -> boolean()`

Types:

**This = *wxWindow()***
**Colour = *wx:wx_colour()***

See **external documentation**.

`setBackgroundStyle(This, Style) -> boolean()`

Types:

**This = *wxWindow()***
**Style = *wx:wx_enum()***

See **external documentation**.
Style = ?wxBG_STYLE_SYSTEM | ?wxBG_STYLE_COLOUR | ?wxBG_STYLE_CUSTOM

`setCaret(This, Caret) -> ok`

Types:

**This = *wxWindow()***
**Caret = *wxCaret:wxCaret()***

See **external documentation**.

`setClientSize(This, Size) -> ok`

Types:

**This = *wxWindow()***
**Size = {W::integer(), H::integer()}**

See **external documentation**.
Also:
setClientSize(This, Rect) -> 'ok' when
This::wxWindow(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()}.

`setClientSize(This, Width, Height) -> ok`

Types:

**This = *wxWindow()***
**Width = integer()**
**Height = integer()**

See **external documentation**.

`setContainingSizer(This, Sizer) -> ok`

Types:

**This = *wxWindow()***

**Sizer = *wxSizer:wxSizer()***

See **external documentation**.

`setCursor(This, Cursor) -> boolean()`

Types:

**This = *wxWindow()***

**Cursor = *wxCursor:wxCursor()***

See **external documentation**.

`setMaxSize(This, MaxSize) -> ok`

Types:

**This = *wxWindow()***

**MaxSize = {W::integer(), H::integer()}**

See **external documentation**.

`setMinSize(This, MinSize) -> ok`

Types:

**This = *wxWindow()***

**MinSize = {W::integer(), H::integer()}**

See **external documentation**.

`setOwnBackgroundColour(This, Colour) -> ok`

Types:

**This = *wxWindow()***

**Colour = *wx:wx_colour()***

See **external documentation**.

`setOwnFont(This, Font) -> ok`

Types:

**This = *wxWindow()***

**Font = *wxFont:wxFont()***

See **external documentation**.

`setOwnForegroundColour(This, Colour) -> ok`

Types:

**This = *wxWindow()***

**Colour = *wx:wx_colour()***

See **external documentation**.

`setDropTarget(This, DropTarget) -> ok`

Types:

**This = *wxWindow()***

**DropTarget = *wx:wx_object()***

See **external documentation**.

```
setExtraStyle(This, ExStyle) -> ok
```

Types:

**This = *wxWindow()***
**ExStyle = integer()**

See **external documentation**.

```
setFocus(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
setFocusFromKbd(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
setFont(This, Font) -> boolean()
```

Types:

**This = *wxWindow()***
**Font = *wxFont:wxFont()***

See **external documentation**.

```
setForegroundColour(This, Colour) -> boolean()
```

Types:

**This = *wxWindow()***
**Colour = *wx:wx_colour()***

See **external documentation**.

```
setHelpText(This, Text) -> ok
```

Types:

**This = *wxWindow()***
**Text = *unicode:chardata()***

See **external documentation**.

```
setId(This, Winid) -> ok
```

Types:

**This = *wxWindow()***
**Winid = integer()**

See **external documentation**.

```
setLabel(This, Label) -> ok
```

Types:

**This = *wxWindow()***
**Label = *unicode:chardata()***

See **external documentation**.

```
setName(This, Name) -> ok
```

Types:

**This = *wxWindow()***
**Name = *unicode:chardata()***

See **external documentation**.

```
setPalette(This, Pal) -> ok
```

Types:

**This = *wxWindow()***
**Pal = *wxPalette:wxPalette()***

See **external documentation**.

```
setScrollbar(This, Orient, Pos, ThumbVisible, Range) -> ok
```

Types:

**This = *wxWindow()***
**Orient = integer()**
**Pos = integer()**
**ThumbVisible = integer()**
**Range = integer()**

Equivalent to *setScrollbar(This, Orient, Pos, ThumbVisible, Range, [])*.

```
setScrollbar(This, Orient, Pos, ThumbVisible, Range, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***
**Orient = integer()**
**Pos = integer()**
**ThumbVisible = integer()**
**Range = integer()**
**Option = {refresh, boolean()}**

See **external documentation**.

```
setScrollPos(This, Orient, Pos) -> ok
```

Types:

**This = *wxWindow()***
**Orient = integer()**
**Pos = integer()**

Equivalent to *setScrollPos(This, Orient, Pos, [])*.

```
setScrollPos(This, Orient, Pos, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***
**Orient = integer()**
**Pos = integer()**
**Option = {refresh, boolean()}**

See **external documentation**.

```
setSize(This, Rect) -> ok
```

Types:

**This = *wxWindow()***
**Rect = {X::integer(), Y::integer(), W::integer(), H::integer()}**

See **external documentation**.
Also:
setSize(This, Size) -> 'ok' when
This::wxWindow(), Size::{W::integer(), H::integer()}.

```
setSize(This, Width, Height) -> ok
```

Types:

**This = *wxWindow()***
**Width = integer()**
**Height = integer()**

See **external documentation**.
Also:
setSize(This, Rect, [Option]) -> 'ok' when
This::wxWindow(), Rect::{X::integer(), Y::integer(), W::integer(), H::integer()},
Option :: {'sizeFlags', integer()}.

```
setSize(This, X, Y, Width, Height) -> ok
```

Types:

**This = *wxWindow()***
**X = integer()**
**Y = integer()**
**Width = integer()**
**Height = integer()**

Equivalent to *setSize(This, X, Y, Width, Height, [])*.

```
setSize(This, X, Y, Width, Height, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***
**X = integer()**
**Y = integer()**
**Width = integer()**
**Height = integer()**

**Option = {sizeFlags, integer()}**

See **external documentation**.

`setSizeHints(This, MinSize) -> ok`

Types:

**This = *wxWindow()***
**MinSize = {W::integer(), H::integer()}**

Equivalent to *setSizeHints(This, MinSize, [])*.

`setSizeHints(This, MinW, MinH) -> ok`

Types:

**This = *wxWindow()***
**MinW = integer()**
**MinH = integer()**

See **external documentation**.
Also:
setSizeHints(This, MinSize, [Option]) -> 'ok' when
This::wxWindow(), MinSize::{W::integer(), H::integer()},
Option :: {'maxSize', {W::integer(), H::integer()}}
| {'incSize', {W::integer(), H::integer()}}.

`setSizeHints(This, MinW, MinH, Options::[Option]) -> ok`

Types:

**This = *wxWindow()***
**MinW = integer()**
**MinH = integer()**
**Option = {maxW, integer()} | {maxH, integer()} | {incW, integer()} | {incH, integer()}**

See **external documentation**.

`setSizer(This, Sizer) -> ok`

Types:

**This = *wxWindow()***
**Sizer = *wxSizer:wxSizer()***

Equivalent to *setSizer(This, Sizer, [])*.

`setSizer(This, Sizer, Options::[Option]) -> ok`

Types:

**This = *wxWindow()***
**Sizer = *wxSizer:wxSizer()***
**Option = {deleteOld, boolean()}**

See **external documentation**.

`setSizerAndFit(This, Sizer) -> ok`

Types:

**`This = wxWindow()`**
**`Sizer = wxSizer:wxSizer()`**

Equivalent to *setSizerAndFit(This, Sizer, [])*.

`setSizerAndFit(This, Sizer, Options::[Option]) -> ok`

Types:

**`This = wxWindow()`**
**`Sizer = wxSizer:wxSizer()`**
**`Option = {deleteOld, boolean()}`**

See **external documentation**.

`setThemeEnabled(This, EnableTheme) -> ok`

Types:

**`This = wxWindow()`**
**`EnableTheme = boolean()`**

See **external documentation**.

`setToolTip(This, Tip) -> ok`

Types:

**`This = wxWindow()`**
**`Tip = unicode:chardata()`**

See **external documentation**.
Also:
setToolTip(This, Tip) -> 'ok' when
This::wxWindow(), Tip::wxToolTip:wxToolTip().

`setVirtualSize(This, Size) -> ok`

Types:

**`This = wxWindow()`**
**`Size = {W::integer(), H::integer()}`**

See **external documentation**.

`setVirtualSize(This, X, Y) -> ok`

Types:

**`This = wxWindow()`**
**`X = integer()`**
**`Y = integer()`**

See **external documentation**.

`setVirtualSizeHints(This, MinSize) -> ok`

Types:

**This = *wxWindow()***
**MinSize = {W::integer(), H::integer()}**

Equivalent to *setVirtualSizeHints(This, MinSize, [])*.

`setVirtualSizeHints(This, MinW, MinH) -> ok`

Types:

**This = *wxWindow()***
**MinW = integer()**
**MinH = integer()**

See **external documentation**.
Also:
setVirtualSizeHints(This, MinSize, [Option]) -> 'ok' when
This::wxWindow(), MinSize::{W::integer(), H::integer()},
Option :: {'maxSize', {W::integer(), H::integer()}}.

`setVirtualSizeHints(This, MinW, MinH, Options::[Option]) -> ok`

Types:

**This = *wxWindow()***
**MinW = integer()**
**MinH = integer()**
**Option = {maxW, integer()} | {maxH, integer()}**

See **external documentation**.

`setWindowStyle(This, Style) -> ok`

Types:

**This = *wxWindow()***
**Style = integer()**

See **external documentation**.

`setWindowStyleFlag(This, Style) -> ok`

Types:

**This = *wxWindow()***
**Style = integer()**

See **external documentation**.

`setWindowVariant(This, Variant) -> ok`

Types:

**This = *wxWindow()***
**Variant = *wx:wx_enum()***

See **external documentation**.
Variant = ?wxWINDOW_VARIANT_NORMAL | ?wxWINDOW_VARIANT_SMALL | ?wxWINDOW_VARIANT_MINI | ?wxWINDOW_VARIANT_LARGE | ?wxWINDOW_VARIANT_MAX

```
shouldInheritColours(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
show(This) -> boolean()
```

Types:

**This = *wxWindow()***

Equivalent to *show(This, [])*.

```
show(This, Options::[Option]) -> boolean()
```

Types:

**This = *wxWindow()***

**Option = {show, boolean()}**

See **external documentation**.

```
thaw(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
transferDataFromWindow(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
transferDataToWindow(This) -> boolean()
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
update(This) -> ok
```

Types:

**This = *wxWindow()***

See **external documentation**.

```
updateWindowUI(This) -> ok
```

Types:

**This = *wxWindow()***

Equivalent to *updateWindowUI(This, [])*.

```
updateWindowUI(This, Options::[Option]) -> ok
```

Types:

**This = *wxWindow()***
**Option = {flags, integer()}**

See **external documentation**.

`validate(This) -> boolean()`

Types:

**This = *wxWindow()***

See **external documentation**.

`warpPointer(This, X, Y) -> ok`

Types:

**This = *wxWindow()***
**X = integer()**
**Y = integer()**

See **external documentation**.

`setTransparent(This, Alpha) -> boolean()`

Types:

**This = *wxWindow()***
**Alpha = integer()**

See **external documentation**.

`canSetTransparent(This) -> boolean()`

Types:

**This = *wxWindow()***

See **external documentation**.

`isDoubleBuffered(This) -> boolean()`

Types:

**This = *wxWindow()***

See **external documentation**.

`setDoubleBuffered(This, On) -> ok`

Types:

**This = *wxWindow()***
**On = boolean()**

See **external documentation**.

`getContentScaleFactor(This) -> number()`

Types:

**This = *wxWindow()***

See **external documentation**.

```
destroy(This::wxWindow()) -> ok
```

Destroys this object, do not use object again

# wxXmlResource

Erlang module

See external documentation: **wxXmlResource**.

## DATA TYPES

wxXmlResource()

An object reference, The representation is internal and can be changed without notice. It can't be used for comparsion stored on disc or distributed for use on other nodes.

## Exports

`new() -> wxXmlResource()`

Equivalent to *new([])*.

`new(Options::[Option]) -> wxXmlResource()`

Types:

**`Option = {flags, integer()} | {domain, unicode:chardata()}`**

See **external documentation**.

`new(Filemask, Options::[Option]) -> wxXmlResource()`

Types:

**`Filemask = unicode:chardata()`**
**`Option = {flags, integer()} | {domain, unicode:chardata()}`**

See **external documentation**.

`attachUnknownControl(This, Name, Control) -> boolean()`

Types:

**`This = wxXmlResource()`**
**`Name = unicode:chardata()`**
**`Control = wxWindow:wxWindow()`**

Equivalent to *attachUnknownControl(This, Name, Control, [])*.

`attachUnknownControl(This, Name, Control, Options::[Option]) -> boolean()`

Types:

**`This = wxXmlResource()`**
**`Name = unicode:chardata()`**
**`Control = wxWindow:wxWindow()`**
**`Option = {parent, wxWindow:wxWindow()}`**

See **external documentation**.

```
clearHandlers(This) -> ok
```

Types:

**This = *wxXmlResource()***

See **external documentation**.

```
compareVersion(This, Major, Minor, Release, Revision) -> integer()
```

Types:

**This = *wxXmlResource()***
**Major = integer()**
**Minor = integer()**
**Release = integer()**
**Revision = integer()**

See **external documentation**.

```
get() -> wxXmlResource()
```

See **external documentation**.

```
getFlags(This) -> integer()
```

Types:

**This = *wxXmlResource()***

See **external documentation**.

```
getVersion(This) -> integer()
```

Types:

**This = *wxXmlResource()***

See **external documentation**.

```
getXRCID(Str_id) -> integer()
```

Types:

**Str_id = [*unicode:chardata()*]**

Equivalent to *getXRCID(Str_id, [])*.

```
getXRCID(Str_id, Options::[Option]) -> integer()
```

Types:

**Str_id = [*unicode:chardata()*]**
**Option = {value_if_not_found, integer()}**

See **external documentation**.

```
initAllHandlers(This) -> ok
```

Types:

**This = *wxXmlResource()***

See **external documentation**.

```
load(This, Filemask) -> boolean()
```

Types:

**This = *wxXmlResource()***
**Filemask = *unicode:chardata()***

See **external documentation**.

```
loadBitmap(This, Name) -> wxBitmap:wxBitmap()
```

Types:

**This = *wxXmlResource()***
**Name = *unicode:chardata()***

See **external documentation**.

```
loadDialog(This, Parent, Name) -> wxDialog:wxDialog()
```

Types:

**This = *wxXmlResource()***
**Parent = *wxWindow:wxWindow()***
**Name = *unicode:chardata()***

See **external documentation**.

```
loadDialog(This, Dlg, Parent, Name) -> boolean()
```

Types:

**This = *wxXmlResource()***
**Dlg = *wxDialog:wxDialog()***
**Parent = *wxWindow:wxWindow()***
**Name = *unicode:chardata()***

See **external documentation**.

```
loadFrame(This, Parent, Name) -> wxFrame:wxFrame()
```

Types:

**This = *wxXmlResource()***
**Parent = *wxWindow:wxWindow()***
**Name = *unicode:chardata()***

See **external documentation**.

```
loadFrame(This, Frame, Parent, Name) -> boolean()
```

Types:

**This = *wxXmlResource()***
**Frame = *wxFrame:wxFrame()***
**Parent = *wxWindow:wxWindow()***
**Name = *unicode:chardata()***

See **external documentation**.

```
loadIcon(This, Name) -> wxIcon:wxIcon()
```

Types:

**This = *wxXmlResource()***
**Name = *unicode:chardata()***

See **external documentation**.

```
loadMenu(This, Name) -> wxMenu:wxMenu()
```

Types:

**This = *wxXmlResource()***
**Name = *unicode:chardata()***

See **external documentation**.

```
loadMenuBar(This, Name) -> wxMenuBar:wxMenuBar()
```

Types:

**This = *wxXmlResource()***
**Name = *unicode:chardata()***

See **external documentation**.

```
loadMenuBar(This, Parent, Name) -> wxMenuBar:wxMenuBar()
```

Types:

**This = *wxXmlResource()***
**Parent = *wxWindow:wxWindow()***
**Name = *unicode:chardata()***

See **external documentation**.

```
loadPanel(This, Parent, Name) -> wxPanel:wxPanel()
```

Types:

**This = *wxXmlResource()***
**Parent = *wxWindow:wxWindow()***
**Name = *unicode:chardata()***

See **external documentation**.

```
loadPanel(This, Panel, Parent, Name) -> boolean()
```

Types:

**This = *wxXmlResource()***
**Panel = *wxPanel:wxPanel()***
**Parent = *wxWindow:wxWindow()***
**Name = *unicode:chardata()***

See **external documentation**.

```
loadToolBar(This, Parent, Name) -> wxToolBar:wxToolBar()
```

Types:

**This = *wxXmlResource()***

**Parent = *wxWindow:wxWindow()***
**Name = *unicode:chardata()***

See **external documentation**.

`set(Res) -> wxXmlResource()`

Types:

**Res = *wxXmlResource()***

See **external documentation**.

`setFlags(This, Flags) -> ok`

Types:

**This = *wxXmlResource()***
**Flags = integer()**

See **external documentation**.

`unload(This, Filename) -> boolean()`

Types:

**This = *wxXmlResource()***
**Filename = *unicode:chardata()***

See **external documentation**.

`xrcctrl(Window, Name, Type) -> wx:wx_object()`

Types:

**Window = *wxWindow:wxWindow()***
**Name = string()**
**Type = atom()**

Looks up a control with Name in a window created with XML resources. You can use it to set/get values from controls. The object is type casted to **Type**. Example:
Xrc = wxXmlResource:get(),
Dlg = wxDialog:new(),
true = wxXmlResource:loadDialog(Xrc, Dlg, Frame, "controls_dialog"),
LCtrl = xrcctrl(Dlg, "controls_listctrl", wxListCtrl),
wxListCtrl:insertColumn(LCtrl, 0, "Name", [{width, 200}]),

`destroy(This::wxXmlResource()) -> ok`

Destroys this object, do not use object again

# wx_misc

Erlang module

See external documentation: **Misc**.

## Exports

`getKeyState(Key) -> boolean()`

Types:

**Key = *wx:wx_enum()***

See **external documentation**.
Key = ?WXK_BACK | ?WXK_TAB | ?WXK_RETURN | ?WXK_ESCAPE | ?WXK_SPACE | ?WXK_DELETE | ?WXK_START | ?WXK_LBUTTON | ?WXK_RBUTTON | ?WXK_CANCEL | ?WXK_MBUTTON | ?WXK_CLEAR | ?WXK_SHIFT | ?WXK_ALT | ?WXK_CONTROL | ?WXK_MENU | ?WXK_PAUSE | ?WXK_CAPITAL | ?WXK_END | ?WXK_HOME | ?WXK_LEFT | ?WXK_UP | ?WXK_RIGHT | ?WXK_DOWN | ?WXK_SELECT | ?WXK_PRINT | ?WXK_EXECUTE | ?WXK_SNAPSHOT | ?WXK_INSERT | ?WXK_HELP | ?WXK_NUMPAD0 | ?WXK_NUMPAD1 | ?WXK_NUMPAD2 | ?WXK_NUMPAD3 | ?WXK_NUMPAD4 | ?WXK_NUMPAD5 | ?WXK_NUMPAD6 | ?WXK_NUMPAD7 | ?WXK_NUMPAD8 | ?WXK_NUMPAD9 | ?WXK_MULTIPLY | ?WXK_ADD | ?WXK_SEPARATOR | ?WXK_SUBTRACT | ?WXK_DECIMAL | ?WXK_DIVIDE | ?WXK_F1 | ?WXK_F2 | ?WXK_F3 | ?WXK_F4 | ?WXK_F5 | ?WXK_F6 | ?WXK_F7 | ?WXK_F8 | ?WXK_F9 | ?WXK_F10 | ?WXK_F11 | ?WXK_F12 | ?WXK_F13 | ?WXK_F14 | ?WXK_F15 | ?WXK_F16 | ?WXK_F17 | ?WXK_F18 | ?WXK_F19 | ?WXK_F20 | ?WXK_F21 | ?WXK_F22 | ?WXK_F23 | ?WXK_F24 | ?WXK_NUMLOCK | ?WXK_SCROLL | ?WXK_PAGEUP | ?WXK_PAGEDOWN | ?WXK_NUMPAD_SPACE | ?WXK_NUMPAD_TAB | ?WXK_NUMPAD_ENTER | ?WXK_NUMPAD_F1 | ?WXK_NUMPAD_F2 | ?WXK_NUMPAD_F3 | ?WXK_NUMPAD_F4 | ?WXK_NUMPAD_HOME | ?WXK_NUMPAD_LEFT | ?WXK_NUMPAD_UP | ?WXK_NUMPAD_RIGHT | ?WXK_NUMPAD_DOWN | ?WXK_NUMPAD_PAGEUP | ?WXK_NUMPAD_PAGEDOWN | ?WXK_NUMPAD_END | ?WXK_NUMPAD_BEGIN | ?WXK_NUMPAD_INSERT | ?WXK_NUMPAD_DELETE | ?WXK_NUMPAD_EQUAL | ?WXK_NUMPAD_MULTIPLY | ?WXK_NUMPAD_ADD | ?WXK_NUMPAD_SEPARATOR | ?WXK_NUMPAD_SUBTRACT | ?WXK_NUMPAD_DECIMAL | ?WXK_NUMPAD_DIVIDE | ?WXK_WINDOWS_LEFT | ?WXK_WINDOWS_RIGHT | ?WXK_WINDOWS_MENU | ?WXK_COMMAND | ?WXK_SPECIAL1 | ?WXK_SPECIAL2 | ?WXK_SPECIAL3 | ?WXK_SPECIAL4 | ?WXK_SPECIAL5 | ?WXK_SPECIAL6 | ?WXK_SPECIAL7 | ?WXK_SPECIAL8 | ?WXK_SPECIAL9 | ?WXK_SPECIAL10 | ?WXK_SPECIAL11 | ?WXK_SPECIAL12 | ?WXK_SPECIAL13 | ?WXK_SPECIAL14 | ?WXK_SPECIAL15 | ?WXK_SPECIAL16 | ?WXK_SPECIAL17 | ?WXK_SPECIAL18 | ?WXK_SPECIAL19 | ?WXK_SPECIAL20

`getMousePosition() -> {X::integer(), Y::integer()}`

See **external documentation**.

`getMouseState() -> wx:wx_wxMouseState()`

See **external documentation**.

`setDetectableAutoRepeat(Flag) -> boolean()`

Types:

**Flag = boolean()**

See **external documentation**.

```
bell() -> ok
```

See **external documentation**.

```
findMenuItemId(Frame, MenuString, ItemString) -> integer()
```

Types:

**Frame = *wxFrame:wxFrame()***
**MenuString = *unicode:chardata()***
**ItemString = *unicode:chardata()***

See **external documentation**.

```
genericFindWindowAtPoint(Pt) -> wxWindow:wxWindow()
```

Types:

**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
findWindowAtPoint(Pt) -> wxWindow:wxWindow()
```

Types:

**Pt = {X::integer(), Y::integer()}**

See **external documentation**.

```
beginBusyCursor() -> ok
```

Equivalent to *beginBusyCursor([])*.

```
beginBusyCursor(Options::[Option]) -> ok
```

Types:

**Option = {cursor, *wxCursor:wxCursor()*}**

See **external documentation**.

```
endBusyCursor() -> ok
```

See **external documentation**.

```
isBusy() -> boolean()
```

See **external documentation**.

```
shutdown(WFlags) -> boolean()
```

Types:

**WFlags = *wx:wx_enum()***

See **external documentation**.
WFlags = ?wxSHUTDOWN_POWEROFF | ?wxSHUTDOWN_REBOOT

```
shell() -> boolean()
```

Equivalent to *shell([])*.

```
shell(Options::[Option]) -> boolean()
```

Types:

**Option = {command, *unicode:chardata()*}**

See **external documentation**.

```
launchDefaultBrowser(Url) -> boolean()
```

Types:

**Url = *unicode:chardata()***

Equivalent to *launchDefaultBrowser(Url, [])*.

```
launchDefaultBrowser(Url, Options::[Option]) -> boolean()
```

Types:

**Url = *unicode:chardata()***

**Option = {flags, integer()}**

See **external documentation**.

```
getEmailAddress() -> unicode:charlist()
```

See **external documentation**.

```
getUserId() -> unicode:charlist()
```

See **external documentation**.

```
getHomeDir() -> unicode:charlist()
```

See **external documentation**.

```
newId() -> integer()
```

See **external documentation**.

```
registerId(Id) -> ok
```

Types:

**Id = integer()**

See **external documentation**.

```
getCurrentId() -> integer()
```

See **external documentation**.

```
getOsDescription() -> unicode:charlist()
```

See **external documentation**.

```
isPlatformLittleEndian() -> boolean()
```

See **external documentation**.

```
isPlatform64Bit() -> boolean()
```

See **external documentation**.

```
displaySize() -> {Width::integer(), Height::integer()}
```

See **external documentation**.

```
setCursor(Cursor) -> ok
```

Types:

**Cursor = *wxCursor:wxCursor()***

See **external documentation**.

# glu

Erlang module

A part of the standard OpenGL Utility api. See *www.khronos.org*

Booleans are represented by integers 0 and 1.

## DATA TYPES

enum() = non_neg_integer()

See wx/include/gl.hrl or glu.hrl

matrix() = *matrix12()* | *matrix16()*

matrix12() = {float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}

matrix16() = {float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}

mem() = binary() | tuple()

Memory block

vertex() = {float(), float(), float()}

## Exports

`tesselate(Normal, Vs::[Vs]) -> {Triangles, VertexPos}`

Types:

**Normal = *vertex()***
**Vs = *vertex()***
**Triangles = [integer()]**
**VertexPos = binary()**

General purpose polygon triangulation. The first argument is the normal and the second a list of vertex positions. Returned is a list of indecies of the vertices and a binary (64bit native float) containing an array of vertex positions, it starts with the vertices in Vs and may contain newly created vertices in the end.

`build1DMipmapLevels(Target, InternalFormat, Width, Format, Type, Level, Base, Max, Data) -> integer()`

Types:

**Target = *enum()***
**InternalFormat = integer()**
**Width = integer()**
**Format = *enum()***
**Type = *enum()***
**Level = integer()**
**Base = integer()**

**Max = integer()**
**Data = binary()**

Builds a subset of one-dimensional mipmap levels

`glu:build1DMipmapLevels` builds a subset of prefiltered one-dimensional texture maps of decreasing resolutions called a mipmap. This is used for the antialiasing of texture mapped primitives.

See **external** documentation.

```
build1DMipmaps(Target, InternalFormat, Width, Format, Type, Data) ->
integer()
```

Types:

**Target = *enum()***
**InternalFormat = integer()**
**Width = integer()**
**Format = *enum()***
**Type = *enum()***
**Data = binary()**

Builds a one-dimensional mipmap

`glu:build1DMipmaps` builds a series of prefiltered one-dimensional texture maps of decreasing resolutions called a mipmap. This is used for the antialiasing of texture mapped primitives.

See **external** documentation.

```
build2DMipmapLevels(Target, InternalFormat, Width, Height, Format, Type,
Level, Base, Max, Data) -> integer()
```

Types:

**Target = *enum()***
**InternalFormat = integer()**
**Width = integer()**
**Height = integer()**
**Format = *enum()***
**Type = *enum()***
**Level = integer()**
**Base = integer()**
**Max = integer()**
**Data = binary()**

Builds a subset of two-dimensional mipmap levels

`glu:build2DMipmapLevels` builds a subset of prefiltered two-dimensional texture maps of decreasing resolutions called a mipmap. This is used for the antialiasing of texture mapped primitives.

See **external** documentation.

```
build2DMipmaps(Target, InternalFormat, Width, Height, Format, Type, Data) ->
integer()
```

Types:

**Target = *enum()***

**InternalFormat = integer()**
**Width = integer()**
**Height = integer()**
**Format = *enum()***
**Type = *enum()***
**Data = binary()**

Builds a two-dimensional mipmap

`glu:build2DMipmaps` builds a series of prefiltered two-dimensional texture maps of decreasing resolutions called a mipmap. This is used for the antialiasing of texture-mapped primitives.

See **external** documentation.

```
build3DMipmapLevels(Target, InternalFormat, Width, Height, Depth, Format,
Type, Level, Base, Max, Data) -> integer()
```

Types:

**Target = *enum()***
**InternalFormat = integer()**
**Width = integer()**
**Height = integer()**
**Depth = integer()**
**Format = *enum()***
**Type = *enum()***
**Level = integer()**
**Base = integer()**
**Max = integer()**
**Data = binary()**

Builds a subset of three-dimensional mipmap levels

`glu:build3DMipmapLevels` builds a subset of prefiltered three-dimensional texture maps of decreasing resolutions called a mipmap. This is used for the antialiasing of texture mapped primitives.

See **external** documentation.

```
build3DMipmaps(Target, InternalFormat, Width, Height, Depth, Format, Type,
Data) -> integer()
```

Types:

**Target = *enum()***
**InternalFormat = integer()**
**Width = integer()**
**Height = integer()**
**Depth = integer()**
**Format = *enum()***
**Type = *enum()***
**Data = binary()**

Builds a three-dimensional mipmap

`glu:build3DMipmaps` builds a series of prefiltered three-dimensional texture maps of decreasing resolutions called a mipmap. This is used for the antialiasing of texture-mapped primitives.

See **external** documentation.

```
checkExtension(ExtName, ExtString) -> 0 | 1
```

Types:

**`ExtName = string()`**
**`ExtString = string()`**

Determines if an extension name is supported

`glu:checkExtension` returns `?GLU_TRUE` if `ExtName` is supported otherwise `?GLU_FALSE` is returned.

See **external** documentation.

```
cylinder(Quad, Base, Top, Height, Slices, Stacks) -> ok
```

Types:

**`Quad = integer()`**
**`Base = float()`**
**`Top = float()`**
**`Height = float()`**
**`Slices = integer()`**
**`Stacks = integer()`**

Draw a cylinder

`glu:cylinder` draws a cylinder oriented along the `z` axis. The base of the cylinder is placed at `z` = 0 and the top at z=height. Like a sphere, a cylinder is subdivided around the `z` axis into slices and along the `z` axis into stacks.

See **external** documentation.

```
deleteQuadric(Quad) -> ok
```

Types:

**`Quad = integer()`**

Destroy a quadrics object

`glu:deleteQuadric` destroys the quadrics object (created with *glu:newQuadric/0* ) and frees any memory it uses. Once `glu:deleteQuadric` has been called, `Quad` cannot be used again.

See **external** documentation.

```
disk(Quad, Inner, Outer, Slices, Loops) -> ok
```

Types:

**`Quad = integer()`**
**`Inner = float()`**
**`Outer = float()`**
**`Slices = integer()`**
**`Loops = integer()`**

Draw a disk

`glu:disk` renders a disk on the `z` = 0 plane. The disk has a radius of `Outer` and contains a concentric circular hole with a radius of `Inner` . If `Inner` is 0, then no hole is generated. The disk is subdivided around the `z` axis into slices (like pizza slices) and also about the `z` axis into rings (as specified by `Slices` and `Loops` , respectively).

See **external** documentation.

`errorString(Error) -> string()`

Types:

**`Error = enum()`**

Produce an error string from a GL or GLU error code

`glu:errorString` produces an error string from a GL or GLU error code. The string is in ISO Latin 1 format. For example, `glu:errorString(?GLU_OUT_OF_MEMORY)` returns the string `out of memory`.

See **external** documentation.

`getString(Name) -> string()`

Types:

**`Name = enum()`**

Return a string describing the GLU version or GLU extensions

`glu:getString` returns a pointer to a static string describing the GLU version or the GLU extensions that are supported.

See **external** documentation.

`lookAt(EyeX, EyeY, EyeZ, CenterX, CenterY, CenterZ, UpX, UpY, UpZ) -> ok`

Types:

**`EyeX = float()`**
**`EyeY = float()`**
**`EyeZ = float()`**
**`CenterX = float()`**
**`CenterY = float()`**
**`CenterZ = float()`**
**`UpX = float()`**
**`UpY = float()`**
**`UpZ = float()`**

Define a viewing transformation

`glu:lookAt` creates a viewing matrix derived from an eye point, a reference point indicating the center of the scene, and an `UP` vector.

See **external** documentation.

`newQuadric() -> integer()`

Create a quadrics object

`glu:newQuadric` creates and returns a pointer to a new quadrics object. This object must be referred to when calling quadrics rendering and control functions. A return value of 0 means that there is not enough memory to allocate the object.

See **external** documentation.

```
ortho2D(Left, Right, Bottom, Top) -> ok
```

Types:

**Left = float()**
**Right = float()**
**Bottom = float()**
**Top = float()**

Define a 2D orthographic projection matrix

`glu:ortho2D` sets up a two-dimensional orthographic viewing region. This is equivalent to calling *gl:ortho/6* with near=-1 and far=1.

See **external** documentation.

```
partialDisk(Quad, Inner, Outer, Slices, Loops, Start, Sweep) -> ok
```

Types:

**Quad = integer()**
**Inner = float()**
**Outer = float()**
**Slices = integer()**
**Loops = integer()**
**Start = float()**
**Sweep = float()**

Draw an arc of a disk

`glu:partialDisk` renders a partial disk on the z=0 plane. A partial disk is similar to a full disk, except that only the subset of the disk from `Start` through `Start` + `Sweep` is included (where 0 degrees is along the +f2yf axis, 90 degrees along the +`x` axis, 180 degrees along the -`y` axis, and 270 degrees along the -`x` axis).

See **external** documentation.

```
perspective(Fovy, Aspect, ZNear, ZFar) -> ok
```

Types:

**Fovy = float()**
**Aspect = float()**
**ZNear = float()**
**ZFar = float()**

Set up a perspective projection matrix

`glu:perspective` specifies a viewing frustum into the world coordinate system. In general, the aspect ratio in `glu:perspective` should match the aspect ratio of the associated viewport. For example, aspect=2.0 means the viewer's angle of view is twice as wide in `x` as it is in `y`. If the viewport is twice as wide as it is tall, it displays the image without distortion.

See **external** documentation.

```
pickMatrix(X, Y, DelX, DelY, Viewport) -> ok
```

Types:

**X = float()**
**Y = float()**

**DelX = float()**
**DelY = float()**
**Viewport = {integer(), integer(), integer(), integer()}**

Define a picking region

`glu:pickMatrix` creates a projection matrix that can be used to restrict drawing to a small region of the viewport. This is typically useful to determine what objects are being drawn near the cursor. Use `glu:pickMatrix` to restrict drawing to a small region around the cursor. Then, enter selection mode (with *gl:renderMode/1* ) and rerender the scene. All primitives that would have been drawn near the cursor are identified and stored in the selection buffer.

See **external** documentation.

`project(ObjX, ObjY, ObjZ, Model, Proj, View) -> {integer(), WinX::float(), WinY::float(), WinZ::float()}`

Types:

**ObjX = float()**
**ObjY = float()**
**ObjZ = float()**
**Model = *matrix()***
**Proj = *matrix()***
**View = {integer(), integer(), integer(), integer()}**

Map object coordinates to window coordinates

`glu:project` transforms the specified object coordinates into window coordinates using `Model` , `Proj` , and `View` . The result is stored in `WinX` , `WinY` , and `WinZ` . A return value of `?GLU_TRUE` indicates success, a return value of `?GLU_FALSE` indicates failure.

See **external** documentation.

`quadricDrawStyle(Quad, Draw) -> ok`

Types:

**Quad = integer()**
**Draw = *enum()***

Specify the draw style desired for quadrics

`glu:quadricDrawStyle` specifies the draw style for quadrics rendered with `Quad` . The legal values are as follows:

See **external** documentation.

`quadricNormals(Quad, Normal) -> ok`

Types:

**Quad = integer()**
**Normal = *enum()***

Specify what kind of normals are desired for quadrics

`glu:quadricNormals` specifies what kind of normals are desired for quadrics rendered with `Quad` . The legal values are as follows:

See **external** documentation.

```
quadricOrientation(Quad, Orientation) -> ok
```

Types:

**Quad = integer()**
**Orientation = *enum()***

Specify inside/outside orientation for quadrics

`glu:quadricOrientation` specifies what kind of orientation is desired for quadrics rendered with `Quad` . The `Orientation` values are as follows:

See **external** documentation.

```
quadricTexture(Quad, Texture) -> ok
```

Types:

**Quad = integer()**
**Texture = 0 | 1**

Specify if texturing is desired for quadrics

`glu:quadricTexture` specifies if texture coordinates should be generated for quadrics rendered with `Quad` . If the value of `Texture` is `?GLU_TRUE`, then texture coordinates are generated, and if `Texture` is `?GLU_FALSE`, they are not. The initial value is `?GLU_FALSE`.

See **external** documentation.

```
scaleImage(Format, WIn, HIn, TypeIn, DataIn, WOut, HOut, TypeOut, DataOut) ->
integer()
```

Types:

**Format = *enum()***
**WIn = integer()**
**HIn = integer()**
**TypeIn = *enum()***
**DataIn = binary()**
**WOut = integer()**
**HOut = integer()**
**TypeOut = *enum()***
**DataOut = *mem()***

Scale an image to an arbitrary size

`glu:scaleImage` scales a pixel image using the appropriate pixel store modes to unpack data from the source image and pack data into the destination image.

See **external** documentation.

```
sphere(Quad, Radius, Slices, Stacks) -> ok
```

Types:

**Quad = integer()**
**Radius = float()**
**Slices = integer()**
**Stacks = integer()**

Draw a sphere

`glu:sphere` draws a sphere of the given radius centered around the origin. The sphere is subdivided around the `z` axis into slices and along the `z` axis into stacks (similar to lines of longitude and latitude).

See **external** documentation.

```
unProject(WinX, WinY, WinZ, Model, Proj, View) -> {integer(), ObjX::float(),
ObjY::float(), ObjZ::float()}
```

Types:

**`WinX = float()`**
**`WinY = float()`**
**`WinZ = float()`**
**`Model = matrix()`**
**`Proj = matrix()`**
**`View = {integer(), integer(), integer(), integer()}`**

Map window coordinates to object coordinates

`glu:unProject` maps the specified window coordinates into object coordinates using `Model` , `Proj` , and `View` . The result is stored in `ObjX` , `ObjY` , and `ObjZ` . A return value of `?GLU_TRUE` indicates success; a return value of `?GLU_FALSE` indicates failure.

See **external** documentation.

```
unProject4(WinX, WinY, WinZ, ClipW, Model, Proj, View, NearVal, FarVal) ->
{integer(), ObjX::float(), ObjY::float(), ObjZ::float(), ObjW::float()}
```

Types:

**`WinX = float()`**
**`WinY = float()`**
**`WinZ = float()`**
**`ClipW = float()`**
**`Model = matrix()`**
**`Proj = matrix()`**
**`View = {integer(), integer(), integer(), integer()}`**
**`NearVal = float()`**
**`FarVal = float()`**

See *unProject/6*

# gl

Erlang module

Standard OpenGL api. See *www.khronos.org*

Booleans are represented by integers 0 and 1.

## DATA TYPES

clamp() = float()

0.0..1.0

enum() = non_neg_integer()

See wx/include/gl.hrl

matrix() = *matrix12()* | *matrix16()*

matrix12() = {float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}

matrix16() = {float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}

mem() = binary() | tuple()

Memory block

offset() = non_neg_integer()

Offset in memory block

## Exports

`clearIndex(C) -> ok`

Types:

**`C = float()`**

Specify the clear value for the color index buffers

`gl:clearIndex` specifies the index used by *gl:clear/1* to clear the color index buffers. `C` is not clamped. Rather, `C` is converted to a fixed-point value with unspecified precision to the right of the binary point. The integer part of this value is then masked with 2 m-1, where m is the number of bits in a color index stored in the frame buffer.

See **external** documentation.

`clearColor(Red, Green, Blue, Alpha) -> ok`

Types:

**`Red = `*`clamp()`**
**`Green = `*`clamp()`**
**`Blue = `*`clamp()`**
**`Alpha = `*`clamp()`**

Specify clear values for the color buffers

`gl:clearColor` specifies the red, green, blue, and alpha values used by *gl:clear/1* to clear the color buffers. Values specified by `gl:clearColor` are clamped to the range [0 1].

See **external** documentation.

`clear(Mask) -> ok`

Types:

**`Mask = integer()`**

Clear buffers to preset values

`gl:clear` sets the bitplane area of the window to values previously selected by `gl:clearColor` , `gl:clearDepth`, and `gl:clearStencil`. Multiple color buffers can be cleared simultaneously by selecting more than one buffer at a time using *gl:drawBuffer/1* .

See **external** documentation.

`indexMask(Mask) -> ok`

Types:

**`Mask = integer()`**

Control the writing of individual bits in the color index buffers

`gl:indexMask` controls the writing of individual bits in the color index buffers. The least significant n bits of `Mask` , where n is the number of bits in a color index buffer, specify a mask. Where a 1 (one) appears in the mask, it's possible to write to the corresponding bit in the color index buffer (or buffers). Where a 0 (zero) appears, the corresponding bit is write-protected.

See **external** documentation.

`colorMask(Red, Green, Blue, Alpha) -> ok`

Types:

**`Red = 0 | 1`**
**`Green = 0 | 1`**
**`Blue = 0 | 1`**
**`Alpha = 0 | 1`**

Enable and disable writing of frame buffer color components

`gl:colorMask` and `gl:colorMaski` specify whether the individual color components in the frame buffer can or cannot be written. `gl:colorMaski` sets the mask for a specific draw buffer, whereas `gl:colorMask` sets the mask for all draw buffers. If `Red` is `?GL_FALSE`, for example, no change is made to the red component of any pixel in any of the color buffers, regardless of the drawing operation attempted.

See **external** documentation.

`alphaFunc(Func, Ref) -> ok`

Types:

**`Func = enum()`**
**`Ref = clamp()`**

Specify the alpha test function

The alpha test discards fragments depending on the outcome of a comparison between an incoming fragment's alpha value and a constant reference value. `gl:alphaFunc` specifies the reference value and the comparison function. The

comparison is performed only if alpha testing is enabled. By default, it is not enabled. (See *gl:enable/1* and *gl:enable/1* of ?GL_ALPHA_TEST.)

See **external** documentation.

```
blendFunc(Sfactor, Dfactor) -> ok
```

Types:

**Sfactor = *enum()***

**Dfactor = *enum()***

Specify pixel arithmetic

Pixels can be drawn using a function that blends the incoming (source) RGBA values with the RGBA values that are already in the frame buffer (the destination values). Blending is initially disabled. Use *gl:enable/1* and *gl:enable/1* with argument ?GL_BLEND to enable and disable blending.

See **external** documentation.

```
logicOp(Opcode) -> ok
```

Types:

**Opcode = *enum()***

Specify a logical pixel operation for rendering

gl:logicOp specifies a logical operation that, when enabled, is applied between the incoming RGBA color and the RGBA color at the corresponding location in the frame buffer. To enable or disable the logical operation, call *gl:enable/1* and *gl:enable/1* using the symbolic constant ?GL_COLOR_LOGIC_OP. The initial value is disabled.

See **external** documentation.

```
cullFace(Mode) -> ok
```

Types:

**Mode = *enum()***

Specify whether front- or back-facing facets can be culled

gl:cullFace specifies whether front- or back-facing facets are culled (as specified by mode) when facet culling is enabled. Facet culling is initially disabled. To enable and disable facet culling, call the *gl:enable/1* and *gl:enable/1* commands with the argument ?GL_CULL_FACE. Facets include triangles, quadrilaterals, polygons, and rectangles.

See **external** documentation.

```
frontFace(Mode) -> ok
```

Types:

**Mode = *enum()***

Define front- and back-facing polygons

In a scene composed entirely of opaque closed surfaces, back-facing polygons are never visible. Eliminating these invisible polygons has the obvious benefit of speeding up the rendering of the image. To enable and disable elimination of back-facing polygons, call *gl:enable/1* and *gl:enable/1* with argument ?GL_CULL_FACE.

See **external** documentation.

```
pointSize(Size) -> ok
```

Types:

**Size = float()**

Specify the diameter of rasterized points

`gl:pointSize` specifies the rasterized diameter of points. If point size mode is disabled (see *gl:enable/1* with parameter `?GL_PROGRAM_POINT_SIZE`), this value will be used to rasterize points. Otherwise, the value written to the shading language built-in variable gl_PointSize will be used.

See **external** documentation.

```
lineWidth(Width) -> ok
```

Types:

**Width = float()**

Specify the width of rasterized lines

`gl:lineWidth` specifies the rasterized width of both aliased and antialiased lines. Using a line width other than 1 has different effects, depending on whether line antialiasing is enabled. To enable and disable line antialiasing, call *gl:enable/1* and *gl:enable/1* with argument `?GL_LINE_SMOOTH`. Line antialiasing is initially disabled.

See **external** documentation.

```
lineStipple(Factor, Pattern) -> ok
```

Types:

**Factor = integer()**

**Pattern = integer()**

Specify the line stipple pattern

Line stippling masks out certain fragments produced by rasterization; those fragments will not be drawn. The masking is achieved by using three parameters: the 16-bit line stipple pattern `Pattern` , the repeat count `Factor` , and an integer stipple counter s.

See **external** documentation.

```
polygonMode(Face, Mode) -> ok
```

Types:

**Face = *enum()***

**Mode = *enum()***

Select a polygon rasterization mode

`gl:polygonMode` controls the interpretation of polygons for rasterization. `Face` describes which polygons `Mode` applies to: both front and back-facing polygons (`?GL_FRONT_AND_BACK` ). The polygon mode affects only the final rasterization of polygons. In particular, a polygon's vertices are lit and the polygon is clipped and possibly culled before these modes are applied.

See **external** documentation.

```
polygonOffset(Factor, Units) -> ok
```

Types:

**Factor = float()**

**Units = float()**

Set the scale and units used to calculate depth values

When ?GL_POLYGON_OFFSET_FILL, ?GL_POLYGON_OFFSET_LINE, or ?GL_POLYGON_OFFSET_POINT is enabled, each fragment's depth value will be offset after it is interpolated from the depth values of the appropriate vertices. The value of the offset is factor×DZ+r×units, where DZ is a measurement of the change in depth relative to the screen area of the polygon, and r is the smallest value that is guaranteed to produce a resolvable offset for a given implementation. The offset is added before the depth test is performed and before the value is written into the depth buffer.

See **external** documentation.

### polygonStipple(Mask) -> ok

Types:

**Mask = binary()**

Set the polygon stippling pattern

Polygon stippling, like line stippling (see *gl:lineStipple/2* ), masks out certain fragments produced by rasterization, creating a pattern. Stippling is independent of polygon antialiasing.

See **external** documentation.

### getPolygonStipple() -> binary()

Return the polygon stipple pattern

gl:getPolygonStipple returns to Pattern a 32×32 polygon stipple pattern. The pattern is packed into memory as if *gl:readPixels/7* with both height and width of 32, type of ?GL_BITMAP, and format of ?GL_COLOR_INDEX were called, and the stipple pattern were stored in an internal 32×32 color index buffer. Unlike *gl:readPixels/7* , however, pixel transfer operations (shift, offset, pixel map) are not applied to the returned stipple image.

See **external** documentation.

### edgeFlag(Flag) -> ok

Types:

**Flag = 0 | 1**

Flag edges as either boundary or nonboundary

Each vertex of a polygon, separate triangle, or separate quadrilateral specified between a *gl:'begin'/1* / *gl:'begin'/1* pair is marked as the start of either a boundary or nonboundary edge. If the current edge flag is true when the vertex is specified, the vertex is marked as the start of a boundary edge. Otherwise, the vertex is marked as the start of a nonboundary edge. gl:edgeFlag sets the edge flag bit to ?GL_TRUE if Flag is ?GL_TRUE and to ?GL_FALSE otherwise.

See **external** documentation.

### edgeFlagv(Flag) -> ok

Types:

**Flag = {Flag::0 | 1}**

Equivalent to *edgeFlag(Flag)*.

### scissor(X, Y, Width, Height) -> ok

Types:

**X = integer()**

**Y = integer()**
**Width = integer()**
**Height = integer()**

Define the scissor box

`gl:scissor` defines a rectangle, called the scissor box, in window coordinates. The first two arguments, `X` and `Y` , specify the lower left corner of the box. `Width` and `Height` specify the width and height of the box.

See **external** documentation.

`clipPlane(Plane, Equation) -> ok`

Types:

**Plane = *enum()***
**Equation = {float(), float(), float(), float()}**

Specify a plane against which all geometry is clipped

Geometry is always clipped against the boundaries of a six-plane frustum in `x`, `y` , and `z`. `gl:clipPlane` allows the specification of additional planes, not necessarily perpendicular to the `x`, `y`, or `z` axis, against which all geometry is clipped. To determine the maximum number of additional clipping planes, call *gl:getBooleanv/1* with argument `?GL_MAX_CLIP_PLANES`. All implementations support at least six such clipping planes. Because the resulting clipping region is the intersection of the defined half-spaces, it is always convex.

See **external** documentation.

`getClipPlane(Plane) -> {float(), float(), float(), float()}`

Types:

**Plane = *enum()***

Return the coefficients of the specified clipping plane

`gl:getClipPlane` returns in `Equation` the four coefficients of the plane equation for `Plane` .

See **external** documentation.

`drawBuffer(Mode) -> ok`

Types:

**Mode = *enum()***

Specify which color buffers are to be drawn into

When colors are written to the frame buffer, they are written into the color buffers specified by `gl:drawBuffer`. The specifications are as follows:

See **external** documentation.

`readBuffer(Mode) -> ok`

Types:

**Mode = *enum()***

Select a color buffer source for pixels

`gl:readBuffer` specifies a color buffer as the source for subsequent *gl:readPixels/7* , *gl:copyTexImage1D/7* , *gl:copyTexImage2D/8* , *gl:copyTexSubImage1D/6* , *gl:copyTexSubImage2D/8* , and *gl:copyTexSubImage3D/9* commands. `Mode` accepts one of twelve or more predefined values. In a fully configured system, `?GL_FRONT`, `?GL_LEFT`, and `?GL_FRONT_LEFT` all name the front left buffer, `?GL_FRONT_RIGHT` and `?GL_RIGHT` name the

front right buffer, and ?GL_BACK_LEFT and ?GL_BACK name the back left buffer. Further more, the constants ?GL_COLOR_ATTACHMENTi may be used to indicate the ith color attachment where i ranges from zero to the value of ?GL_MAX_COLOR_ATTACHMENTS minus one.

See **external** documentation.

### enable(Cap) -> ok

Types:

**Cap = *enum()***

Enable or disable server-side GL capabilities

gl:enable and *gl:enable/1* enable and disable various capabilities. Use *gl:isEnabled/1* or *gl:getBooleanv/1* to determine the current setting of any capability. The initial value for each capability with the exception of ?GL_DITHER and ?GL_MULTISAMPLE is ?GL_FALSE. The initial value for ?GL_DITHER and ?GL_MULTISAMPLE is ?GL_TRUE.

See **external** documentation.

### disable(Cap) -> ok

Types:

**Cap = *enum()***

See *enable/1*

### isEnabled(Cap) -> 0 | 1

Types:

**Cap = *enum()***

Test whether a capability is enabled

gl:isEnabled returns ?GL_TRUE if Cap is an enabled capability and returns ?GL_FALSE otherwise. Boolean states that are indexed may be tested with gl:isEnabledi . For gl:isEnabledi, Index specifies the index of the capability to test. Index must be between zero and the count of indexed capabilities for Cap . Initially all capabilities except ?GL_DITHER are disabled; ?GL_DITHER is initially enabled.

See **external** documentation.

### enableClientState(Cap) -> ok

Types:

**Cap = *enum()***

Enable or disable client-side capability

gl:enableClientState and *gl:enableClientState/1* enable or disable individual client-side capabilities. By default, all client-side capabilities are disabled. Both gl:enableClientState and *gl:enableClientState/1* take a single argument, Cap , which can assume one of the following values:

See **external** documentation.

### disableClientState(Cap) -> ok

Types:

**Cap = *enum()***

See *enableClientState/1*

```
getBooleanv(Pname) -> [0 | 1]
```

Types:

**Pname = *enum()***

Return the value or values of a selected parameter

These four commands return values for simple state variables in GL. `Pname` is a symbolic constant indicating the state variable to be returned, and `Params` is a pointer to an array of the indicated type in which to place the returned data.

See **external** documentation.

```
getDoublev(Pname) -> [float()]
```

Types:

**Pname = *enum()***

See *getBooleanv/1*

```
getFloatv(Pname) -> [float()]
```

Types:

**Pname = *enum()***

See *getBooleanv/1*

```
getIntegerv(Pname) -> [integer()]
```

Types:

**Pname = *enum()***

See *getBooleanv/1*

```
pushAttrib(Mask) -> ok
```

Types:

**Mask = integer()**

Push and pop the server attribute stack

`gl:pushAttrib` takes one argument, a mask that indicates which groups of state variables to save on the attribute stack. Symbolic constants are used to set bits in the mask. `Mask` is typically constructed by specifying the bitwise-or of several of these constants together. The special mask `?GL_ALL_ATTRIB_BITS` can be used to save all stackable states.

See **external** documentation.

```
popAttrib() -> ok
```

See *pushAttrib/1*

```
pushClientAttrib(Mask) -> ok
```

Types:

**Mask = integer()**

Push and pop the client attribute stack

`gl:pushClientAttrib` takes one argument, a mask that indicates which groups of client-state variables to save on the client attribute stack. Symbolic constants are used to set bits in the mask. `Mask` is

typically constructed by specifying the bitwise-or of several of these constants together. The special mask ?GL_CLIENT_ALL_ATTRIB_BITS can be used to save all stackable client state.

See **external** documentation.

```
popClientAttrib() -> ok
```

See *pushClientAttrib/1*

```
renderMode(Mode) -> integer()
```

Types:

**Mode = *enum()***

Set rasterization mode

gl:renderMode sets the rasterization mode. It takes one argument, Mode , which can assume one of three predefined values:

See **external** documentation.

```
getError() -> enum()
```

Return error information

gl:getError returns the value of the error flag. Each detectable error is assigned a numeric code and symbolic name. When an error occurs, the error flag is set to the appropriate error code value. No other errors are recorded until gl:getError is called, the error code is returned, and the flag is reset to ?GL_NO_ERROR. If a call to gl:getError returns ?GL_NO_ERROR, there has been no detectable error since the last call to gl:getError , or since the GL was initialized.

See **external** documentation.

```
getString(Name) -> string()
```

Types:

**Name = *enum()***

Return a string describing the current GL connection

gl:getString returns a pointer to a static string describing some aspect of the current GL connection. Name can be one of the following:

See **external** documentation.

```
finish() -> ok
```

Block until all GL execution is complete

gl:finish does not return until the effects of all previously called GL commands are complete. Such effects include all changes to GL state, all changes to connection state, and all changes to the frame buffer contents.

See **external** documentation.

```
flush() -> ok
```

Force execution of GL commands in finite time

Different GL implementations buffer commands in several different locations, including network buffers and the graphics accelerator itself. gl:flush empties all of these buffers, causing all issued commands to be executed as

quickly as they are accepted by the actual rendering engine. Though this execution may not be completed in any particular time period, it does complete in finite time.

See **external** documentation.

`hint(Target, Mode) -> ok`

Types:

**`Target = enum()`**

**`Mode = enum()`**

Specify implementation-specific hints

Certain aspects of GL behavior, when there is room for interpretation, can be controlled with hints. A hint is specified with two arguments. `Target` is a symbolic constant indicating the behavior to be controlled, and `Mode` is another symbolic constant indicating the desired behavior. The initial value for each `Target` is `?GL_DONT_CARE` . `Mode` can be one of the following:

See **external** documentation.

`clearDepth(Depth) -> ok`

Types:

**`Depth = clamp()`**

Specify the clear value for the depth buffer

`gl:clearDepth` specifies the depth value used by *gl:clear/1* to clear the depth buffer. Values specified by `gl:clearDepth` are clamped to the range [0 1].

See **external** documentation.

`depthFunc(Func) -> ok`

Types:

**`Func = enum()`**

Specify the value used for depth buffer comparisons

`gl:depthFunc` specifies the function used to compare each incoming pixel depth value with the depth value present in the depth buffer. The comparison is performed only if depth testing is enabled. (See *gl:enable/1* and *gl:enable/1* of `?GL_DEPTH_TEST` .)

See **external** documentation.

`depthMask(Flag) -> ok`

Types:

**`Flag = 0 | 1`**

Enable or disable writing into the depth buffer

`gl:depthMask` specifies whether the depth buffer is enabled for writing. If `Flag` is `?GL_FALSE`, depth buffer writing is disabled. Otherwise, it is enabled. Initially, depth buffer writing is enabled.

See **external** documentation.

`depthRange(Near_val, Far_val) -> ok`

Types:

**`Near_val = clamp()`**

**Far_val = *clamp()***

Specify mapping of depth values from normalized device coordinates to window coordinates

After clipping and division by `w`, depth coordinates range from -1 to 1, corresponding to the near and far clipping planes. `gl:depthRange` specifies a linear mapping of the normalized depth coordinates in this range to window depth coordinates. Regardless of the actual depth buffer implementation, window coordinate depth values are treated as though they range from 0 through 1 (like color components). Thus, the values accepted by `gl:depthRange` are both clamped to this range before they are accepted.

See **external** documentation.

```
clearAccum(Red, Green, Blue, Alpha) -> ok
```

Types:

**Red = float()**
**Green = float()**
**Blue = float()**
**Alpha = float()**

Specify clear values for the accumulation buffer

`gl:clearAccum` specifies the red, green, blue, and alpha values used by *gl:clear/1* to clear the accumulation buffer.

See **external** documentation.

```
accum(Op, Value) -> ok
```

Types:

**Op = *enum()***
**Value = float()**

Operate on the accumulation buffer

The accumulation buffer is an extended-range color buffer. Images are not rendered into it. Rather, images rendered into one of the color buffers are added to the contents of the accumulation buffer after rendering. Effects such as antialiasing (of points, lines, and polygons), motion blur, and depth of field can be created by accumulating images generated with different transformation matrices.

See **external** documentation.

```
matrixMode(Mode) -> ok
```

Types:

**Mode = *enum()***

Specify which matrix is the current matrix

`gl:matrixMode` sets the current matrix mode. `Mode` can assume one of four values:

See **external** documentation.

```
ortho(Left, Right, Bottom, Top, Near_val, Far_val) -> ok
```

Types:

**Left = float()**
**Right = float()**
**Bottom = float()**
**Top = float()**

**Near_val = float()**
**Far_val = float()**

Multiply the current matrix with an orthographic matrix

`gl:ortho` describes a transformation that produces a parallel projection. The current matrix (see *gl:matrixMode/1* ) is multiplied by this matrix and the result replaces the current matrix, as if *gl:multMatrixd/1* were called with the following matrix as its argument:

See **external** documentation.

`frustum(Left, Right, Bottom, Top, Near_val, Far_val) -> ok`

Types:

**Left = float()**
**Right = float()**
**Bottom = float()**
**Top = float()**
**Near_val = float()**
**Far_val = float()**

Multiply the current matrix by a perspective matrix

`gl:frustum` describes a perspective matrix that produces a perspective projection. The current matrix (see *gl:matrixMode/1* ) is multiplied by this matrix and the result replaces the current matrix, as if *gl:multMatrixd/1* were called with the following matrix as its argument:

See **external** documentation.

`viewport(X, Y, Width, Height) -> ok`

Types:

**X = integer()**
**Y = integer()**
**Width = integer()**
**Height = integer()**

Set the viewport

`gl:viewport` specifies the affine transformation of x and y from normalized device coordinates to window coordinates. Let (x nd y nd) be normalized device coordinates. Then the window coordinates (x w y w) are computed as follows:

See **external** documentation.

`pushMatrix() -> ok`

Push and pop the current matrix stack

There is a stack of matrices for each of the matrix modes. In `?GL_MODELVIEW` mode, the stack depth is at least 32. In the other modes, `?GL_COLOR`, `?GL_PROJECTION` , and `?GL_TEXTURE`, the depth is at least 2. The current matrix in any mode is the matrix on the top of the stack for that mode.

See **external** documentation.

`popMatrix() -> ok`

See *pushMatrix/0*

```
loadIdentity() -> ok
```

Replace the current matrix with the identity matrix

`gl:loadIdentity` replaces the current matrix with the identity matrix. It is semantically equivalent to calling *gl:loadMatrixd/1* with the identity matrix

See **external** documentation.

```
loadMatrixd(M) -> ok
```

Types:

**M = *matrix()***

Replace the current matrix with the specified matrix

`gl:loadMatrix` replaces the current matrix with the one whose elements are specified by `M` . The current matrix is the projection matrix, modelview matrix, or texture matrix, depending on the current matrix mode (see *gl:matrixMode/1* ).

See **external** documentation.

```
loadMatrixf(M) -> ok
```

Types:

**M = *matrix()***

See *loadMatrixd/1*

```
multMatrixd(M) -> ok
```

Types:

**M = *matrix()***

Multiply the current matrix with the specified matrix

`gl:multMatrix` multiplies the current matrix with the one specified using `M` , and replaces the current matrix with the product.

See **external** documentation.

```
multMatrixf(M) -> ok
```

Types:

**M = *matrix()***

See *multMatrixd/1*

```
rotated(Angle, X, Y, Z) -> ok
```

Types:

**Angle = float()**
**X = float()**
**Y = float()**
**Z = float()**

Multiply the current matrix by a rotation matrix

`gl:rotate` produces a rotation of `Angle` degrees around the vector (x y z). The current matrix (see *gl:matrixMode/1* ) is multiplied by a rotation matrix with the product replacing the current matrix, as if *gl:multMatrixd/1* were called with the following matrix as its argument:

See **external** documentation.

`rotatef(Angle, X, Y, Z) -> ok`

Types:

**`Angle = float()`**
**`X = float()`**
**`Y = float()`**
**`Z = float()`**

See *rotated/4*

`scaled(X, Y, Z) -> ok`

Types:

**`X = float()`**
**`Y = float()`**
**`Z = float()`**

Multiply the current matrix by a general scaling matrix

`gl:scale` produces a nonuniform scaling along the `x`, `y`, and `z` axes. The three parameters indicate the desired scale factor along each of the three axes.

See **external** documentation.

`scalef(X, Y, Z) -> ok`

Types:

**`X = float()`**
**`Y = float()`**
**`Z = float()`**

See *scaled/3*

`translated(X, Y, Z) -> ok`

Types:

**`X = float()`**
**`Y = float()`**
**`Z = float()`**

Multiply the current matrix by a translation matrix

`gl:translate` produces a translation by (x y z). The current matrix (see *gl:matrixMode/1* ) is multiplied by this translation matrix, with the product replacing the current matrix, as if *gl:multMatrixd/1* were called with the following matrix for its argument:

See **external** documentation.

`translatef(X, Y, Z) -> ok`

Types:

**`X = float()`**
**`Y = float()`**
**`Z = float()`**

See *translated/3*

`isList(List) -> 0 | 1`

Types:

**`List = integer()`**

Determine if a name corresponds to a display list

`gl:isList` returns `?GL_TRUE` if `List` is the name of a display list and returns `?GL_FALSE` if it is not, or if an error occurs.

See **external** documentation.

`deleteLists(List, Range) -> ok`

Types:

**`List = integer()`**

**`Range = integer()`**

Delete a contiguous group of display lists

`gl:deleteLists` causes a contiguous group of display lists to be deleted. `List` is the name of the first display list to be deleted, and `Range` is the number of display lists to delete. All display lists d with list<= d<= list+range-1 are deleted.

See **external** documentation.

`genLists(Range) -> integer()`

Types:

**`Range = integer()`**

Generate a contiguous set of empty display lists

`gl:genLists` has one argument, `Range` . It returns an integer `n` such that `Range` contiguous empty display lists, named n, n+1, ..., n+range-1, are created. If `Range` is 0, if there is no group of `Range` contiguous names available, or if any error is generated, no display lists are generated, and 0 is returned.

See **external** documentation.

`newList(List, Mode) -> ok`

Types:

**`List = integer()`**

**`Mode = `*`enum()`**

Create or replace a display list

Display lists are groups of GL commands that have been stored for subsequent execution. Display lists are created with `gl:newList`. All subsequent commands are placed in the display list, in the order issued, until *gl:endList/0* is called.

See **external** documentation.

`endList() -> ok`

glBeginList

See *external* documentation.

```
callList(List) -> ok
```

Types:

**`List = integer()`**

Execute a display list

`gl:callList` causes the named display list to be executed. The commands saved in the display list are executed in order, just as if they were called without using a display list. If `List` has not been defined as a display list, `gl:callList` is ignored.

See **external** documentation.

```
callLists(Lists) -> ok
```

Types:

**`Lists = [integer()]`**

Execute a list of display lists

`gl:callLists` causes each display list in the list of names passed as `Lists` to be executed. As a result, the commands saved in each display list are executed in order, just as if they were called without using a display list. Names of display lists that have not been defined are ignored.

See **external** documentation.

```
listBase(Base) -> ok
```

Types:

**`Base = integer()`**

set the display-list base for

*gl:callLists/1*

*gl:callLists/1* specifies an array of offsets. Display-list names are generated by adding `Base` to each offset. Names that reference valid display lists are executed; the others are ignored.

See **external** documentation.

```
begin(Mode) -> ok
```

Types:

**`Mode = enum()`**

Delimit the vertices of a primitive or a group of like primitives

`gl:'begin'` and *gl:'begin'/1* delimit the vertices that define a primitive or a group of like primitives. `gl:'begin'` accepts a single argument that specifies in which of ten ways the vertices are interpreted. Taking n as an integer count starting at one, and N as the total number of vertices specified, the interpretations are as follows:

See **external** documentation.

```
end() -> ok
```

See *'begin'/1*

```
vertex2d(X, Y) -> ok
```

Types:

**`X = float()`**

**`Y = float()`**

Specify a vertex

`gl:vertex` commands are used within *gl:'begin'/1* / *gl:'begin'/1* pairs to specify point, line, and polygon vertices. The current color, normal, texture coordinates, and fog coordinate are associated with the vertex when `gl:vertex` is called.

See **external** documentation.

```
vertex2f(X, Y) -> ok
```

Types:

**X = float()**
**Y = float()**

See *vertex2d/2*

```
vertex2i(X, Y) -> ok
```

Types:

**X = integer()**
**Y = integer()**

See *vertex2d/2*

```
vertex2s(X, Y) -> ok
```

Types:

**X = integer()**
**Y = integer()**

See *vertex2d/2*

```
vertex3d(X, Y, Z) -> ok
```

Types:

**X = float()**
**Y = float()**
**Z = float()**

See *vertex2d/2*

```
vertex3f(X, Y, Z) -> ok
```

Types:

**X = float()**
**Y = float()**
**Z = float()**

See *vertex2d/2*

```
vertex3i(X, Y, Z) -> ok
```

Types:

**X = integer()**
**Y = integer()**
**Z = integer()**

See *vertex2d/2*

`vertex3s(X, Y, Z) -> ok`

Types:

**X = integer()**
**Y = integer()**
**Z = integer()**

See *vertex2d/2*

`vertex4d(X, Y, Z, W) -> ok`

Types:

**X = float()**
**Y = float()**
**Z = float()**
**W = float()**

See *vertex2d/2*

`vertex4f(X, Y, Z, W) -> ok`

Types:

**X = float()**
**Y = float()**
**Z = float()**
**W = float()**

See *vertex2d/2*

`vertex4i(X, Y, Z, W) -> ok`

Types:

**X = integer()**
**Y = integer()**
**Z = integer()**
**W = integer()**

See *vertex2d/2*

`vertex4s(X, Y, Z, W) -> ok`

Types:

**X = integer()**
**Y = integer()**
**Z = integer()**
**W = integer()**

See *vertex2d/2*

`vertex2dv(V) -> ok`

Types:

**V = {X::float(), Y::float()}**

Equivalent to *vertex2d(X, Y)*.

`vertex2fv(V) -> ok`

Types:

**V = {X::float(), Y::float()}**

Equivalent to *vertex2f(X, Y)*.

`vertex2iv(V) -> ok`

Types:

**V = {X::integer(), Y::integer()}**

Equivalent to *vertex2i(X, Y)*.

`vertex2sv(V) -> ok`

Types:

**V = {X::integer(), Y::integer()}**

Equivalent to *vertex2s(X, Y)*.

`vertex3dv(V) -> ok`

Types:

**V = {X::float(), Y::float(), Z::float()}**

Equivalent to *vertex3d(X, Y, Z)*.

`vertex3fv(V) -> ok`

Types:

**V = {X::float(), Y::float(), Z::float()}**

Equivalent to *vertex3f(X, Y, Z)*.

`vertex3iv(V) -> ok`

Types:

**V = {X::integer(), Y::integer(), Z::integer()}**

Equivalent to *vertex3i(X, Y, Z)*.

`vertex3sv(V) -> ok`

Types:

**V = {X::integer(), Y::integer(), Z::integer()}**

Equivalent to *vertex3s(X, Y, Z)*.

`vertex4dv(V) -> ok`

Types:

**V = {X::float(), Y::float(), Z::float(), W::float()}**

Equivalent to *vertex4d(X, Y, Z, W)*.

`vertex4fv(V) -> ok`

Types:

**`V = {X::float(), Y::float(), Z::float(), W::float()}`**

Equivalent to *vertex4f(X, Y, Z, W)*.

`vertex4iv(V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer(), W::integer()}`**

Equivalent to *vertex4i(X, Y, Z, W)*.

`vertex4sv(V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer(), W::integer()}`**

Equivalent to *vertex4s(X, Y, Z, W)*.

`normal3b(Nx, Ny, Nz) -> ok`

Types:

**`Nx = integer()`**
**`Ny = integer()`**
**`Nz = integer()`**

Set the current normal vector

The current normal is set to the given coordinates whenever `gl:normal` is issued. Byte, short, or integer arguments are converted to floating-point format with a linear mapping that maps the most positive representable integer value to 1.0 and the most negative representable integer value to -1.0.

See **external** documentation.

`normal3d(Nx, Ny, Nz) -> ok`

Types:

**`Nx = float()`**
**`Ny = float()`**
**`Nz = float()`**

See *normal3b/3*

`normal3f(Nx, Ny, Nz) -> ok`

Types:

**`Nx = float()`**
**`Ny = float()`**
**`Nz = float()`**

See *normal3b/3*

`normal3i(Nx, Ny, Nz) -> ok`

Types:

**`Nx = integer()`**

**Ny = integer()**
**Nz = integer()**

See *normal3b/3*

`normal3s(Nx, Ny, Nz) -> ok`

Types:

**Nx = integer()**
**Ny = integer()**
**Nz = integer()**

See *normal3b/3*

`normal3bv(V) -> ok`

Types:

**V = {Nx::integer(), Ny::integer(), Nz::integer()}**

Equivalent to *normal3b(Nx, Ny, Nz)*.

`normal3dv(V) -> ok`

Types:

**V = {Nx::float(), Ny::float(), Nz::float()}**

Equivalent to *normal3d(Nx, Ny, Nz)*.

`normal3fv(V) -> ok`

Types:

**V = {Nx::float(), Ny::float(), Nz::float()}**

Equivalent to *normal3f(Nx, Ny, Nz)*.

`normal3iv(V) -> ok`

Types:

**V = {Nx::integer(), Ny::integer(), Nz::integer()}**

Equivalent to *normal3i(Nx, Ny, Nz)*.

`normal3sv(V) -> ok`

Types:

**V = {Nx::integer(), Ny::integer(), Nz::integer()}**

Equivalent to *normal3s(Nx, Ny, Nz)*.

`indexd(C) -> ok`

Types:

**C = float()**

Set the current color index

`gl:index` updates the current (single-valued) color index. It takes one argument, the new value for the current color index.

See **external** documentation.

`indexf(C) -> ok`
Types:
**`C = float()`**
See *indexd/1*

`indexi(C) -> ok`
Types:
**`C = integer()`**
See *indexd/1*

`indexs(C) -> ok`
Types:
**`C = integer()`**
See *indexd/1*

`indexub(C) -> ok`
Types:
**`C = integer()`**
See *indexd/1*

`indexdv(C) -> ok`
Types:
**`C = {C::float()}`**
Equivalent to *indexd(C)*.

`indexfv(C) -> ok`
Types:
**`C = {C::float()}`**
Equivalent to *indexf(C)*.

`indexiv(C) -> ok`
Types:
**`C = {C::integer()}`**
Equivalent to *indexi(C)*.

`indexsv(C) -> ok`
Types:
**`C = {C::integer()}`**
Equivalent to *indexs(C)*.

```
indexubv(C) -> ok
```

Types:

**C = {C::integer()}**

Equivalent to *indexub(C)*.

```
color3b(Red, Green, Blue) -> ok
```

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**

Set the current color

The GL stores both a current single-valued color index and a current four-valued RGBA color. `gl:color` sets a new four-valued RGBA color. `gl:color` has two major variants: `gl:color3` and `gl:color4`. `gl:color3` variants specify new red, green, and blue values explicitly and set the current alpha value to 1.0 (full intensity) implicitly. `gl:color4` variants specify all four color components explicitly.

See **external** documentation.

```
color3d(Red, Green, Blue) -> ok
```

Types:

**Red = float()**
**Green = float()**
**Blue = float()**

See *color3b/3*

```
color3f(Red, Green, Blue) -> ok
```

Types:

**Red = float()**
**Green = float()**
**Blue = float()**

See *color3b/3*

```
color3i(Red, Green, Blue) -> ok
```

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**

See *color3b/3*

```
color3s(Red, Green, Blue) -> ok
```

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**

See *color3b/3*

```
color3ub(Red, Green, Blue) -> ok
```

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**

See *color3b/3*

```
color3ui(Red, Green, Blue) -> ok
```

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**

See *color3b/3*

```
color3us(Red, Green, Blue) -> ok
```

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**

See *color3b/3*

```
color4b(Red, Green, Blue, Alpha) -> ok
```

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**
**Alpha = integer()**

See *color3b/3*

```
color4d(Red, Green, Blue, Alpha) -> ok
```

Types:

**Red = float()**
**Green = float()**
**Blue = float()**
**Alpha = float()**

See *color3b/3*

```
color4f(Red, Green, Blue, Alpha) -> ok
```

Types:

**Red = float()**
**Green = float()**

**Blue = float()**
**Alpha = float()**

See *color3b/3*

`color4i(Red, Green, Blue, Alpha) -> ok`

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**
**Alpha = integer()**

See *color3b/3*

`color4s(Red, Green, Blue, Alpha) -> ok`

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**
**Alpha = integer()**

See *color3b/3*

`color4ub(Red, Green, Blue, Alpha) -> ok`

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**
**Alpha = integer()**

See *color3b/3*

`color4ui(Red, Green, Blue, Alpha) -> ok`

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**
**Alpha = integer()**

See *color3b/3*

`color4us(Red, Green, Blue, Alpha) -> ok`

Types:

**Red = integer()**
**Green = integer()**
**Blue = integer()**
**Alpha = integer()**

See *color3b/3*

`color3bv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *color3b(Red, Green, Blue)*.

`color3dv(V) -> ok`

Types:

**`V = {Red::float(), Green::float(), Blue::float()}`**

Equivalent to *color3d(Red, Green, Blue)*.

`color3fv(V) -> ok`

Types:

**`V = {Red::float(), Green::float(), Blue::float()}`**

Equivalent to *color3f(Red, Green, Blue)*.

`color3iv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *color3i(Red, Green, Blue)*.

`color3sv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *color3s(Red, Green, Blue)*.

`color3ubv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *color3ub(Red, Green, Blue)*.

`color3uiv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *color3ui(Red, Green, Blue)*.

`color3usv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *color3us(Red, Green, Blue)*.

`color4bv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer(), Alpha::integer()}`**

Equivalent to *color4b(Red, Green, Blue, Alpha)*.

`color4dv(V) -> ok`

Types:

**`V = {Red::float(), Green::float(), Blue::float(), Alpha::float()}`**

Equivalent to *color4d(Red, Green, Blue, Alpha)*.

`color4fv(V) -> ok`

Types:

**`V = {Red::float(), Green::float(), Blue::float(), Alpha::float()}`**

Equivalent to *color4f(Red, Green, Blue, Alpha)*.

`color4iv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer(), Alpha::integer()}`**

Equivalent to *color4i(Red, Green, Blue, Alpha)*.

`color4sv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer(), Alpha::integer()}`**

Equivalent to *color4s(Red, Green, Blue, Alpha)*.

`color4ubv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer(), Alpha::integer()}`**

Equivalent to *color4ub(Red, Green, Blue, Alpha)*.

`color4uiv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer(), Alpha::integer()}`**

Equivalent to *color4ui(Red, Green, Blue, Alpha)*.

`color4usv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer(), Alpha::integer()}`**

Equivalent to *color4us(Red, Green, Blue, Alpha)*.

`texCoord1d(S) -> ok`

Types:

**`S = float()`**

Set the current texture coordinates

`gl:texCoord` specifies texture coordinates in one, two, three, or four dimensions. `gl:texCoord1` sets the current texture coordinates to (s 0 0 1); a call to `gl:texCoord2` sets them to (s t 0 1). Similarly, `gl:texCoord3` specifies the texture coordinates as (s t r 1), and `gl:texCoord4` defines all four components explicitly as (s t r q).

See **external** documentation.

`texCoord1f(S) -> ok`

Types:

**`S = float()`**

See *texCoord1d/1*

`texCoord1i(S) -> ok`

Types:

**`S = integer()`**

See *texCoord1d/1*

`texCoord1s(S) -> ok`

Types:

**`S = integer()`**

See *texCoord1d/1*

`texCoord2d(S, T) -> ok`

Types:

**`S = float()`**
**`T = float()`**

See *texCoord1d/1*

`texCoord2f(S, T) -> ok`

Types:

**`S = float()`**
**`T = float()`**

See *texCoord1d/1*

`texCoord2i(S, T) -> ok`

Types:

**`S = integer()`**
**`T = integer()`**

See *texCoord1d/1*

`texCoord2s(S, T) -> ok`

Types:

**`S = integer()`**
**`T = integer()`**

See *texCoord1d/1*

texCoord3d(S, T, R) -> ok

Types:

**S = float()**

**T = float()**

**R = float()**

See *texCoord1d/1*

texCoord3f(S, T, R) -> ok

Types:

**S = float()**

**T = float()**

**R = float()**

See *texCoord1d/1*

texCoord3i(S, T, R) -> ok

Types:

**S = integer()**

**T = integer()**

**R = integer()**

See *texCoord1d/1*

texCoord3s(S, T, R) -> ok

Types:

**S = integer()**

**T = integer()**

**R = integer()**

See *texCoord1d/1*

texCoord4d(S, T, R, Q) -> ok

Types:

**S = float()**

**T = float()**

**R = float()**

**Q = float()**

See *texCoord1d/1*

texCoord4f(S, T, R, Q) -> ok

Types:

**S = float()**

**T = float()**

**R = float()**

**Q = float()**

See *texCoord1d/1*

texCoord4i(S, T, R, Q) -> ok

Types:

**S = integer()**
**T = integer()**
**R = integer()**
**Q = integer()**

See *texCoord1d/1*

texCoord4s(S, T, R, Q) -> ok

Types:

**S = integer()**
**T = integer()**
**R = integer()**
**Q = integer()**

See *texCoord1d/1*

texCoord1dv(V) -> ok

Types:

**V = {S::float()}**

Equivalent to *texCoord1d(S)*.

texCoord1fv(V) -> ok

Types:

**V = {S::float()}**

Equivalent to *texCoord1f(S)*.

texCoord1iv(V) -> ok

Types:

**V = {S::integer()}**

Equivalent to *texCoord1i(S)*.

texCoord1sv(V) -> ok

Types:

**V = {S::integer()}**

Equivalent to *texCoord1s(S)*.

texCoord2dv(V) -> ok

Types:

**V = {S::float(), T::float()}**

Equivalent to *texCoord2d(S, T)*.

texCoord2fv(V) -> ok

Types:

**V = {S::float(), T::float()}**

Equivalent to *texCoord2f(S, T)*.

`texCoord2iv(V) -> ok`

Types:

**V = {S::integer(), T::integer()}**

Equivalent to *texCoord2i(S, T)*.

`texCoord2sv(V) -> ok`

Types:

**V = {S::integer(), T::integer()}**

Equivalent to *texCoord2s(S, T)*.

`texCoord3dv(V) -> ok`

Types:

**V = {S::float(), T::float(), R::float()}**

Equivalent to *texCoord3d(S, T, R)*.

`texCoord3fv(V) -> ok`

Types:

**V = {S::float(), T::float(), R::float()}**

Equivalent to *texCoord3f(S, T, R)*.

`texCoord3iv(V) -> ok`

Types:

**V = {S::integer(), T::integer(), R::integer()}**

Equivalent to *texCoord3i(S, T, R)*.

`texCoord3sv(V) -> ok`

Types:

**V = {S::integer(), T::integer(), R::integer()}**

Equivalent to *texCoord3s(S, T, R)*.

`texCoord4dv(V) -> ok`

Types:

**V = {S::float(), T::float(), R::float(), Q::float()}**

Equivalent to *texCoord4d(S, T, R, Q)*.

`texCoord4fv(V) -> ok`

Types:

**V = {S::float(), T::float(), R::float(), Q::float()}**

Equivalent to *texCoord4f(S, T, R, Q)*.

`texCoord4iv(V) -> ok`

Types:

**`V = {S::integer(), T::integer(), R::integer(), Q::integer()}`**

Equivalent to *texCoord4i(S, T, R, Q)*.

`texCoord4sv(V) -> ok`

Types:

**`V = {S::integer(), T::integer(), R::integer(), Q::integer()}`**

Equivalent to *texCoord4s(S, T, R, Q)*.

`rasterPos2d(X, Y) -> ok`

Types:

**`X = float()`**
**`Y = float()`**

Specify the raster position for pixel operations

The GL maintains a 3D position in window coordinates. This position, called the raster position, is used to position pixel and bitmap write operations. It is maintained with subpixel accuracy. See *gl:bitmap/7* , *gl:drawPixels/5* , and *gl:copyPixels/5* .

See **external** documentation.

`rasterPos2f(X, Y) -> ok`

Types:

**`X = float()`**
**`Y = float()`**

See *rasterPos2d/2*

`rasterPos2i(X, Y) -> ok`

Types:

**`X = integer()`**
**`Y = integer()`**

See *rasterPos2d/2*

`rasterPos2s(X, Y) -> ok`

Types:

**`X = integer()`**
**`Y = integer()`**

See *rasterPos2d/2*

`rasterPos3d(X, Y, Z) -> ok`

Types:

**`X = float()`**
**`Y = float()`**
**`Z = float()`**

See *rasterPos2d/2*

```
rasterPos3f(X, Y, Z) -> ok
```

Types:

**X = float()**
**Y = float()**
**Z = float()**

See *rasterPos2d/2*

```
rasterPos3i(X, Y, Z) -> ok
```

Types:

**X = integer()**
**Y = integer()**
**Z = integer()**

See *rasterPos2d/2*

```
rasterPos3s(X, Y, Z) -> ok
```

Types:

**X = integer()**
**Y = integer()**
**Z = integer()**

See *rasterPos2d/2*

```
rasterPos4d(X, Y, Z, W) -> ok
```

Types:

**X = float()**
**Y = float()**
**Z = float()**
**W = float()**

See *rasterPos2d/2*

```
rasterPos4f(X, Y, Z, W) -> ok
```

Types:

**X = float()**
**Y = float()**
**Z = float()**
**W = float()**

See *rasterPos2d/2*

```
rasterPos4i(X, Y, Z, W) -> ok
```

Types:

**X = integer()**
**Y = integer()**

**Z = integer()**
**W = integer()**

See *rasterPos2d/2*

`rasterPos4s(X, Y, Z, W) -> ok`

Types:

**X = integer()**
**Y = integer()**
**Z = integer()**
**W = integer()**

See *rasterPos2d/2*

`rasterPos2dv(V) -> ok`

Types:

**V = {X::float(), Y::float()}**

Equivalent to *rasterPos2d(X, Y)*.

`rasterPos2fv(V) -> ok`

Types:

**V = {X::float(), Y::float()}**

Equivalent to *rasterPos2f(X, Y)*.

`rasterPos2iv(V) -> ok`

Types:

**V = {X::integer(), Y::integer()}**

Equivalent to *rasterPos2i(X, Y)*.

`rasterPos2sv(V) -> ok`

Types:

**V = {X::integer(), Y::integer()}**

Equivalent to *rasterPos2s(X, Y)*.

`rasterPos3dv(V) -> ok`

Types:

**V = {X::float(), Y::float(), Z::float()}**

Equivalent to *rasterPos3d(X, Y, Z)*.

`rasterPos3fv(V) -> ok`

Types:

**V = {X::float(), Y::float(), Z::float()}**

Equivalent to *rasterPos3f(X, Y, Z)*.

`rasterPos3iv(V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer()}`**

Equivalent to *rasterPos3i(X, Y, Z)*.

`rasterPos3sv(V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer()}`**

Equivalent to *rasterPos3s(X, Y, Z)*.

`rasterPos4dv(V) -> ok`

Types:

**`V = {X::float(), Y::float(), Z::float(), W::float()}`**

Equivalent to *rasterPos4d(X, Y, Z, W)*.

`rasterPos4fv(V) -> ok`

Types:

**`V = {X::float(), Y::float(), Z::float(), W::float()}`**

Equivalent to *rasterPos4f(X, Y, Z, W)*.

`rasterPos4iv(V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer(), W::integer()}`**

Equivalent to *rasterPos4i(X, Y, Z, W)*.

`rasterPos4sv(V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer(), W::integer()}`**

Equivalent to *rasterPos4s(X, Y, Z, W)*.

`rectd(X1, Y1, X2, Y2) -> ok`

Types:

**`X1 = float()`**
**`Y1 = float()`**
**`X2 = float()`**
**`Y2 = float()`**

Draw a rectangle

`gl:rect` supports efficient specification of rectangles as two corner points. Each rectangle command takes four arguments, organized either as two consecutive pairs of (x y) coordinates or as two pointers to arrays, each containing an (x y) pair. The resulting rectangle is defined in the z=0 plane.

See **external** documentation.

```
rectf(X1, Y1, X2, Y2) -> ok
```

Types:

**X1 = float()**
**Y1 = float()**
**X2 = float()**
**Y2 = float()**

See *rectd/4*

```
recti(X1, Y1, X2, Y2) -> ok
```

Types:

**X1 = integer()**
**Y1 = integer()**
**X2 = integer()**
**Y2 = integer()**

See *rectd/4*

```
rects(X1, Y1, X2, Y2) -> ok
```

Types:

**X1 = integer()**
**Y1 = integer()**
**X2 = integer()**
**Y2 = integer()**

See *rectd/4*

```
rectdv(V1, V2) -> ok
```

Types:

**V1 = {float(), float()}**
**V2 = {float(), float()}**

See *rectd/4*

```
rectfv(V1, V2) -> ok
```

Types:

**V1 = {float(), float()}**
**V2 = {float(), float()}**

See *rectd/4*

```
rectiv(V1, V2) -> ok
```

Types:

**V1 = {integer(), integer()}**
**V2 = {integer(), integer()}**

See *rectd/4*

```
rectsv(V1, V2) -> ok
```

Types:

**V1 = {integer(), integer()}**

**V2 = {integer(), integer()}**

See *rectd/4*

```
vertexPointer(Size, Type, Stride, Ptr) -> ok
```

Types:

**Size = integer()**

**Type = *enum()***

**Stride = integer()**

**Ptr = *offset()* | *mem()***

Define an array of vertex data

`gl:vertexPointer` specifies the location and data format of an array of vertex coordinates to use when rendering. `Size` specifies the number of coordinates per vertex, and must be 2, 3, or 4. `Type` specifies the data type of each coordinate, and `Stride` specifies the byte stride from one vertex to the next, allowing vertices and attributes to be packed into a single array or stored in separate arrays. (Single-array storage may be more efficient on some implementations; see *gl:interleavedArrays/3* .)

See **external** documentation.

```
normalPointer(Type, Stride, Ptr) -> ok
```

Types:

**Type = *enum()***

**Stride = integer()**

**Ptr = *offset()* | *mem()***

Define an array of normals

`gl:normalPointer` specifies the location and data format of an array of normals to use when rendering. `Type` specifies the data type of each normal coordinate, and `Stride` specifies the byte stride from one normal to the next, allowing vertices and attributes to be packed into a single array or stored in separate arrays. (Single-array storage may be more efficient on some implementations; see *gl:interleavedArrays/3* .)

See **external** documentation.

```
colorPointer(Size, Type, Stride, Ptr) -> ok
```

Types:

**Size = integer()**

**Type = *enum()***

**Stride = integer()**

**Ptr = *offset()* | *mem()***

Define an array of colors

`gl:colorPointer` specifies the location and data format of an array of color components to use when rendering. `Size` specifies the number of components per color, and must be 3 or 4. `Type` specifies the data type of each color component, and `Stride` specifies the byte stride from one color to the next, allowing vertices and attributes to be packed into a single array or stored in separate arrays. (Single-array storage may be more efficient on some implementations; see *gl:interleavedArrays/3* .)

See **external** documentation.

`indexPointer(Type, Stride, Ptr) -> ok`

Types:

**`Type = enum()`**
**`Stride = integer()`**
**`Ptr = offset() | mem()`**

Define an array of color indexes

`gl:indexPointer` specifies the location and data format of an array of color indexes to use when rendering. `Type` specifies the data type of each color index and `Stride` specifies the byte stride from one color index to the next, allowing vertices and attributes to be packed into a single array or stored in separate arrays.

See **external** documentation.

`texCoordPointer(Size, Type, Stride, Ptr) -> ok`

Types:

**`Size = integer()`**
**`Type = enum()`**
**`Stride = integer()`**
**`Ptr = offset() | mem()`**

Define an array of texture coordinates

`gl:texCoordPointer` specifies the location and data format of an array of texture coordinates to use when rendering. `Size` specifies the number of coordinates per texture coordinate set, and must be 1, 2, 3, or 4. `Type` specifies the data type of each texture coordinate, and `Stride` specifies the byte stride from one texture coordinate set to the next, allowing vertices and attributes to be packed into a single array or stored in separate arrays. (Single-array storage may be more efficient on some implementations; see *gl:interleavedArrays/3* .)

See **external** documentation.

`edgeFlagPointer(Stride, Ptr) -> ok`

Types:

**`Stride = integer()`**
**`Ptr = offset() | mem()`**

Define an array of edge flags

`gl:edgeFlagPointer` specifies the location and data format of an array of boolean edge flags to use when rendering. `Stride` specifies the byte stride from one edge flag to the next, allowing vertices and attributes to be packed into a single array or stored in separate arrays.

See **external** documentation.

`arrayElement(I) -> ok`

Types:

**`I = integer()`**

Render a vertex using the specified vertex array element

`gl:arrayElement` commands are used within *gl:'begin'/1* / *gl:'begin'/1* pairs to specify vertex and attribute data for point, line, and polygon primitives. If `?GL_VERTEX_ARRAY` is enabled when `gl:arrayElement` is called, a single

vertex is drawn, using vertex and attribute data taken from location `I` of the enabled arrays. If `?GL_VERTEX_ARRAY` is not enabled, no drawing occurs but the attributes corresponding to the enabled arrays are modified.

See **external** documentation.

```
drawArrays(Mode, First, Count) -> ok
```

Types:

**`Mode = enum()`**
**`First = integer()`**
**`Count = integer()`**

Render primitives from array data

`gl:drawArrays` specifies multiple geometric primitives with very few subroutine calls. Instead of calling a GL procedure to pass each individual vertex, normal, texture coordinate, edge flag, or color, you can prespecify separate arrays of vertices, normals, and colors and use them to construct a sequence of primitives with a single call to `gl:drawArrays` .

See **external** documentation.

```
drawElements(Mode, Count, Type, Indices) -> ok
```

Types:

**`Mode = enum()`**
**`Count = integer()`**
**`Type = enum()`**
**`Indices = offset() | mem()`**

Render primitives from array data

`gl:drawElements` specifies multiple geometric primitives with very few subroutine calls. Instead of calling a GL function to pass each individual vertex, normal, texture coordinate, edge flag, or color, you can prespecify separate arrays of vertices, normals, and so on, and use them to construct a sequence of primitives with a single call to `gl:drawElements` .

See **external** documentation.

```
interleavedArrays(Format, Stride, Pointer) -> ok
```

Types:

**`Format = enum()`**
**`Stride = integer()`**
**`Pointer = offset() | mem()`**

Simultaneously specify and enable several interleaved arrays

`gl:interleavedArrays` lets you specify and enable individual color, normal, texture and vertex arrays whose elements are part of a larger aggregate array element. For some implementations, this is more efficient than specifying the arrays separately.

See **external** documentation.

```
shadeModel(Mode) -> ok
```

Types:

**`Mode = enum()`**

Select flat or smooth shading

GL primitives can have either flat or smooth shading. Smooth shading, the default, causes the computed colors of vertices to be interpolated as the primitive is rasterized, typically assigning different colors to each resulting pixel fragment. Flat shading selects the computed color of just one vertex and assigns it to all the pixel fragments generated by rasterizing a single primitive. In either case, the computed color of a vertex is the result of lighting if lighting is enabled, or it is the current color at the time the vertex was specified if lighting is disabled.

See **external** documentation.

```
lightf(Light, Pname, Param) -> ok
```

Types:

**Light = *enum()***
**Pname = *enum()***
**Param = float()**

Set light source parameters

`gl:light` sets the values of individual light source parameters. `Light` names the light and is a symbolic name of the form `?GL_LIGHT` i, where i ranges from 0 to the value of `?GL_MAX_LIGHTS` - 1. `Pname` specifies one of ten light source parameters, again by symbolic name. `Params` is either a single value or a pointer to an array that contains the new values.

See **external** documentation.

```
lighti(Light, Pname, Param) -> ok
```

Types:

**Light = *enum()***
**Pname = *enum()***
**Param = integer()**

See *lightf/3*

```
lightfv(Light, Pname, Params) -> ok
```

Types:

**Light = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *lightf/3*

```
lightiv(Light, Pname, Params) -> ok
```

Types:

**Light = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *lightf/3*

```
getLightfv(Light, Pname) -> {float(), float(), float(), float()}
```

Types:

**Light = *enum()***

**Pname = *enum()***

Return light source parameter values

`gl:getLight` returns in `Params` the value or values of a light source parameter. `Light` names the light and is a symbolic name of the form `?GL_LIGHT` i where i ranges from 0 to the value of `?GL_MAX_LIGHTS` - 1. `?GL_MAX_LIGHTS` is an implementation dependent constant that is greater than or equal to eight. `Pname` specifies one of ten light source parameters, again by symbolic name.

See **external** documentation.

```
getLightiv(Light, Pname) -> {integer(), integer(), integer(), integer()}
```

Types:

**Light = *enum()***
**Pname = *enum()***

See *getLightfv/2*

```
lightModelf(Pname, Param) -> ok
```

Types:

**Pname = *enum()***
**Param = float()**

Set the lighting model parameters

`gl:lightModel` sets the lighting model parameter. `Pname` names a parameter and `Params` gives the new value. There are three lighting model parameters:

See **external** documentation.

```
lightModeli(Pname, Param) -> ok
```

Types:

**Pname = *enum()***
**Param = integer()**

See *lightModelf/2*

```
lightModelfv(Pname, Params) -> ok
```

Types:

**Pname = *enum()***
**Params = tuple()**

See *lightModelf/2*

```
lightModeliv(Pname, Params) -> ok
```

Types:

**Pname = *enum()***
**Params = tuple()**

See *lightModelf/2*

```
materialf(Face, Pname, Param) -> ok
```

Types:

**Face = *enum()***
**Pname = *enum()***
**Param = float()**

Specify material parameters for the lighting model

`gl:material` assigns values to material parameters. There are two matched sets of material parameters. One, the `front-facing` set, is used to shade points, lines, bitmaps, and all polygons (when two-sided lighting is disabled), or just front-facing polygons (when two-sided lighting is enabled). The other set, `back-facing`, is used to shade back-facing polygons only when two-sided lighting is enabled. Refer to the *gl:lightModelf/2* reference page for details concerning one- and two-sided lighting calculations.

See **external** documentation.

`materiali(Face, Pname, Param) -> ok`

Types:

**Face = *enum()***
**Pname = *enum()***
**Param = integer()**

See *materialf/3*

`materialfv(Face, Pname, Params) -> ok`

Types:

**Face = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *materialf/3*

`materialiv(Face, Pname, Params) -> ok`

Types:

**Face = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *materialf/3*

`getMaterialfv(Face, Pname) -> {float(), float(), float(), float()}`

Types:

**Face = *enum()***
**Pname = *enum()***

Return material parameters

`gl:getMaterial` returns in `Params` the value or values of parameter `Pname` of material `Face` . Six parameters are defined:

See **external** documentation.

`getMaterialiv(Face, Pname) -> {integer(), integer(), integer(), integer()}`

Types:

**Face = *enum()***
**Pname = *enum()***

See *getMaterialfv/2*

`colorMaterial(Face, Mode) -> ok`

Types:

**Face = *enum()***
**Mode = *enum()***

Cause a material color to track the current color

`gl:colorMaterial` specifies which material parameters track the current color. When `?GL_COLOR_MATERIAL` is enabled, the material parameter or parameters specified by `Mode` , of the material or materials specified by `Face` , track the current color at all times.

See **external** documentation.

`pixelZoom(Xfactor, Yfactor) -> ok`

Types:

**Xfactor = float()**
**Yfactor = float()**

Specify the pixel zoom factors

`gl:pixelZoom` specifies values for the x and y zoom factors. During the execution of *gl:drawPixels/5* or *gl:copyPixels/5* , if ( xr, yr) is the current raster position, and a given element is in the mth row and nth column of the pixel rectangle, then pixels whose centers are in the rectangle with corners at

See **external** documentation.

`pixelStoref(Pname, Param) -> ok`

Types:

**Pname = *enum()***
**Param = float()**

Set pixel storage modes

`gl:pixelStore` sets pixel storage modes that affect the operation of subsequent *gl:readPixels/7* as well as the unpacking of texture patterns (see *gl:texImage1D/8* , *gl:texImage2D/9* , *gl:texImage3D/10* , *gl:texSubImage1D/7* , *gl:texSubImage1D/7* , *gl:texSubImage1D/7* ), *gl:compressedTexImage1D/7* , *gl:compressedTexImage2D/8* , *gl:compressedTexImage3D/9* , *gl:compressedTexSubImage1D/7* , *gl:compressedTexSubImage2D/9* or *gl:compressedTexSubImage1D/7* .

See **external** documentation.

`pixelStorei(Pname, Param) -> ok`

Types:

**Pname = *enum()***
**Param = integer()**

See *pixelStoref/2*

```
pixelTransferf(Pname, Param) -> ok
```

Types:

**Pname = *enum()***

**Param = float()**

Set pixel transfer modes

`gl:pixelTransfer` sets pixel transfer modes that affect the operation of subsequent *gl:copyPixels/5* , *gl:copyTexImage1D/7* , *gl:copyTexImage2D/8* , *gl:copyTexSubImage1D/6* , *gl:copyTexSubImage2D/8* , *gl:copyTexSubImage3D/9* , *gl:drawPixels/5* , *gl:readPixels/7* , *gl:texImage1D/8* , *gl:texImage2D/9* , *gl:texImage3D/10* , *gl:texSubImage1D/7* , *gl:texSubImage1D/7* , and *gl:texSubImage1D/7* commands. Additionally, if the ARB_imaging subset is supported, the routines *gl:colorTable/6* , *gl:colorSubTable/6* , *gl:convolutionFilter1D/6* , *gl:convolutionFilter2D/7* , *gl:histogram/4* , *gl:minmax/3* , and *gl:separableFilter2D/8* are also affected. The algorithms that are specified by pixel transfer modes operate on pixels after they are read from the frame buffer ( *gl:copyPixels/5* *gl:copyTexImage1D/7* , *gl:copyTexImage2D/8* , *gl:copyTexSubImage1D/6* , *gl:copyTexSubImage2D/8* , *gl:copyTexSubImage3D/9* , and *gl:readPixels/7* ), or unpacked from client memory ( *gl:drawPixels/5* , *gl:texImage1D/8* , *gl:texImage2D/9* , *gl:texImage3D/10* , *gl:texSubImage1D/7* , *gl:texSubImage1D/7* , and *gl:texSubImage1D/7* ). Pixel transfer operations happen in the same order, and in the same manner, regardless of the command that resulted in the pixel operation. Pixel storage modes (see *gl:pixelStoref/2* ) control the unpacking of pixels being read from client memory and the packing of pixels being written back into client memory.

See **external** documentation.

```
pixelTransferi(Pname, Param) -> ok
```

Types:

**Pname = *enum()***

**Param = integer()**

See *pixelTransferf/2*

```
pixelMapfv(Map, Mapsize, Values) -> ok
```

Types:

**Map = *enum()***

**Mapsize = integer()**

**Values = binary()**

Set up pixel transfer maps

`gl:pixelMap` sets up translation tables, or `maps`, used by *gl:copyPixels/5* , *gl:copyTexImage1D/7* , *gl:copyTexImage2D/8* , *gl:copyTexSubImage1D/6* , *gl:copyTexSubImage2D/8* , *gl:copyTexSubImage3D/9* , *gl:drawPixels/5* , *gl:readPixels/7* , *gl:texImage1D/8* , *gl:texImage2D/9* , *gl:texImage3D/10* , *gl:texSubImage1D/7* , *gl:texSubImage1D/7* , and *gl:texSubImage1D/7* . Additionally, if the ARB_imaging subset is supported, the routines *gl:colorTable/6* , *gl:colorSubTable/6* , *gl:convolutionFilter1D/6* , *gl:convolutionFilter2D/7* , *gl:histogram/4* , *gl:minmax/3* , and *gl:separableFilter2D/8* . Use of these maps is described completely in the *gl:pixelTransferf/2* reference page, and partly in the reference pages for the pixel and texture image commands. Only the specification of the maps is described in this reference page.

See **external** documentation.

```
pixelMapuiv(Map, Mapsize, Values) -> ok
```

Types:

**Map = *enum()***

**Mapsize = integer()**

**Values = binary()**

See *pixelMapfv/3*

`pixelMapusv(Map, Mapsize, Values) -> ok`

Types:

**Map = *enum()***
**Mapsize = integer()**
**Values = binary()**

See *pixelMapfv/3*

`getPixelMapfv(Map, Values) -> ok`

Types:

**Map = *enum()***
**Values = *mem()***

Return the specified pixel map

See the *gl:pixelMapfv/3* reference page for a description of the acceptable values for the `Map` parameter. `gl:getPixelMap` returns in `Data` the contents of the pixel map specified in `Map` . Pixel maps are used during the execution of *gl:readPixels/7* , *gl:drawPixels/5* , *gl:copyPixels/5* , *gl:texImage1D/8* , *gl:texImage2D/9* , *gl:texImage3D/10* , *gl:texSubImage1D/7* , *gl:texSubImage1D/7* , *gl:texSubImage1D/7* , *gl:copyTexImage1D/7* , *gl:copyTexImage2D/8* , *gl:copyTexSubImage1D/6* , *gl:copyTexSubImage2D/8* , and *gl:copyTexSubImage3D/9* . to map color indices, stencil indices, color components, and depth components to other values.

See **external** documentation.

`getPixelMapuiv(Map, Values) -> ok`

Types:

**Map = *enum()***
**Values = *mem()***

See *getPixelMapfv/2*

`getPixelMapusv(Map, Values) -> ok`

Types:

**Map = *enum()***
**Values = *mem()***

See *getPixelMapfv/2*

`bitmap(Width, Height, Xorig, Yorig, Xmove, Ymove, Bitmap) -> ok`

Types:

**Width = integer()**
**Height = integer()**
**Xorig = float()**
**Yorig = float()**
**Xmove = float()**
**Ymove = float()**

**Bitmap = *offset() | mem()***

Draw a bitmap

A bitmap is a binary image. When drawn, the bitmap is positioned relative to the current raster position, and frame buffer pixels corresponding to 1's in the bitmap are written using the current raster color or index. Frame buffer pixels corresponding to 0's in the bitmap are not modified.

See **external** documentation.

`readPixels(X, Y, Width, Height, Format, Type, Pixels) -> ok`

Types:

**X = integer()**
**Y = integer()**
**Width = integer()**
**Height = integer()**
**Format = *enum()***
**Type = *enum()***
**Pixels = *mem()***

Read a block of pixels from the frame buffer

`gl:readPixels` returns pixel data from the frame buffer, starting with the pixel whose lower left corner is at location ( `X` , `Y` ), into client memory starting at location `Data` . Several parameters control the processing of the pixel data before it is placed into client memory. These parameters are set with *gl:pixelStoref/2* . This reference page describes the effects on `gl:readPixels` of most, but not all of the parameters specified by these three commands.

See **external** documentation.

`drawPixels(Width, Height, Format, Type, Pixels) -> ok`

Types:

**Width = integer()**
**Height = integer()**
**Format = *enum()***
**Type = *enum()***
**Pixels = *offset() | mem()***

Write a block of pixels to the frame buffer

`gl:drawPixels` reads pixel data from memory and writes it into the frame buffer relative to the current raster position, provided that the raster position is valid. Use *gl:rasterPos2d/2* or *gl:windowPos2d/2* to set the current raster position; use *gl:getBooleanv/1* with argument `?GL_CURRENT_RASTER_POSITION_VALID` to determine if the specified raster position is valid, and *gl:getBooleanv/1* with argument `?GL_CURRENT_RASTER_POSITION` to query the raster position.

See **external** documentation.

`copyPixels(X, Y, Width, Height, Type) -> ok`

Types:

**X = integer()**
**Y = integer()**
**Width = integer()**

**Height = integer()**
**Type = *enum()***

Copy pixels in the frame buffer

`gl:copyPixels` copies a screen-aligned rectangle of pixels from the specified frame buffer location to a region relative to the current raster position. Its operation is well defined only if the entire pixel source region is within the exposed portion of the window. Results of copies from outside the window, or from regions of the window that are not exposed, are hardware dependent and undefined.

See **external** documentation.

`stencilFunc(Func, Ref, Mask) -> ok`

Types:

**Func = *enum()***
**Ref = integer()**
**Mask = integer()**

Set front and back function and reference value for stencil testing

Stenciling, like depth-buffering, enables and disables drawing on a per-pixel basis. Stencil planes are first drawn into using GL drawing primitives, then geometry and images are rendered using the stencil planes to mask out portions of the screen. Stenciling is typically used in multipass rendering algorithms to achieve special effects, such as decals, outlining, and constructive solid geometry rendering.

See **external** documentation.

`stencilMask(Mask) -> ok`

Types:

**Mask = integer()**

Control the front and back writing of individual bits in the stencil planes

`gl:stencilMask` controls the writing of individual bits in the stencil planes. The least significant n bits of `Mask` , where n is the number of bits in the stencil buffer, specify a mask. Where a 1 appears in the mask, it's possible to write to the corresponding bit in the stencil buffer. Where a 0 appears, the corresponding bit is write-protected. Initially, all bits are enabled for writing.

See **external** documentation.

`stencilOp(Fail, Zfail, Zpass) -> ok`

Types:

**Fail = *enum()***
**Zfail = *enum()***
**Zpass = *enum()***

Set front and back stencil test actions

Stenciling, like depth-buffering, enables and disables drawing on a per-pixel basis. You draw into the stencil planes using GL drawing primitives, then render geometry and images, using the stencil planes to mask out portions of the screen. Stenciling is typically used in multipass rendering algorithms to achieve special effects, such as decals, outlining, and constructive solid geometry rendering.

See **external** documentation.

```
clearStencil(S) -> ok
```

Types:

**S = integer()**

Specify the clear value for the stencil buffer

`gl:clearStencil` specifies the index used by *gl:clear/1* to clear the stencil buffer. `S` is masked with 2 m-1, where m is the number of bits in the stencil buffer.

See **external** documentation.

```
texGend(Coord, Pname, Param) -> ok
```

Types:

**Coord = *enum()***
**Pname = *enum()***
**Param = float()**

Control the generation of texture coordinates

`gl:texGen` selects a texture-coordinate generation function or supplies coefficients for one of the functions. `Coord` names one of the (`s`, `t`, `r`, `q` ) texture coordinates; it must be one of the symbols `?GL_S`, `?GL_T`, `?GL_R` , or `?GL_Q`. `Pname` must be one of three symbolic constants: `?GL_TEXTURE_GEN_MODE` , `?GL_OBJECT_PLANE`, or `?GL_EYE_PLANE`. If `Pname` is `?GL_TEXTURE_GEN_MODE` , then `Params` chooses a mode, one of `?GL_OBJECT_LINEAR`, `?GL_EYE_LINEAR` , `?GL_SPHERE_MAP`, `?GL_NORMAL_MAP`, or `?GL_REFLECTION_MAP`. If `Pname` is either `?GL_OBJECT_PLANE` or `?GL_EYE_PLANE`, `Params` contains coefficients for the corresponding texture generation function.

See **external** documentation.

```
texGenf(Coord, Pname, Param) -> ok
```

Types:

**Coord = *enum()***
**Pname = *enum()***
**Param = float()**

See *texGend/3*

```
texGeni(Coord, Pname, Param) -> ok
```

Types:

**Coord = *enum()***
**Pname = *enum()***
**Param = integer()**

See *texGend/3*

```
texGendv(Coord, Pname, Params) -> ok
```

Types:

**Coord = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *texGend/3*

```
texGenfv(Coord, Pname, Params) -> ok
```

Types:

**Coord = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *texGend/3*

```
texGeniv(Coord, Pname, Params) -> ok
```

Types:

**Coord = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *texGend/3*

```
getTexGendv(Coord, Pname) -> {float(), float(), float(), float()}
```

Types:

**Coord = *enum()***
**Pname = *enum()***

Return texture coordinate generation parameters

`gl:getTexGen` returns in `Params` selected parameters of a texture coordinate generation function that was specified using *gl:texGend/3* . `Coord` names one of the (`s`, `t`, `r`, `q`) texture coordinates, using the symbolic constant `?GL_S`, `?GL_T`, `?GL_R`, or `?GL_Q`.

See **external** documentation.

```
getTexGenfv(Coord, Pname) -> {float(), float(), float(), float()}
```

Types:

**Coord = *enum()***
**Pname = *enum()***

See *getTexGendv/2*

```
getTexGeniv(Coord, Pname) -> {integer(), integer(), integer(), integer()}
```

Types:

**Coord = *enum()***
**Pname = *enum()***

See *getTexGendv/2*

```
texEnvf(Target, Pname, Param) -> ok
```

Types:

**Target = *enum()***
**Pname = *enum()***
**Param = float()**

glTexEnvf

See *external* documentation.

```
texEnvi(Target, Pname, Param) -> ok
```

Types:

**Target = *enum()***
**Pname = *enum()***
**Param = integer()**

glTexEnvi

See *external* documentation.

```
texEnvfv(Target, Pname, Params) -> ok
```

Types:

**Target = *enum()***
**Pname = *enum()***
**Params = tuple()**

Set texture environment parameters

A texture environment specifies how texture values are interpreted when a fragment is textured. When `Target` is `?GL_TEXTURE_FILTER_CONTROL`, `Pname` must be `?GL_TEXTURE_LOD_BIAS` . When `Target` is `?GL_TEXTURE_ENV`, `Pname` can be `?GL_TEXTURE_ENV_MODE` , `?GL_TEXTURE_ENV_COLOR`, `?GL_COMBINE_RGB`, `?GL_COMBINE_ALPHA`, `?GL_RGB_SCALE` , `?GL_ALPHA_SCALE`, `?GL_SRC0_RGB`, `?GL_SRC1_RGB`, `?GL_SRC2_RGB`, `?GL_SRC0_ALPHA` , `?GL_SRC1_ALPHA`, or `?GL_SRC2_ALPHA`.

See **external** documentation.

```
texEnviv(Target, Pname, Params) -> ok
```

Types:

**Target = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *texEnvfv/3*

```
getTexEnvfv(Target, Pname) -> {float(), float(), float(), float()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

Return texture environment parameters

`gl:getTexEnv` returns in `Params` selected values of a texture environment that was specified with *gl:texEnvfv/3* . `Target` specifies a texture environment.

See **external** documentation.

```
getTexEnviv(Target, Pname) -> {integer(), integer(), integer(), integer()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

See *getTexEnvfv/2*

```
texParameterf(Target, Pname, Param) -> ok
```

Types:

**Target = *enum()***
**Pname = *enum()***
**Param = float()**

Set texture parameters

`gl:texParameter` assigns the value or values in `Params` to the texture parameter specified as `Pname` . `Target` defines the target texture, either `?GL_TEXTURE_1D` , `?GL_TEXTURE_2D`, `?GL_TEXTURE_1D_ARRAY`, `?GL_TEXTURE_2D_ARRAY`, `?GL_TEXTURE_RECTANGLE` , or `?GL_TEXTURE_3D`. The following symbols are accepted in `Pname` :

See **external** documentation.

```
texParameteri(Target, Pname, Param) -> ok
```

Types:

**Target = *enum()***
**Pname = *enum()***
**Param = integer()**

See *texParameterf/3*

```
texParameterfv(Target, Pname, Params) -> ok
```

Types:

**Target = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *texParameterf/3*

```
texParameteriv(Target, Pname, Params) -> ok
```

Types:

**Target = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *texParameterf/3*

```
getTexParameterfv(Target, Pname) -> {float(), float(), float(), float()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

Return texture parameter values

`gl:getTexParameter` returns in `Params` the value or values of the texture parameter specified as `Pname` . `Target` defines the target texture. `?GL_TEXTURE_1D`, `?GL_TEXTURE_2D`, `?GL_TEXTURE_3D`, `?GL_TEXTURE_1D_ARRAY`, `?GL_TEXTURE_2D_ARRAY` , `?GL_TEXTURE_RECTANGLE`, `?GL_TEXTURE_CUBE_MAP`, `?GL_TEXTURE_CUBE_MAP_ARRAY` specify one-, two-, or three-dimensional, one-dimensional array, two-dimensional array, rectangle, cube-mapped or cube-mapped array texturing, respectively. `Pname` accepts the same symbols as *gl:texParameterf/3* , with the same interpretations:

See **external** documentation.

```
getTexParameteriv(Target, Pname) -> {integer(), integer(), integer(),
integer()}
```

Types:

**Target = *enum()***

**Pname = *enum()***

See *getTexParameterfv/2*

```
getTexLevelParameterfv(Target, Level, Pname) -> {float()}
```

Types:

**Target = *enum()***

**Level = integer()**

**Pname = *enum()***

Return texture parameter values for a specific level of detail

`gl:getTexLevelParameter` returns in `Params` texture parameter values for a specific level-of-detail value, specified as `Level` . `Target` defines the target texture, either `?GL_TEXTURE_1D`, `?GL_TEXTURE_2D`, `?GL_TEXTURE_3D`, `?GL_PROXY_TEXTURE_1D` , `?GL_PROXY_TEXTURE_2D`, `?GL_PROXY_TEXTURE_3D`, `?GL_TEXTURE_CUBE_MAP_POSITIVE_X` , `?GL_TEXTURE_CUBE_MAP_NEGATIVE_X`, `?GL_TEXTURE_CUBE_MAP_POSITIVE_Y`, `?GL_TEXTURE_CUBE_MAP_NEGATIVE_Y` , `?GL_TEXTURE_CUBE_MAP_POSITIVE_Z`, `?GL_TEXTURE_CUBE_MAP_NEGATIVE_Z`, or `?GL_PROXY_TEXTURE_CUBE_MAP` .

See **external** documentation.

```
getTexLevelParameteriv(Target, Level, Pname) -> {integer()}
```

Types:

**Target = *enum()***

**Level = integer()**

**Pname = *enum()***

See *getTexLevelParameterfv/3*

```
texImage1D(Target, Level, InternalFormat, Width, Border, Format, Type,
Pixels) -> ok
```

Types:

**Target = *enum()***

**Level = integer()**

**InternalFormat = integer()**

**Width = integer()**

**Border = integer()**

**Format = *enum()***

**Type = *enum()***

**Pixels = *offset()* | *mem()***

Specify a one-dimensional texture image

Texturing maps a portion of a specified texture image onto each graphical primitive for which texturing is enabled. To enable and disable one-dimensional texturing, call *gl:enable/1* and *gl:enable/1* with argument `?GL_TEXTURE_1D`.

See **external** documentation.

```
texImage2D(Target, Level, InternalFormat, Width, Height, Border, Format,
Type, Pixels) -> ok
```

Types:

**`Target = enum()`**
**`Level = integer()`**
**`InternalFormat = integer()`**
**`Width = integer()`**
**`Height = integer()`**
**`Border = integer()`**
**`Format = enum()`**
**`Type = enum()`**
**`Pixels = offset() | mem()`**

Specify a two-dimensional texture image

Texturing allows elements of an image array to be read by shaders.

See **external** documentation.

```
getTexImage(Target, Level, Format, Type, Pixels) -> ok
```

Types:

**`Target = enum()`**
**`Level = integer()`**
**`Format = enum()`**
**`Type = enum()`**
**`Pixels = mem()`**

Return a texture image

`gl:getTexImage` returns a texture image into `Img` . `Target` specifies whether the desired texture image is one specified by *gl:texImage1D/8* (`?GL_TEXTURE_1D` ), *gl:texImage2D/9* (`?GL_TEXTURE_1D_ARRAY`, `?GL_TEXTURE_RECTANGLE`, `?GL_TEXTURE_2D` or any of `?GL_TEXTURE_CUBE_MAP_*`), or *gl:texImage3D/10* (`?GL_TEXTURE_2D_ARRAY` , `?GL_TEXTURE_3D`). `Level` specifies the level-of-detail number of the desired image. `Format` and `Type` specify the format and type of the desired image array. See the reference page for *gl:texImage1D/8* for a description of the acceptable values for the `Format` and `Type` parameters, respectively.

See **external** documentation.

```
genTextures(N) -> [integer()]
```

Types:

**`N = integer()`**

Generate texture names

`gl:genTextures` returns `N` texture names in `Textures` . There is no guarantee that the names form a contiguous set of integers; however, it is guaranteed that none of the returned names was in use immediately before the call to `gl:genTextures`.

See **external** documentation.

`deleteTextures(Textures) -> ok`

Types:

**`Textures = [integer()]`**

Delete named textures

`gl:deleteTextures` deletes `N` textures named by the elements of the array `Textures` . After a texture is deleted, it has no contents or dimensionality, and its name is free for reuse (for example by *gl:genTextures/1* ). If a texture that is currently bound is deleted, the binding reverts to 0 (the default texture).

See **external** documentation.

`bindTexture(Target, Texture) -> ok`

Types:

**`Target = enum()`**

**`Texture = integer()`**

Bind a named texture to a texturing target

`gl:bindTexture` lets you create or use a named texture. Calling `gl:bindTexture` with `Target` set to `?GL_TEXTURE_1D`, `?GL_TEXTURE_2D`, `?GL_TEXTURE_3D` , or `?GL_TEXTURE_1D_ARRAY`, `?GL_TEXTURE_2D_ARRAY`, `?GL_TEXTURE_RECTANGLE` , `?GL_TEXTURE_CUBE_MAP`, `?GL_TEXTURE_2D_MULTISAMPLE` or `?GL_TEXTURE_2D_MULTISAMPLE_ARRAY` and `Texture` set to the name of the new texture binds the texture name to the target. When a texture is bound to a target, the previous binding for that target is automatically broken.

See **external** documentation.

`prioritizeTextures(Textures, Priorities) -> ok`

Types:

**`Textures = [integer()]`**

**`Priorities = [clamp()]`**

Set texture residence priority

`gl:prioritizeTextures` assigns the `N` texture priorities given in `Priorities` to the `N` textures named in `Textures` .

See **external** documentation.

`areTexturesResident(Textures) -> {0 | 1, Residences::[0 | 1]}`

Types:

**`Textures = [integer()]`**

Determine if textures are loaded in texture memory

GL establishes a `working set` of textures that are resident in texture memory. These textures can be bound to a texture target much more efficiently than textures that are not resident.

See **external** documentation.

`isTexture(Texture) -> 0 | 1`

Types:

**Texture = integer()**

Determine if a name corresponds to a texture

`gl:isTexture` returns `?GL_TRUE` if `Texture` is currently the name of a texture. If `Texture` is zero, or is a non-zero value that is not currently the name of a texture, or if an error occurs, `gl:isTexture` returns `?GL_FALSE`.

See **external** documentation.

`texSubImage1D(Target, Level, Xoffset, Width, Format, Type, Pixels) -> ok`

Types:

**Target = *enum()***
**Level = integer()**
**Xoffset = integer()**
**Width = integer()**
**Format = *enum()***
**Type = *enum()***
**Pixels = *offset()* | *mem()***

glTexSubImage

See *external* documentation.

`texSubImage2D(Target, Level, Xoffset, Yoffset, Width, Height, Format, Type, Pixels) -> ok`

Types:

**Target = *enum()***
**Level = integer()**
**Xoffset = integer()**
**Yoffset = integer()**
**Width = integer()**
**Height = integer()**
**Format = *enum()***
**Type = *enum()***
**Pixels = *offset()* | *mem()***

glTexSubImage

See *external* documentation.

`copyTexImage1D(Target, Level, Internalformat, X, Y, Width, Border) -> ok`

Types:

**Target = *enum()***
**Level = integer()**
**Internalformat = *enum()***
**X = integer()**
**Y = integer()**
**Width = integer()**
**Border = integer()**

Copy pixels into a 1D texture image

`gl:copyTexImage1D` defines a one-dimensional texture image with pixels from the current `?GL_READ_BUFFER`.

See **external** documentation.

```
copyTexImage2D(Target, Level, Internalformat, X, Y, Width, Height, Border) ->
ok
```

Types:

**Target = *enum()***
**Level = integer()**
**Internalformat = *enum()***
**X = integer()**
**Y = integer()**
**Width = integer()**
**Height = integer()**
**Border = integer()**

Copy pixels into a 2D texture image

`gl:copyTexImage2D` defines a two-dimensional texture image, or cube-map texture image with pixels from the current `?GL_READ_BUFFER`.

See **external** documentation.

```
copyTexSubImage1D(Target, Level, Xoffset, X, Y, Width) -> ok
```

Types:

**Target = *enum()***
**Level = integer()**
**Xoffset = integer()**
**X = integer()**
**Y = integer()**
**Width = integer()**

Copy a one-dimensional texture subimage

`gl:copyTexSubImage1D` replaces a portion of a one-dimensional texture image with pixels from the current `?GL_READ_BUFFER` (rather than from main memory, as is the case for *gl:texSubImage1D/7* ).

See **external** documentation.

```
copyTexSubImage2D(Target, Level, Xoffset, Yoffset, X, Y, Width, Height) -> ok
```

Types:

**Target = *enum()***
**Level = integer()**
**Xoffset = integer()**
**Yoffset = integer()**
**X = integer()**
**Y = integer()**
**Width = integer()**
**Height = integer()**

Copy a two-dimensional texture subimage

`gl:copyTexSubImage2D` replaces a rectangular portion of a two-dimensional texture image or cube-map texture image with pixels from the current `?GL_READ_BUFFER` (rather than from main memory, as is the case for *gl:texSubImage1D/7* ).

See **external** documentation.

```
map1d(Target, U1, U2, Stride, Order, Points) -> ok
```

Types:

**Target = *enum()***
**U1 = float()**
**U2 = float()**
**Stride = integer()**
**Order = integer()**
**Points = binary()**

glMap

See *external* documentation.

```
map1f(Target, U1, U2, Stride, Order, Points) -> ok
```

Types:

**Target = *enum()***
**U1 = float()**
**U2 = float()**
**Stride = integer()**
**Order = integer()**
**Points = binary()**

glMap

See *external* documentation.

```
map2d(Target, U1, U2, Ustride, Uorder, V1, V2, Vstride, Vorder, Points) -> ok
```

Types:

**Target = *enum()***
**U1 = float()**
**U2 = float()**
**Ustride = integer()**
**Uorder = integer()**
**V1 = float()**
**V2 = float()**
**Vstride = integer()**
**Vorder = integer()**
**Points = binary()**

glMap

See *external* documentation.

```
map2f(Target, U1, U2, Ustride, Uorder, V1, V2, Vstride, Vorder, Points) -> ok
```

Types:

**Target = *enum()***
**U1 = float()**
**U2 = float()**
**Ustride = integer()**
**Uorder = integer()**
**V1 = float()**
**V2 = float()**
**Vstride = integer()**
**Vorder = integer()**
**Points = binary()**

glMap

See *external* documentation.

```
getMapdv(Target, Query, V) -> ok
```

Types:

**Target = *enum()***
**Query = *enum()***
**V = *mem()***

Return evaluator parameters

*gl:map1d/6* and *gl:map1d/6* define evaluators. `gl:getMap` returns evaluator parameters. `Target` chooses a map, `Query` selects a specific parameter, and `V` points to storage where the values will be returned.

See **external** documentation.

```
getMapfv(Target, Query, V) -> ok
```

Types:

**Target = *enum()***
**Query = *enum()***
**V = *mem()***

See *getMapdv/3*

```
getMapiv(Target, Query, V) -> ok
```

Types:

**Target = *enum()***
**Query = *enum()***
**V = *mem()***

See *getMapdv/3*

```
evalCoord1d(U) -> ok
```

Types:

**U = float()**

Evaluate enabled one- and two-dimensional maps

`gl:evalCoord1` evaluates enabled one-dimensional maps at argument `U` . `gl:evalCoord2` does the same for two-dimensional maps using two domain values, `U` and `V` . To define a map, call *gl:map1d/6* and *gl:map1d/6* ; to enable and disable it, call *gl:enable/1* and *gl:enable/1* .

See **external** documentation.

```
evalCoord1f(U) -> ok
```

Types:

**`U = float()`**

See *evalCoord1d/1*

```
evalCoord1dv(U) -> ok
```

Types:

**`U = {U::float()}`**

Equivalent to *evalCoord1d(U)*.

```
evalCoord1fv(U) -> ok
```

Types:

**`U = {U::float()}`**

Equivalent to *evalCoord1f(U)*.

```
evalCoord2d(U, V) -> ok
```

Types:

**`U = float()`**
**`V = float()`**

See *evalCoord1d/1*

```
evalCoord2f(U, V) -> ok
```

Types:

**`U = float()`**
**`V = float()`**

See *evalCoord1d/1*

```
evalCoord2dv(U) -> ok
```

Types:

**`U = {U::float(), V::float()}`**

Equivalent to *evalCoord2d(U, V)*.

```
evalCoord2fv(U) -> ok
```

Types:

**`U = {U::float(), V::float()}`**

Equivalent to *evalCoord2f(U, V)*.

```
mapGrid1d(Un, U1, U2) -> ok
```

Types:

**Un = integer()**
**U1 = float()**
**U2 = float()**

Define a one- or two-dimensional mesh

`gl:mapGrid` and *gl:evalMesh1/3* are used together to efficiently generate and evaluate a series of evenly-spaced map domain values. *gl:evalMesh1/3* steps through the integer domain of a one- or two-dimensional grid, whose range is the domain of the evaluation maps specified by *gl:map1d/6* and *gl:map1d/6* .

See **external** documentation.

```
mapGrid1f(Un, U1, U2) -> ok
```

Types:

**Un = integer()**
**U1 = float()**
**U2 = float()**

See *mapGrid1d/3*

```
mapGrid2d(Un, U1, U2, Vn, V1, V2) -> ok
```

Types:

**Un = integer()**
**U1 = float()**
**U2 = float()**
**Vn = integer()**
**V1 = float()**
**V2 = float()**

See *mapGrid1d/3*

```
mapGrid2f(Un, U1, U2, Vn, V1, V2) -> ok
```

Types:

**Un = integer()**
**U1 = float()**
**U2 = float()**
**Vn = integer()**
**V1 = float()**
**V2 = float()**

See *mapGrid1d/3*

```
evalPoint1(I) -> ok
```

Types:

**I = integer()**

Generate and evaluate a single point in a mesh

*gl:mapGrid1d/3* and *gl:evalMesh1/3* are used in tandem to efficiently generate and evaluate a series of evenly spaced map domain values. `gl:evalPoint` can be used to evaluate a single grid point in the same gridspace that is traversed by *gl:evalMesh1/3* . Calling `gl:evalPoint1` is equivalent to calling glEvalCoord1( i.Δ u+u 1 ); where Δ u=(u 2-u 1)/n

See **external** documentation.

```
evalPoint2(I, J) -> ok
```

Types:

**I = integer()**
**J = integer()**

See *evalPoint1/1*

```
evalMesh1(Mode, I1, I2) -> ok
```

Types:

**Mode = *enum()***
**I1 = integer()**
**I2 = integer()**

Compute a one- or two-dimensional grid of points or lines

*gl:mapGrid1d/3* and `gl:evalMesh` are used in tandem to efficiently generate and evaluate a series of evenly-spaced map domain values. `gl:evalMesh` steps through the integer domain of a one- or two-dimensional grid, whose range is the domain of the evaluation maps specified by *gl:map1d/6* and *gl:map1d/6* . `Mode` determines whether the resulting vertices are connected as points, lines, or filled polygons.

See **external** documentation.

```
evalMesh2(Mode, I1, I2, J1, J2) -> ok
```

Types:

**Mode = *enum()***
**I1 = integer()**
**I2 = integer()**
**J1 = integer()**
**J2 = integer()**

See *evalMesh1/3*

```
fogf(Pname, Param) -> ok
```

Types:

**Pname = *enum()***
**Param = float()**

Specify fog parameters

Fog is initially disabled. While enabled, fog affects rasterized geometry, bitmaps, and pixel blocks, but not buffer clear operations. To enable and disable fog, call *gl:enable/1* and *gl:enable/1* with argument `?GL_FOG`.

See **external** documentation.

```
fogi(Pname, Param) -> ok
```

Types:

**Pname = *enum()***
**Param = integer()**

See *fogf/2*

```
fogfv(Pname, Params) -> ok
```

Types:

**Pname = *enum()***
**Params = tuple()**

See *fogf/2*

```
fogiv(Pname, Params) -> ok
```

Types:

**Pname = *enum()***
**Params = tuple()**

See *fogf/2*

```
feedbackBuffer(Size, Type, Buffer) -> ok
```

Types:

**Size = integer()**
**Type = *enum()***
**Buffer = *mem()***

Controls feedback mode

The `gl:feedbackBuffer` function controls feedback. Feedback, like selection, is a GL mode. The mode is selected by calling *gl:renderMode/1* with `?GL_FEEDBACK`. When the GL is in feedback mode, no pixels are produced by rasterization. Instead, information about primitives that would have been rasterized is fed back to the application using the GL.

See **external** documentation.

```
passThrough(Token) -> ok
```

Types:

**Token = float()**

Place a marker in the feedback buffer

See **external** documentation.

```
selectBuffer(Size, Buffer) -> ok
```

Types:

**Size = integer()**
**Buffer = *mem()***

Establish a buffer for selection mode values

`gl:selectBuffer` has two arguments: `Buffer` is a pointer to an array of unsigned integers, and `Size` indicates the size of the array. `Buffer` returns values from the name stack (see *gl:initNames/0* , *gl:loadName/1* , *gl:pushName/1*

) when the rendering mode is ?GL_SELECT (see *gl:renderMode/1* ). gl:selectBuffer must be issued before selection mode is enabled, and it must not be issued while the rendering mode is ?GL_SELECT.

See **external** documentation.

```
initNames() -> ok
```

Initialize the name stack

The name stack is used during selection mode to allow sets of rendering commands to be uniquely identified. It consists of an ordered set of unsigned integers. gl:initNames causes the name stack to be initialized to its default empty state.

See **external** documentation.

```
loadName(Name) -> ok
```

Types:

**Name = integer()**

Load a name onto the name stack

The name stack is used during selection mode to allow sets of rendering commands to be uniquely identified. It consists of an ordered set of unsigned integers and is initially empty.

See **external** documentation.

```
pushName(Name) -> ok
```

Types:

**Name = integer()**

Push and pop the name stack

The name stack is used during selection mode to allow sets of rendering commands to be uniquely identified. It consists of an ordered set of unsigned integers and is initially empty.

See **external** documentation.

```
popName() -> ok
```

See *pushName/1*

```
blendColor(Red, Green, Blue, Alpha) -> ok
```

Types:

**Red = *clamp()***
**Green = *clamp()***
**Blue = *clamp()***
**Alpha = *clamp()***

Set the blend color

The ?GL_BLEND_COLOR may be used to calculate the source and destination blending factors. The color components are clamped to the range [0 1] before being stored. See *gl:blendFunc/2* for a complete description of the blending operations. Initially the ?GL_BLEND_COLOR is set to (0, 0, 0, 0).

See **external** documentation.

```
blendEquation(Mode) -> ok
```

Types:

**Mode = *enum()***

Specify the equation used for both the RGB blend equation and the Alpha blend equation

The blend equations determine how a new pixel (the "source" color) is combined with a pixel already in the framebuffer (the "destination" color). This function sets both the RGB blend equation and the alpha blend equation to a single equation. `gl:blendEquationi` specifies the blend equation for a single draw buffer whereas `gl:blendEquation` sets the blend equation for all draw buffers.

See **external** documentation.

```
drawRangeElements(Mode, Start, End, Count, Type, Indices) -> ok
```

Types:

**Mode = *enum()***
**Start = integer()**
**End = integer()**
**Count = integer()**
**Type = *enum()***
**Indices = *offset()* | *mem()***

Render primitives from array data

`gl:drawRangeElements` is a restricted form of *gl:drawElements/4* . `Mode` , `Start` , `End` , and `Count` match the corresponding arguments to *gl:drawElements/4* , with the additional constraint that all values in the arrays `Count` must lie between `Start` and `End` , inclusive.

See **external** documentation.

```
texImage3D(Target, Level, InternalFormat, Width, Height, Depth, Border,
Format, Type, Pixels) -> ok
```

Types:

**Target = *enum()***
**Level = integer()**
**InternalFormat = integer()**
**Width = integer()**
**Height = integer()**
**Depth = integer()**
**Border = integer()**
**Format = *enum()***
**Type = *enum()***
**Pixels = *offset()* | *mem()***

Specify a three-dimensional texture image

Texturing maps a portion of a specified texture image onto each graphical primitive for which texturing is enabled. To enable and disable three-dimensional texturing, call *gl:enable/1* and *gl:enable/1* with argument `?GL_TEXTURE_3D`.

See **external** documentation.

```
texSubImage3D(Target, Level, Xoffset, Yoffset, Zoffset, Width, Height, Depth,
Format, Type, Pixels) -> ok
```

Types:

**Target = *enum()***
**Level = integer()**
**Xoffset = integer()**
**Yoffset = integer()**
**Zoffset = integer()**
**Width = integer()**
**Height = integer()**
**Depth = integer()**
**Format = *enum()***
**Type = *enum()***
**Pixels = *offset()* | *mem()***

glTexSubImage

See *external* documentation.

```
copyTexSubImage3D(Target, Level, Xoffset, Yoffset, Zoffset, X, Y, Width,
Height) -> ok
```

Types:

**Target = *enum()***
**Level = integer()**
**Xoffset = integer()**
**Yoffset = integer()**
**Zoffset = integer()**
**X = integer()**
**Y = integer()**
**Width = integer()**
**Height = integer()**

Copy a three-dimensional texture subimage

`gl:copyTexSubImage3D` replaces a rectangular portion of a three-dimensional texture image with pixels from the current `?GL_READ_BUFFER` (rather than from main memory, as is the case for *gl:texSubImage1D/7* ).

See **external** documentation.

```
colorTable(Target, Internalformat, Width, Format, Type, Table) -> ok
```

Types:

**Target = *enum()***
**Internalformat = *enum()***
**Width = integer()**
**Format = *enum()***
**Type = *enum()***
**Table = *offset()* | *mem()***

Define a color lookup table

gl:colorTable may be used in two ways: to test the actual size and color resolution of a lookup table given a particular set of parameters, or to load the contents of a color lookup table. Use the targets ?GL_PROXY_* for the first case and the other targets for the second case.

See **external** documentation.

colorTableParameterfv(Target, Pname, Params) -> ok

Types:

**Target = *enum()***
**Pname = *enum()***
**Params = {float(), float(), float(), float()}**

Set color lookup table parameters

gl:colorTableParameter is used to specify the scale factors and bias terms applied to color components when they are loaded into a color table. Target indicates which color table the scale and bias terms apply to; it must be set to ?GL_COLOR_TABLE, ?GL_POST_CONVOLUTION_COLOR_TABLE , or ?GL_POST_COLOR_MATRIX_COLOR_TABLE.

See **external** documentation.

colorTableParameteriv(Target, Pname, Params) -> ok

Types:

**Target = *enum()***
**Pname = *enum()***
**Params = {integer(), integer(), integer(), integer()}**

See *colorTableParameterfv/3*

copyColorTable(Target, Internalformat, X, Y, Width) -> ok

Types:

**Target = *enum()***
**Internalformat = *enum()***
**X = integer()**
**Y = integer()**
**Width = integer()**

Copy pixels into a color table

gl:copyColorTable loads a color table with pixels from the current ?GL_READ_BUFFER (rather than from main memory, as is the case for *gl:colorTable/6* ).

See **external** documentation.

getColorTable(Target, Format, Type, Table) -> ok

Types:

**Target = *enum()***
**Format = *enum()***
**Type = *enum()***
**Table = *mem()***

Retrieve contents of a color lookup table

`gl:getColorTable` returns in `Table` the contents of the color table specified by `Target` . No pixel transfer operations are performed, but pixel storage modes that are applicable to *gl:readPixels/7* are performed.

See **external** documentation.

```
getColorTableParameterfv(Target, Pname) -> {float(), float(), float(),
float()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

Get color lookup table parameters

Returns parameters specific to color table `Target` .

See **external** documentation.

```
getColorTableParameteriv(Target, Pname) -> {integer(), integer(), integer(),
integer()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

See *getColorTableParameterfv/2*

```
colorSubTable(Target, Start, Count, Format, Type, Data) -> ok
```

Types:

**Target = *enum()***
**Start = integer()**
**Count = integer()**
**Format = *enum()***
**Type = *enum()***
**Data = *offset()* | *mem()***

Respecify a portion of a color table

`gl:colorSubTable` is used to respecify a contiguous portion of a color table previously defined using *gl:colorTable/6* . The pixels referenced by `Data` replace the portion of the existing table from indices `Start` to start +count-1, inclusive. This region may not include any entries outside the range of the color table as it was originally specified. It is not an error to specify a subtexture with width of 0, but such a specification has no effect.

See **external** documentation.

```
copyColorSubTable(Target, Start, X, Y, Width) -> ok
```

Types:

**Target = *enum()***
**Start = integer()**
**X = integer()**
**Y = integer()**
**Width = integer()**

Respecify a portion of a color table

`gl:copyColorSubTable` is used to respecify a contiguous portion of a color table previously defined using *gl:colorTable/6* . The pixels copied from the framebuffer replace the portion of the existing table from indices `Start` to start+x-1, inclusive. This region may not include any entries outside the range of the color table, as was originally specified. It is not an error to specify a subtexture with width of 0, but such a specification has no effect.

See **external** documentation.

```
convolutionFilter1D(Target, Internalformat, Width, Format, Type, Image) -> ok
```

Types:

**Target = *enum()***
**Internalformat = *enum()***
**Width = integer()**
**Format = *enum()***
**Type = *enum()***
**Image = *offset()* | *mem()***

Define a one-dimensional convolution filter

`gl:convolutionFilter1D` builds a one-dimensional convolution filter kernel from an array of pixels.

See **external** documentation.

```
convolutionFilter2D(Target, Internalformat, Width, Height, Format, Type,
Image) -> ok
```

Types:

**Target = *enum()***
**Internalformat = *enum()***
**Width = integer()**
**Height = integer()**
**Format = *enum()***
**Type = *enum()***
**Image = *offset()* | *mem()***

Define a two-dimensional convolution filter

`gl:convolutionFilter2D` builds a two-dimensional convolution filter kernel from an array of pixels.

See **external** documentation.

```
convolutionParameterf(Target, Pname, Params) -> ok
```

Types:

**Target = *enum()***
**Pname = *enum()***
**Params = tuple()**

Set convolution parameters

`gl:convolutionParameter` sets the value of a convolution parameter.

See **external** documentation.

```
convolutionParameterfv(Target::enum(), Pname::enum(), Params) -> ok
```

Types:

**Params = {Params::tuple()}**

Equivalent to *convolutionParameterf(Target, Pname, Params)*.

`convolutionParameteri(Target, Pname, Params) -> ok`

Types:

**Target = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *convolutionParameterf/3*

`convolutionParameteriv(Target::enum(), Pname::enum(), Params) -> ok`

Types:

**Params = {Params::tuple()}**

Equivalent to *convolutionParameteri(Target, Pname, Params)*.

`copyConvolutionFilter1D(Target, Internalformat, X, Y, Width) -> ok`

Types:

**Target = *enum()***
**Internalformat = *enum()***
**X = integer()**
**Y = integer()**
**Width = integer()**

Copy pixels into a one-dimensional convolution filter

`gl:copyConvolutionFilter1D` defines a one-dimensional convolution filter kernel with pixels from the current `?GL_READ_BUFFER` (rather than from main memory, as is the case for *gl:convolutionFilter1D/6* ).

See **external** documentation.

`copyConvolutionFilter2D(Target, Internalformat, X, Y, Width, Height) -> ok`

Types:

**Target = *enum()***
**Internalformat = *enum()***
**X = integer()**
**Y = integer()**
**Width = integer()**
**Height = integer()**

Copy pixels into a two-dimensional convolution filter

`gl:copyConvolutionFilter2D` defines a two-dimensional convolution filter kernel with pixels from the current `?GL_READ_BUFFER` (rather than from main memory, as is the case for *gl:convolutionFilter2D/7* ).

See **external** documentation.

`getConvolutionFilter(Target, Format, Type, Image) -> ok`

Types:

**Target = *enum()***

**Format = *enum()***
**Type = *enum()***
**Image = *mem()***

Get current 1D or 2D convolution filter kernel

`gl:getConvolutionFilter` returns the current 1D or 2D convolution filter kernel as an image. The one- or two-dimensional image is placed in `Image` according to the specifications in `Format` and `Type` . No pixel transfer operations are performed on this image, but the relevant pixel storage modes are applied.

See **external** documentation.

```
getConvolutionParameterfv(Target, Pname) -> {float(), float(), float(),
float()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

Get convolution parameters

`gl:getConvolutionParameter` retrieves convolution parameters. `Target` determines which convolution filter is queried. `Pname` determines which parameter is returned:

See **external** documentation.

```
getConvolutionParameteriv(Target, Pname) -> {integer(), integer(), integer(),
integer()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

See *getConvolutionParameterfv/2*

```
separableFilter2D(Target, Internalformat, Width, Height, Format, Type, Row,
Column) -> ok
```

Types:

**Target = *enum()***
**Internalformat = *enum()***
**Width = integer()**
**Height = integer()**
**Format = *enum()***
**Type = *enum()***
**Row = *offset()* | *mem()***
**Column = *offset()* | *mem()***

Define a separable two-dimensional convolution filter

`gl:separableFilter2D` builds a two-dimensional separable convolution filter kernel from two arrays of pixels.

See **external** documentation.

```
getHistogram(Target, Reset, Format, Type, Values) -> ok
```

Types:

**Target = *enum()***
**Reset = 0 | 1**
**Format = *enum()***
**Type = *enum()***
**Values = *mem()***

Get histogram table

`gl:getHistogram` returns the current histogram table as a one-dimensional image with the same width as the histogram. No pixel transfer operations are performed on this image, but pixel storage modes that are applicable to 1D images are honored.

See **external** documentation.

```
getHistogramParameterfv(Target, Pname) -> {float()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

Get histogram parameters

`gl:getHistogramParameter` is used to query parameter values for the current histogram or for a proxy. The histogram state information may be queried by calling `gl:getHistogramParameter` with a `Target` of `?GL_HISTOGRAM` (to obtain information for the current histogram table) or `?GL_PROXY_HISTOGRAM` (to obtain information from the most recent proxy request) and one of the following values for the `Pname` argument:

See **external** documentation.

```
getHistogramParameteriv(Target, Pname) -> {integer()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

See *getHistogramParameterfv/2*

```
getMinmax(Target, Reset, Format, Types, Values) -> ok
```

Types:

**Target = *enum()***
**Reset = 0 | 1**
**Format = *enum()***
**Types = *enum()***
**Values = *mem()***

Get minimum and maximum pixel values

`gl:getMinmax` returns the accumulated minimum and maximum pixel values (computed on a per-component basis) in a one-dimensional image of width 2. The first set of return values are the minima, and the second set of return values are the maxima. The format of the return values is determined by `Format` , and their type is determined by `Types` .

See **external** documentation.

```
getMinmaxParameterfv(Target, Pname) -> {float()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

Get minmax parameters

`gl:getMinmaxParameter` retrieves parameters for the current minmax table by setting `Pname` to one of the following values:

See **external** documentation.

```
getMinmaxParameteriv(Target, Pname) -> {integer()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

See *getMinmaxParameterfv/2*

```
histogram(Target, Width, Internalformat, Sink) -> ok
```

Types:

**Target = *enum()***
**Width = integer()**
**Internalformat = *enum()***
**Sink = 0 | 1**

Define histogram table

When `?GL_HISTOGRAM` is enabled, RGBA color components are converted to histogram table indices by clamping to the range [0,1], multiplying by the width of the histogram table, and rounding to the nearest integer. The table entries selected by the RGBA indices are then incremented. (If the internal format of the histogram table includes luminance, then the index derived from the R color component determines the luminance table entry to be incremented.) If a histogram table entry is incremented beyond its maximum value, then its value becomes undefined. (This is not an error.)

See **external** documentation.

```
minmax(Target, Internalformat, Sink) -> ok
```

Types:

**Target = *enum()***
**Internalformat = *enum()***
**Sink = 0 | 1**

Define minmax table

When `?GL_MINMAX` is enabled, the RGBA components of incoming pixels are compared to the minimum and maximum values for each component, which are stored in the two-element minmax table. (The first element stores the minima, and the second element stores the maxima.) If a pixel component is greater than the corresponding component in the maximum element, then the maximum element is updated with the pixel component value. If a pixel component is less than the corresponding component in the minimum element, then the minimum element is updated with the pixel component value. (In both cases, if the internal format of the minmax table includes luminance, then the R color component of incoming pixels is used for comparison.) The contents of the minmax table may be retrieved at a later time by calling *gl:getMinmax/5* . The minmax operation is enabled or disabled by calling *gl:enable/1* or *gl:enable/1* , respectively, with an argument of `?GL_MINMAX` .

See **external** documentation.

```
resetHistogram(Target) -> ok
```

Types:

**Target = *enum()***

Reset histogram table entries to zero

`gl:resetHistogram` resets all the elements of the current histogram table to zero.

See **external** documentation.

```
resetMinmax(Target) -> ok
```

Types:

**Target = *enum()***

Reset minmax table entries to initial values

`gl:resetMinmax` resets the elements of the current minmax table to their initial values: the `maximum` element receives the minimum possible component values, and the `minimum` element receives the maximum possible component values.

See **external** documentation.

```
activeTexture(Texture) -> ok
```

Types:

**Texture = *enum()***

Select active texture unit

`gl:activeTexture` selects which texture unit subsequent texture state calls will affect. The number of texture units an implementation supports is implementation dependent, but must be at least 80.

See **external** documentation.

```
sampleCoverage(Value, Invert) -> ok
```

Types:

**Value = *clamp()***

**Invert = 0 | 1**

Specify multisample coverage parameters

Multisampling samples a pixel multiple times at various implementation-dependent subpixel locations to generate antialiasing effects. Multisampling transparently antialiases points, lines, polygons, and images if it is enabled.

See **external** documentation.

```
compressedTexImage3D(Target, Level, Internalformat, Width, Height, Depth,
Border, ImageSize, Data) -> ok
```

Types:

**Target = *enum()***

**Level = integer()**

**Internalformat = *enum()***

**Width = integer()**

**Height = integer()**

**Depth = integer()**

**Border = integer()**
**ImageSize = integer()**
**Data = *offset()* | *mem()***

Specify a three-dimensional texture image in a compressed format

Texturing allows elements of an image array to be read by shaders.

See **external** documentation.

```
compressedTexImage2D(Target, Level, Internalformat, Width, Height, Border,
ImageSize, Data) -> ok
```

Types:

**Target = *enum()***
**Level = integer()**
**Internalformat = *enum()***
**Width = integer()**
**Height = integer()**
**Border = integer()**
**ImageSize = integer()**
**Data = *offset()* | *mem()***

Specify a two-dimensional texture image in a compressed format

Texturing allows elements of an image array to be read by shaders.

See **external** documentation.

```
compressedTexImage1D(Target, Level, Internalformat, Width, Border, ImageSize,
Data) -> ok
```

Types:

**Target = *enum()***
**Level = integer()**
**Internalformat = *enum()***
**Width = integer()**
**Border = integer()**
**ImageSize = integer()**
**Data = *offset()* | *mem()***

Specify a one-dimensional texture image in a compressed format

Texturing allows elements of an image array to be read by shaders.

See **external** documentation.

```
compressedTexSubImage3D(Target, Level, Xoffset, Yoffset, Zoffset, Width,
Height, Depth, Format, ImageSize, Data) -> ok
```

Types:

**Target = *enum()***
**Level = integer()**
**Xoffset = integer()**

**Yoffset = integer()**
**Zoffset = integer()**
**Width = integer()**
**Height = integer()**
**Depth = integer()**
**Format = *enum()***
**ImageSize = integer()**
**Data = *offset()* | *mem()***

Specify a three-dimensional texture subimage in a compressed format

Texturing allows elements of an image array to be read by shaders.

See **external** documentation.

```
compressedTexSubImage2D(Target, Level, Xoffset, Yoffset, Width, Height,
Format, ImageSize, Data) -> ok
```

Types:

**Target = *enum()***
**Level = integer()**
**Xoffset = integer()**
**Yoffset = integer()**
**Width = integer()**
**Height = integer()**
**Format = *enum()***
**ImageSize = integer()**
**Data = *offset()* | *mem()***

Specify a two-dimensional texture subimage in a compressed format

Texturing allows elements of an image array to be read by shaders.

See **external** documentation.

```
compressedTexSubImage1D(Target, Level, Xoffset, Width, Format, ImageSize,
Data) -> ok
```

Types:

**Target = *enum()***
**Level = integer()**
**Xoffset = integer()**
**Width = integer()**
**Format = *enum()***
**ImageSize = integer()**
**Data = *offset()* | *mem()***

Specify a one-dimensional texture subimage in a compressed format

Texturing allows elements of an image array to be read by shaders.

See **external** documentation.

```
getCompressedTexImage(Target, Lod, Img) -> ok
```

Types:

**Target = *enum()***
**Lod = integer()**
**Img = *mem()***

Return a compressed texture image

`gl:getCompressedTexImage` returns the compressed texture image associated with `Target` and `Lod` into `Img` . `Img` should be an array of `?GL_TEXTURE_COMPRESSED_IMAGE_SIZE` bytes. `Target` specifies whether the desired texture image was one specified by *gl:texImage1D/8* (`?GL_TEXTURE_1D`), *gl:texImage2D/9* (`?GL_TEXTURE_2D` or any of `?GL_TEXTURE_CUBE_MAP_*` ), or *gl:texImage3D/10* (`?GL_TEXTURE_3D`). `Lod` specifies the level-of-detail number of the desired image.

See **external** documentation.

```
clientActiveTexture(Texture) -> ok
```

Types:

**Texture = *enum()***

Select active texture unit

`gl:clientActiveTexture` selects the vertex array client state parameters to be modified by *gl:texCoordPointer/4* , and enabled or disabled with *gl:enableClientState/1* or *gl:enableClientState/1* , respectively, when called with a parameter of `?GL_TEXTURE_COORD_ARRAY` .

See **external** documentation.

```
multiTexCoord1d(Target, S) -> ok
```

Types:

**Target = *enum()***
**S = float()**

Set the current texture coordinates

`gl:multiTexCoord` specifies texture coordinates in one, two, three, or four dimensions. `gl:multiTexCoord1` sets the current texture coordinates to (s 0 0 1); a call to `gl:multiTexCoord2` sets them to (s t 0 1). Similarly, `gl:multiTexCoord3` specifies the texture coordinates as (s t r 1), and `gl:multiTexCoord4` defines all four components explicitly as (s t r q).

See **external** documentation.

```
multiTexCoord1dv(Target::enum(), V) -> ok
```

Types:

**V = {S::float()}**

Equivalent to *multiTexCoord1d(Target, S)*.

```
multiTexCoord1f(Target, S) -> ok
```

Types:

**Target = *enum()***
**S = float()**

See *multiTexCoord1d/2*

```
multiTexCoord1fv(Target::enum(), V) -> ok
```

Types:

**V = {S::float()}**

Equivalent to *multiTexCoord1f(Target, S)*.

```
multiTexCoord1i(Target, S) -> ok
```

Types:

**Target = *enum()***

**S = integer()**

See *multiTexCoord1d/2*

```
multiTexCoord1iv(Target::enum(), V) -> ok
```

Types:

**V = {S::integer()}**

Equivalent to *multiTexCoord1i(Target, S)*.

```
multiTexCoord1s(Target, S) -> ok
```

Types:

**Target = *enum()***

**S = integer()**

See *multiTexCoord1d/2*

```
multiTexCoord1sv(Target::enum(), V) -> ok
```

Types:

**V = {S::integer()}**

Equivalent to *multiTexCoord1s(Target, S)*.

```
multiTexCoord2d(Target, S, T) -> ok
```

Types:

**Target = *enum()***

**S = float()**

**T = float()**

See *multiTexCoord1d/2*

```
multiTexCoord2dv(Target::enum(), V) -> ok
```

Types:

**V = {S::float(), T::float()}**

Equivalent to *multiTexCoord2d(Target, S, T)*.

```
multiTexCoord2f(Target, S, T) -> ok
```

Types:

**Target = *enum()***

**S = float()**

**T = float()**

See *multiTexCoord1d/2*

`multiTexCoord2fv(Target::enum(), V) -> ok`

Types:

**V = {S::float(), T::float()}**

Equivalent to *multiTexCoord2f(Target, S, T)*.

`multiTexCoord2i(Target, S, T) -> ok`

Types:

**Target = *enum()***

**S = integer()**

**T = integer()**

See *multiTexCoord1d/2*

`multiTexCoord2iv(Target::enum(), V) -> ok`

Types:

**V = {S::integer(), T::integer()}**

Equivalent to *multiTexCoord2i(Target, S, T)*.

`multiTexCoord2s(Target, S, T) -> ok`

Types:

**Target = *enum()***

**S = integer()**

**T = integer()**

See *multiTexCoord1d/2*

`multiTexCoord2sv(Target::enum(), V) -> ok`

Types:

**V = {S::integer(), T::integer()}**

Equivalent to *multiTexCoord2s(Target, S, T)*.

`multiTexCoord3d(Target, S, T, R) -> ok`

Types:

**Target = *enum()***

**S = float()**

**T = float()**

**R = float()**

See *multiTexCoord1d/2*

`multiTexCoord3dv(Target::enum(), V) -> ok`

Types:

**V = {S::float(), T::float(), R::float()}**

Equivalent to *multiTexCoord3d(Target, S, T, R)*.

```
multiTexCoord3f(Target, S, T, R) -> ok
```

Types:

**Target = *enum()***
**S = float()**
**T = float()**
**R = float()**

See *multiTexCoord1d/2*

```
multiTexCoord3fv(Target::enum(), V) -> ok
```

Types:

**V = {S::float(), T::float(), R::float()}**

Equivalent to *multiTexCoord3f(Target, S, T, R)*.

```
multiTexCoord3i(Target, S, T, R) -> ok
```

Types:

**Target = *enum()***
**S = integer()**
**T = integer()**
**R = integer()**

See *multiTexCoord1d/2*

```
multiTexCoord3iv(Target::enum(), V) -> ok
```

Types:

**V = {S::integer(), T::integer(), R::integer()}**

Equivalent to *multiTexCoord3i(Target, S, T, R)*.

```
multiTexCoord3s(Target, S, T, R) -> ok
```

Types:

**Target = *enum()***
**S = integer()**
**T = integer()**
**R = integer()**

See *multiTexCoord1d/2*

```
multiTexCoord3sv(Target::enum(), V) -> ok
```

Types:

**V = {S::integer(), T::integer(), R::integer()}**

Equivalent to *multiTexCoord3s(Target, S, T, R)*.

```
multiTexCoord4d(Target, S, T, R, Q) -> ok
```

Types:

**Target = *enum()***
**S = float()**
**T = float()**
**R = float()**
**Q = float()**

See *multiTexCoord1d/2*

`multiTexCoord4dv(Target::enum(), V) -> ok`

Types:

**V = {S::float(), T::float(), R::float(), Q::float()}**

Equivalent to *multiTexCoord4d(Target, S, T, R, Q)*.

`multiTexCoord4f(Target, S, T, R, Q) -> ok`

Types:

**Target = *enum()***
**S = float()**
**T = float()**
**R = float()**
**Q = float()**

See *multiTexCoord1d/2*

`multiTexCoord4fv(Target::enum(), V) -> ok`

Types:

**V = {S::float(), T::float(), R::float(), Q::float()}**

Equivalent to *multiTexCoord4f(Target, S, T, R, Q)*.

`multiTexCoord4i(Target, S, T, R, Q) -> ok`

Types:

**Target = *enum()***
**S = integer()**
**T = integer()**
**R = integer()**
**Q = integer()**

See *multiTexCoord1d/2*

`multiTexCoord4iv(Target::enum(), V) -> ok`

Types:

**V = {S::integer(), T::integer(), R::integer(), Q::integer()}**

Equivalent to *multiTexCoord4i(Target, S, T, R, Q)*.

`multiTexCoord4s(Target, S, T, R, Q) -> ok`

Types:

**Target = *enum()***

**S = integer()**
**T = integer()**
**R = integer()**
**Q = integer()**

See *multiTexCoord1d/2*

`multiTexCoord4sv(Target::enum(), V) -> ok`

Types:

**V = {S::integer(), T::integer(), R::integer(), Q::integer()}**

Equivalent to *multiTexCoord4s(Target, S, T, R, Q)*.

`loadTransposeMatrixf(M) -> ok`

Types:

**M = *matrix()***

Replace the current matrix with the specified row-major ordered matrix

`gl:loadTransposeMatrix` replaces the current matrix with the one whose elements are specified by `M` . The current matrix is the projection matrix, modelview matrix, or texture matrix, depending on the current matrix mode (see *gl:matrixMode/1* ).

See **external** documentation.

`loadTransposeMatrixd(M) -> ok`

Types:

**M = *matrix()***

See *loadTransposeMatrixf/1*

`multTransposeMatrixf(M) -> ok`

Types:

**M = *matrix()***

Multiply the current matrix with the specified row-major ordered matrix

`gl:multTransposeMatrix` multiplies the current matrix with the one specified using `M` , and replaces the current matrix with the product.

See **external** documentation.

`multTransposeMatrixd(M) -> ok`

Types:

**M = *matrix()***

See *multTransposeMatrixf/1*

`blendFuncSeparate(SfactorRGB, DfactorRGB, SfactorAlpha, DfactorAlpha) -> ok`

Types:

**SfactorRGB = *enum()***
**DfactorRGB = *enum()***
**SfactorAlpha = *enum()***

**DfactorAlpha = *enum()***

Specify pixel arithmetic for RGB and alpha components separately

Pixels can be drawn using a function that blends the incoming (source) RGBA values with the RGBA values that are already in the frame buffer (the destination values). Blending is initially disabled. Use *gl:enable/1* and *gl:enable/1* with argument `?GL_BLEND` to enable and disable blending.

See **external** documentation.

`multiDrawArrays(Mode, First, Count) -> ok`

Types:

**Mode = *enum()***
**First = [integer()] | *mem()***
**Count = [integer()] | *mem()***

Render multiple sets of primitives from array data

`gl:multiDrawArrays` specifies multiple sets of geometric primitives with very few subroutine calls. Instead of calling a GL procedure to pass each individual vertex, normal, texture coordinate, edge flag, or color, you can prespecify separate arrays of vertices, normals, and colors and use them to construct a sequence of primitives with a single call to `gl:multiDrawArrays`.

See **external** documentation.

`pointParameterf(Pname, Param) -> ok`

Types:

**Pname = *enum()***
**Param = float()**

Specify point parameters

The following values are accepted for `Pname` :

See **external** documentation.

`pointParameterfv(Pname, Params) -> ok`

Types:

**Pname = *enum()***
**Params = tuple()**

See *pointParameterf/2*

`pointParameteri(Pname, Param) -> ok`

Types:

**Pname = *enum()***
**Param = integer()**

See *pointParameterf/2*

`pointParameteriv(Pname, Params) -> ok`

Types:

**Pname = *enum()***
**Params = tuple()**

See *pointParameterf/2*

`fogCoordf(Coord) -> ok`

Types:

**`Coord = float()`**

Set the current fog coordinates

`gl:fogCoord` specifies the fog coordinate that is associated with each vertex and the current raster position. The value specified is interpolated and used in computing the fog color (see *gl:fogf/2* ).

See **external** documentation.

`fogCoordfv(Coord) -> ok`

Types:

**`Coord = {Coord::float()}`**

Equivalent to *fogCoordf(Coord)*.

`fogCoordd(Coord) -> ok`

Types:

**`Coord = float()`**

See *fogCoordf/1*

`fogCoorddv(Coord) -> ok`

Types:

**`Coord = {Coord::float()}`**

Equivalent to *fogCoordd(Coord)*.

`fogCoordPointer(Type, Stride, Pointer) -> ok`

Types:

**`Type = `*`enum()`**
**`Stride = integer()`**
**`Pointer = `*`offset()` **`|`** `mem()`**

Define an array of fog coordinates

`gl:fogCoordPointer` specifies the location and data format of an array of fog coordinates to use when rendering. `Type` specifies the data type of each fog coordinate, and `Stride` specifies the byte stride from one fog coordinate to the next, allowing vertices and attributes to be packed into a single array or stored in separate arrays.

See **external** documentation.

`secondaryColor3b(Red, Green, Blue) -> ok`

Types:

**`Red = integer()`**
**`Green = integer()`**
**`Blue = integer()`**

Set the current secondary color

The GL stores both a primary four-valued RGBA color and a secondary four-valued RGBA color (where alpha is always set to 0.0) that is associated with every vertex.

See **external** documentation.

`secondaryColor3bv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *secondaryColor3b(Red, Green, Blue)*.

`secondaryColor3d(Red, Green, Blue) -> ok`

Types:

**`Red = float()`**
**`Green = float()`**
**`Blue = float()`**

See *secondaryColor3b/3*

`secondaryColor3dv(V) -> ok`

Types:

**`V = {Red::float(), Green::float(), Blue::float()}`**

Equivalent to *secondaryColor3d(Red, Green, Blue)*.

`secondaryColor3f(Red, Green, Blue) -> ok`

Types:

**`Red = float()`**
**`Green = float()`**
**`Blue = float()`**

See *secondaryColor3b/3*

`secondaryColor3fv(V) -> ok`

Types:

**`V = {Red::float(), Green::float(), Blue::float()}`**

Equivalent to *secondaryColor3f(Red, Green, Blue)*.

`secondaryColor3i(Red, Green, Blue) -> ok`

Types:

**`Red = integer()`**
**`Green = integer()`**
**`Blue = integer()`**

See *secondaryColor3b/3*

`secondaryColor3iv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *secondaryColor3i(Red, Green, Blue)*.

`secondaryColor3s(Red, Green, Blue) -> ok`

Types:

**`Red = integer()`**
**`Green = integer()`**
**`Blue = integer()`**

See *secondaryColor3b/3*

`secondaryColor3sv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *secondaryColor3s(Red, Green, Blue)*.

`secondaryColor3ub(Red, Green, Blue) -> ok`

Types:

**`Red = integer()`**
**`Green = integer()`**
**`Blue = integer()`**

See *secondaryColor3b/3*

`secondaryColor3ubv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *secondaryColor3ub(Red, Green, Blue)*.

`secondaryColor3ui(Red, Green, Blue) -> ok`

Types:

**`Red = integer()`**
**`Green = integer()`**
**`Blue = integer()`**

See *secondaryColor3b/3*

`secondaryColor3uiv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *secondaryColor3ui(Red, Green, Blue)*.

`secondaryColor3us(Red, Green, Blue) -> ok`

Types:

**`Red = integer()`**
**`Green = integer()`**
**`Blue = integer()`**

See *secondaryColor3b/3*

`secondaryColor3usv(V) -> ok`

Types:

**`V = {Red::integer(), Green::integer(), Blue::integer()}`**

Equivalent to *secondaryColor3us(Red, Green, Blue)*.

`secondaryColorPointer(Size, Type, Stride, Pointer) -> ok`

Types:

**`Size = integer()`**
**`Type = enum()`**
**`Stride = integer()`**
**`Pointer = offset() | mem()`**

Define an array of secondary colors

`gl:secondaryColorPointer` specifies the location and data format of an array of color components to use when rendering. `Size` specifies the number of components per color, and must be 3. `Type` specifies the data type of each color component, and `Stride` specifies the byte stride from one color to the next, allowing vertices and attributes to be packed into a single array or stored in separate arrays.

See **external** documentation.

`windowPos2d(X, Y) -> ok`

Types:

**`X = float()`**
**`Y = float()`**

Specify the raster position in window coordinates for pixel operations

The GL maintains a 3D position in window coordinates. This position, called the raster position, is used to position pixel and bitmap write operations. It is maintained with subpixel accuracy. See *gl:bitmap/7* , *gl:drawPixels/5* , and *gl:copyPixels/5* .

See **external** documentation.

`windowPos2dv(V) -> ok`

Types:

**`V = {X::float(), Y::float()}`**

Equivalent to *windowPos2d(X, Y)*.

`windowPos2f(X, Y) -> ok`

Types:

**`X = float()`**
**`Y = float()`**

See *windowPos2d/2*

`windowPos2fv(V) -> ok`

Types:

**V = {X::float(), Y::float()}**

Equivalent to *windowPos2f(X, Y)*.

`windowPos2i(X, Y) -> ok`

Types:

**X = integer()**
**Y = integer()**

See *windowPos2d/2*

`windowPos2iv(V) -> ok`

Types:

**V = {X::integer(), Y::integer()}**

Equivalent to *windowPos2i(X, Y)*.

`windowPos2s(X, Y) -> ok`

Types:

**X = integer()**
**Y = integer()**

See *windowPos2d/2*

`windowPos2sv(V) -> ok`

Types:

**V = {X::integer(), Y::integer()}**

Equivalent to *windowPos2s(X, Y)*.

`windowPos3d(X, Y, Z) -> ok`

Types:

**X = float()**
**Y = float()**
**Z = float()**

See *windowPos2d/2*

`windowPos3dv(V) -> ok`

Types:

**V = {X::float(), Y::float(), Z::float()}**

Equivalent to *windowPos3d(X, Y, Z)*.

`windowPos3f(X, Y, Z) -> ok`

Types:

**X = float()**
**Y = float()**
**Z = float()**

See *windowPos2d/2*

`windowPos3fv(V) -> ok`

Types:

**`V = {X::float(), Y::float(), Z::float()}`**

Equivalent to *windowPos3f(X, Y, Z)*.

`windowPos3i(X, Y, Z) -> ok`

Types:

**`X = integer()`**
**`Y = integer()`**
**`Z = integer()`**

See *windowPos2d/2*

`windowPos3iv(V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer()}`**

Equivalent to *windowPos3i(X, Y, Z)*.

`windowPos3s(X, Y, Z) -> ok`

Types:

**`X = integer()`**
**`Y = integer()`**
**`Z = integer()`**

See *windowPos2d/2*

`windowPos3sv(V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer()}`**

Equivalent to *windowPos3s(X, Y, Z)*.

`genQueries(N) -> [integer()]`

Types:

**`N = integer()`**

Generate query object names

`gl:genQueries` returns `N` query object names in `Ids` . There is no guarantee that the names form a contiguous set of integers; however, it is guaranteed that none of the returned names was in use immediately before the call to `gl:genQueries`.

See **external** documentation.

`deleteQueries(Ids) -> ok`

Types:

**`Ids = [integer()]`**

Delete named query objects

`gl:deleteQueries` deletes `N` query objects named by the elements of the array `Ids` . After a query object is deleted, it has no contents, and its name is free for reuse (for example by *gl:genQueries/1* ).

See **external** documentation.

```
isQuery(Id) -> 0 | 1
```

Types:

**`Id = integer()`**

Determine if a name corresponds to a query object

`gl:isQuery` returns `?GL_TRUE` if `Id` is currently the name of a query object. If `Id` is zero, or is a non-zero value that is not currently the name of a query object, or if an error occurs, `gl:isQuery` returns `?GL_FALSE`.

See **external** documentation.

```
beginQuery(Target, Id) -> ok
```

Types:

**`Target = enum()`**

**`Id = integer()`**

Delimit the boundaries of a query object

`gl:beginQuery` and *gl:beginQuery/2* delimit the boundaries of a query object. `Query` must be a name previously returned from a call to *gl:genQueries/1* . If a query object with name `Id` does not yet exist it is created with the type determined by `Target` . `Target` must be one of `?GL_SAMPLES_PASSED`, `?GL_ANY_SAMPLES_PASSED`, `?GL_PRIMITIVES_GENERATED` , `?GL_TRANSFORM_FEEDBACK_PRIMITIVES_WRITTEN`, or `?GL_TIME_ELAPSED`. The behavior of the query object depends on its type and is as follows.

See **external** documentation.

```
endQuery(Target) -> ok
```

Types:

**`Target = enum()`**

See *beginQuery/2*

```
getQueryiv(Target, Pname) -> integer()
```

Types:

**`Target = enum()`**

**`Pname = enum()`**

glGetQuery

See *external* documentation.

```
getQueryObjectiv(Id, Pname) -> integer()
```

Types:

**`Id = integer()`**

**`Pname = enum()`**

Return parameters of a query object

`gl:getQueryObject` returns in `Params` a selected parameter of the query object specified by `Id` .

See **external** documentation.

`getQueryObjectuiv(Id, Pname) -> integer()`

Types:

**`Id = integer()`**

**`Pname = enum()`**

See *getQueryObjectiv/2*

`bindBuffer(Target, Buffer) -> ok`

Types:

**`Target = enum()`**

**`Buffer = integer()`**

Bind a named buffer object

`gl:bindBuffer` binds a buffer object to the specified buffer binding point. Calling `gl:bindBuffer` with `Target` set to one of the accepted symbolic constants and `Buffer` set to the name of a buffer object binds that buffer object name to the target. If no buffer object with name `Buffer` exists, one is created with that name. When a buffer object is bound to a target, the previous binding for that target is automatically broken.

See **external** documentation.

`deleteBuffers(Buffers) -> ok`

Types:

**`Buffers = [integer()]`**

Delete named buffer objects

`gl:deleteBuffers` deletes `N` buffer objects named by the elements of the array `Buffers` . After a buffer object is deleted, it has no contents, and its name is free for reuse (for example by *gl:genBuffers/1* ). If a buffer object that is currently bound is deleted, the binding reverts to 0 (the absence of any buffer object).

See **external** documentation.

`genBuffers(N) -> [integer()]`

Types:

**`N = integer()`**

Generate buffer object names

`gl:genBuffers` returns `N` buffer object names in `Buffers` . There is no guarantee that the names form a contiguous set of integers; however, it is guaranteed that none of the returned names was in use immediately before the call to `gl:genBuffers` .

See **external** documentation.

`isBuffer(Buffer) -> 0 | 1`

Types:

**`Buffer = integer()`**

Determine if a name corresponds to a buffer object

`gl:isBuffer` returns `?GL_TRUE` if `Buffer` is currently the name of a buffer object. If `Buffer` is zero, or is a non-zero value that is not currently the name of a buffer object, or if an error occurs, `gl:isBuffer` returns `?GL_FALSE` .

See **external** documentation.

```
bufferData(Target, Size, Data, Usage) -> ok
```

Types:

**Target = *enum()***
**Size = integer()**
**Data = *offset()* | *mem()***
**Usage = *enum()***

Creates and initializes a buffer object's data store

`gl:bufferData` creates a new data store for the buffer object currently bound to `Target` . Any pre-existing data store is deleted. The new data store is created with the specified `Size` in bytes and `Usage` . If `Data` is not `?NULL`, the data store is initialized with data from this pointer. In its initial state, the new data store is not mapped, it has a `?NULL` mapped pointer, and its mapped access is `?GL_READ_WRITE` .

See **external** documentation.

```
bufferSubData(Target, Offset, Size, Data) -> ok
```

Types:

**Target = *enum()***
**Offset = integer()**
**Size = integer()**
**Data = *offset()* | *mem()***

Updates a subset of a buffer object's data store

`gl:bufferSubData` redefines some or all of the data store for the buffer object currently bound to `Target` . Data starting at byte offset `Offset` and extending for `Size` bytes is copied to the data store from the memory pointed to by `Data` . An error is thrown if `Offset` and `Size` together define a range beyond the bounds of the buffer object's data store.

See **external** documentation.

```
getBufferSubData(Target, Offset, Size, Data) -> ok
```

Types:

**Target = *enum()***
**Offset = integer()**
**Size = integer()**
**Data = *mem()***

Returns a subset of a buffer object's data store

`gl:getBufferSubData` returns some or all of the data from the buffer object currently bound to `Target` . Data starting at byte offset `Offset` and extending for `Size` bytes is copied from the data store to the memory pointed to by `Data` . An error is thrown if the buffer object is currently mapped, or if `Offset` and `Size` together define a range beyond the bounds of the buffer object's data store.

See **external** documentation.

```
getBufferParameteriv(Target, Pname) -> integer()
```

Types:

**Target = *enum()***

**Pname = *enum()***

Return parameters of a buffer object

`gl:getBufferParameteriv` returns in `Data` a selected parameter of the buffer object specified by `Target` .

See **external** documentation.

`blendEquationSeparate(ModeRGB, ModeAlpha) -> ok`

Types:

**ModeRGB = *enum()***

**ModeAlpha = *enum()***

Set the RGB blend equation and the alpha blend equation separately

The blend equations determines how a new pixel (the "source" color) is combined with a pixel already in the framebuffer (the "destination" color). These functions specifie one blend equation for the RGB-color components and one blend equation for the alpha component. `gl:blendEquationSeparatei` specifies the blend equations for a single draw buffer whereas `gl:blendEquationSeparate` sets the blend equations for all draw buffers.

See **external** documentation.

`drawBuffers(Bufs) -> ok`

Types:

**Bufs = [*enum()*]**

Specifies a list of color buffers to be drawn into

`gl:drawBuffers` defines an array of buffers into which outputs from the fragment shader data will be written. If a fragment shader writes a value to one or more user defined output variables, then the value of each variable will be written into the buffer specified at a location within `Bufs` corresponding to the location assigned to that user defined output. The draw buffer used for user defined outputs assigned to locations greater than or equal to `N` is implicitly set to `?GL_NONE` and any data written to such an output is discarded.

See **external** documentation.

`stencilOpSeparate(Face, Sfail, Dpfail, Dppass) -> ok`

Types:

**Face = *enum()***

**Sfail = *enum()***

**Dpfail = *enum()***

**Dppass = *enum()***

Set front and/or back stencil test actions

Stenciling, like depth-buffering, enables and disables drawing on a per-pixel basis. You draw into the stencil planes using GL drawing primitives, then render geometry and images, using the stencil planes to mask out portions of the screen. Stenciling is typically used in multipass rendering algorithms to achieve special effects, such as decals, outlining, and constructive solid geometry rendering.

See **external** documentation.

`stencilFuncSeparate(Face, Func, Ref, Mask) -> ok`

Types:

**Face = *enum()***

**Func = *enum()***
**Ref = integer()**
**Mask = integer()**

Set front and/or back function and reference value for stencil testing

Stenciling, like depth-buffering, enables and disables drawing on a per-pixel basis. You draw into the stencil planes using GL drawing primitives, then render geometry and images, using the stencil planes to mask out portions of the screen. Stenciling is typically used in multipass rendering algorithms to achieve special effects, such as decals, outlining, and constructive solid geometry rendering.

See **external** documentation.

`stencilMaskSeparate(Face, Mask) -> ok`

Types:

**Face = *enum()***
**Mask = integer()**

Control the front and/or back writing of individual bits in the stencil planes

`gl:stencilMaskSeparate` controls the writing of individual bits in the stencil planes. The least significant n bits of `Mask` , where n is the number of bits in the stencil buffer, specify a mask. Where a 1 appears in the mask, it's possible to write to the corresponding bit in the stencil buffer. Where a 0 appears, the corresponding bit is write-protected. Initially, all bits are enabled for writing.

See **external** documentation.

`attachShader(Program, Shader) -> ok`

Types:

**Program = integer()**
**Shader = integer()**

Attaches a shader object to a program object

In order to create a complete shader program, there must be a way to specify the list of things that will be linked together. Program objects provide this mechanism. Shaders that are to be linked together in a program object must first be attached to that program object. `gl:attachShader` attaches the shader object specified by `Shader` to the program object specified by `Program` . This indicates that `Shader` will be included in link operations that will be performed on `Program` .

See **external** documentation.

`bindAttribLocation(Program, Index, Name) -> ok`

Types:

**Program = integer()**
**Index = integer()**
**Name = string()**

Associates a generic vertex attribute index with a named attribute variable

`gl:bindAttribLocation` is used to associate a user-defined attribute variable in the program object specified by `Program` with a generic vertex attribute index. The name of the user-defined attribute variable is passed as a null terminated string in `Name` . The generic vertex attribute index to be bound to this variable is specified by `Index` . When `Program` is made part of current state, values provided via the generic vertex attribute `Index` will modify the value of the user-defined attribute variable specified by `Name` .

See **external** documentation.

`compileShader(Shader) -> ok`

Types:

**`Shader = integer()`**

Compiles a shader object

`gl:compileShader` compiles the source code strings that have been stored in the shader object specified by `Shader` .

See **external** documentation.

`createProgram() -> integer()`

Creates a program object

`gl:createProgram` creates an empty program object and returns a non-zero value by which it can be referenced. A program object is an object to which shader objects can be attached. This provides a mechanism to specify the shader objects that will be linked to create a program. It also provides a means for checking the compatibility of the shaders that will be used to create a program (for instance, checking the compatibility between a vertex shader and a fragment shader). When no longer needed as part of a program object, shader objects can be detached.

See **external** documentation.

`createShader(Type) -> integer()`

Types:

**`Type = enum()`**

Creates a shader object

`gl:createShader` creates an empty shader object and returns a non-zero value by which it can be referenced. A shader object is used to maintain the source code strings that define a shader. `ShaderType` indicates the type of shader to be created. Five types of shader are supported. A shader of type `?GL_VERTEX_SHADER` is a shader that is intended to run on the programmable vertex processor. A shader of type `?GL_TESS_CONTROL_SHADER` is a shader that is intended to run on the programmable tessellation processor in the control stage. A shader of type `?GL_TESS_EVALUATION_SHADER` is a shader that is intended to run on the programmable tessellation processor in the evaluation stage. A shader of type `?GL_GEOMETRY_SHADER` is a shader that is intended to run on the programmable geometry processor. A shader of type `?GL_FRAGMENT_SHADER` is a shader that is intended to run on the programmable fragment processor.

See **external** documentation.

`deleteProgram(Program) -> ok`

Types:

**`Program = integer()`**

Deletes a program object

`gl:deleteProgram` frees the memory and invalidates the name associated with the program object specified by `Program.` This command effectively undoes the effects of a call to *gl:createProgram/0* .

See **external** documentation.

`deleteShader(Shader) -> ok`

Types:

**Shader = integer()**

Deletes a shader object

`gl:deleteShader` frees the memory and invalidates the name associated with the shader object specified by `Shader` . This command effectively undoes the effects of a call to *gl:createShader/1* .

See **external** documentation.

```
detachShader(Program, Shader) -> ok
```

Types:

**Program = integer()**

**Shader = integer()**

Detaches a shader object from a program object to which it is attached

`gl:detachShader` detaches the shader object specified by `Shader` from the program object specified by `Program` . This command can be used to undo the effect of the command *gl:attachShader/2* .

See **external** documentation.

```
disableVertexAttribArray(Index) -> ok
```

Types:

**Index = integer()**

Enable or disable a generic vertex attribute array

`gl:enableVertexAttribArray` enables the generic vertex attribute array specified by `Index` . `gl:disableVertexAttribArray` disables the generic vertex attribute array specified by `Index` . By default, all client-side capabilities are disabled, including all generic vertex attribute arrays. If enabled, the values in the generic vertex attribute array will be accessed and used for rendering when calls are made to vertex array commands such as *gl:drawArrays/3* , *gl:drawElements/4* , *gl:drawRangeElements/6* , see `glMultiDrawElements` , or *gl:multiDrawArrays/3* .

See **external** documentation.

```
enableVertexAttribArray(Index) -> ok
```

Types:

**Index = integer()**

See *disableVertexAttribArray/1*

```
getActiveAttrib(Program, Index, BufSize) -> {Size::integer(), Type::enum(),
Name::string()}
```

Types:

**Program = integer()**

**Index = integer()**

**BufSize = integer()**

Returns information about an active attribute variable for the specified program object

`gl:getActiveAttrib` returns information about an active attribute variable in the program object specified by `Program` . The number of active attributes can be obtained by calling *gl:getProgramiv/2* with the value `? GL_ACTIVE_ATTRIBUTES`. A value of 0 for `Index` selects the first active attribute variable. Permissible values for `Index` range from 0 to the number of active attribute variables minus 1.

See **external** documentation.

```
getActiveUniform(Program, Index, BufSize) -> {Size::integer(), Type::enum(),
Name::string()}
```

Types:

**Program = integer()**
**Index = integer()**
**BufSize = integer()**

Returns information about an active uniform variable for the specified program object

`gl:getActiveUniform` returns information about an active uniform variable in the program object specified by `Program` . The number of active uniform variables can be obtained by calling *gl:getProgramiv/2* with the value ? `GL_ACTIVE_UNIFORMS`. A value of 0 for `Index` selects the first active uniform variable. Permissible values for `Index` range from 0 to the number of active uniform variables minus 1.

See **external** documentation.

```
getAttachedShaders(Program, MaxCount) -> [integer()]
```

Types:

**Program = integer()**
**MaxCount = integer()**

Returns the handles of the shader objects attached to a program object

`gl:getAttachedShaders` returns the names of the shader objects attached to `Program` . The names of shader objects that are attached to `Program` will be returned in `Shaders.` The actual number of shader names written into `Shaders` is returned in `Count.` If no shader objects are attached to `Program` , `Count` is set to 0. The maximum number of shader names that may be returned in `Shaders` is specified by `MaxCount` .

See **external** documentation.

```
getAttribLocation(Program, Name) -> integer()
```

Types:

**Program = integer()**
**Name = string()**

Returns the location of an attribute variable

`gl:getAttribLocation` queries the previously linked program object specified by `Program` for the attribute variable specified by `Name` and returns the index of the generic vertex attribute that is bound to that attribute variable. If `Name` is a matrix attribute variable, the index of the first column of the matrix is returned. If the named attribute variable is not an active attribute in the specified program object or if `Name` starts with the reserved prefix "gl_", a value of -1 is returned.

See **external** documentation.

```
getProgramiv(Program, Pname) -> integer()
```

Types:

**Program = integer()**
**Pname = *enum()***

Returns a parameter from a program object

`gl:getProgram` returns in `Params` the value of a parameter for a specific program object. The following parameters are defined:

See **external** documentation.

```
getProgramInfoLog(Program, BufSize) -> string()
```

Types:

**`Program = integer()`**
**`BufSize = integer()`**

Returns the information log for a program object

`gl:getProgramInfoLog` returns the information log for the specified program object. The information log for a program object is modified when the program object is linked or validated. The string that is returned will be null terminated.

See **external** documentation.

```
getShaderiv(Shader, Pname) -> integer()
```

Types:

**`Shader = integer()`**
**`Pname = `*`enum()`**

Returns a parameter from a shader object

`gl:getShader` returns in `Params` the value of a parameter for a specific shader object. The following parameters are defined:

See **external** documentation.

```
getShaderInfoLog(Shader, BufSize) -> string()
```

Types:

**`Shader = integer()`**
**`BufSize = integer()`**

Returns the information log for a shader object

`gl:getShaderInfoLog` returns the information log for the specified shader object. The information log for a shader object is modified when the shader is compiled. The string that is returned will be null terminated.

See **external** documentation.

```
getShaderSource(Shader, BufSize) -> string()
```

Types:

**`Shader = integer()`**
**`BufSize = integer()`**

Returns the source code string from a shader object

`gl:getShaderSource` returns the concatenation of the source code strings from the shader object specified by `Shader` . The source code strings for a shader object are the result of a previous call to *gl:shaderSource/2* . The string returned by the function will be null terminated.

See **external** documentation.

```
getUniformLocation(Program, Name) -> integer()
```

Types:

**Program = integer()**

**Name = string()**

Returns the location of a uniform variable

`gl:getUniformLocation` returns an integer that represents the location of a specific uniform variable within a program object. `Name` must be a null terminated string that contains no white space. `Name` must be an active uniform variable name in `Program` that is not a structure, an array of structures, or a subcomponent of a vector or a matrix. This function returns -1 if `Name` does not correspond to an active uniform variable in `Program` , if `Name` starts with the reserved prefix "gl_", or if `Name` is associated with an atomic counter or a named uniform block.

See **external** documentation.

```
getUniformfv(Program, Location) -> matrix()
```

Types:

**Program = integer()**

**Location = integer()**

Returns the value of a uniform variable

`gl:getUniform` returns in `Params` the value(s) of the specified uniform variable. The type of the uniform variable specified by `Location` determines the number of values returned. If the uniform variable is defined in the shader as a boolean, int, or float, a single value will be returned. If it is defined as a vec2, ivec2, or bvec2, two values will be returned. If it is defined as a vec3, ivec3, or bvec3, three values will be returned, and so on. To query values stored in uniform variables declared as arrays, call `gl:getUniform` for each element of the array. To query values stored in uniform variables declared as structures, call `gl:getUniform` for each field in the structure. The values for uniform variables declared as a matrix will be returned in column major order.

See **external** documentation.

```
getUniformiv(Program, Location) -> {integer(), integer(), integer(),
integer(), integer(), integer(), integer(), integer(), integer(), integer(),
integer(), integer(), integer(), integer(), integer(), integer()}
```

Types:

**Program = integer()**

**Location = integer()**

See *getUniformfv/2*

```
getVertexAttribdv(Index, Pname) -> {float(), float(), float(), float()}
```

Types:

**Index = integer()**

**Pname = *enum()***

Return a generic vertex attribute parameter

`gl:getVertexAttrib` returns in `Params` the value of a generic vertex attribute parameter. The generic vertex attribute to be queried is specified by `Index` , and the parameter to be queried is specified by `Pname` .

See **external** documentation.

```
getVertexAttribfv(Index, Pname) -> {float(), float(), float(), float()}
```

Types:

**Index = integer()**

**Pname = *enum()***

See *getVertexAttribdv/2*

```
getVertexAttribiv(Index, Pname) -> {integer(), integer(), integer(),
integer()}
```

Types:

**Index = integer()**

**Pname = *enum()***

See *getVertexAttribdv/2*

```
isProgram(Program) -> 0 | 1
```

Types:

**Program = integer()**

Determines if a name corresponds to a program object

`gl:isProgram` returns `?GL_TRUE` if `Program` is the name of a program object previously created with *gl:createProgram/0* and not yet deleted with *gl:deleteProgram/1* . If `Program` is zero or a non-zero value that is not the name of a program object, or if an error occurs, `gl:isProgram` returns `?GL_FALSE`.

See **external** documentation.

```
isShader(Shader) -> 0 | 1
```

Types:

**Shader = integer()**

Determines if a name corresponds to a shader object

`gl:isShader` returns `?GL_TRUE` if `Shader` is the name of a shader object previously created with *gl:createShader/1* and not yet deleted with *gl:deleteShader/1* . If `Shader` is zero or a non-zero value that is not the name of a shader object, or if an error occurs, `gl:isShader` returns `?GL_FALSE`.

See **external** documentation.

```
linkProgram(Program) -> ok
```

Types:

**Program = integer()**

Links a program object

`gl:linkProgram` links the program object specified by `Program` . If any shader objects of type `?GL_VERTEX_SHADER` are attached to `Program` , they will be used to create an executable that will run on the programmable vertex processor. If any shader objects of type `?GL_GEOMETRY_SHADER` are attached to `Program` , they will be used to create an executable that will run on the programmable geometry processor. If any shader objects of type `?GL_FRAGMENT_SHADER` are attached to `Program` , they will be used to create an executable that will run on the programmable fragment processor.

See **external** documentation.

`shaderSource(Shader, String) -> ok`

Types:

**`Shader = integer()`**
**`String = iolist()`**

Replaces the source code in a shader object

`gl:shaderSource` sets the source code in `Shader` to the source code in the array of strings specified by `String` . Any source code previously stored in the shader object is completely replaced. The number of strings in the array is specified by `Count` . If `Length` is `?NULL`, each string is assumed to be null terminated. If `Length` is a value other than `?NULL`, it points to an array containing a string length for each of the corresponding elements of `String` . Each element in the `Length` array may contain the length of the corresponding string (the null character is not counted as part of the string length) or a value less than 0 to indicate that the string is null terminated. The source code strings are not scanned or parsed at this time; they are simply copied into the specified shader object.

See **external** documentation.

`useProgram(Program) -> ok`

Types:

**`Program = integer()`**

Installs a program object as part of current rendering state

`gl:useProgram` installs the program object specified by `Program` as part of current rendering state. One or more executables are created in a program object by successfully attaching shader objects to it with *gl:attachShader/2* , successfully compiling the shader objects with *gl:compileShader/1* , and successfully linking the program object with *gl:linkProgram/1* .

See **external** documentation.

`uniform1f(Location, V0) -> ok`

Types:

**`Location = integer()`**
**`V0 = float()`**

Specify the value of a uniform variable for the current program object

`gl:uniform` modifies the value of a uniform variable or a uniform variable array. The location of the uniform variable to be modified is specified by `Location` , which should be a value returned by *gl:getUniformLocation/2* . `gl:uniform` operates on the program object that was made part of current state by calling *gl:useProgram/1* .

See **external** documentation.

`uniform2f(Location, V0, V1) -> ok`

Types:

**`Location = integer()`**
**`V0 = float()`**
**`V1 = float()`**

See *uniform1f/2*

`uniform3f(Location, V0, V1, V2) -> ok`

Types:

**`Location = integer()`**

**V0 = float()**
**V1 = float()**
**V2 = float()**

See *uniform1f/2*

```
uniform4f(Location, V0, V1, V2, V3) -> ok
```

Types:

**Location = integer()**
**V0 = float()**
**V1 = float()**
**V2 = float()**
**V3 = float()**

See *uniform1f/2*

```
uniform1i(Location, V0) -> ok
```

Types:

**Location = integer()**
**V0 = integer()**

See *uniform1f/2*

```
uniform2i(Location, V0, V1) -> ok
```

Types:

**Location = integer()**
**V0 = integer()**
**V1 = integer()**

See *uniform1f/2*

```
uniform3i(Location, V0, V1, V2) -> ok
```

Types:

**Location = integer()**
**V0 = integer()**
**V1 = integer()**
**V2 = integer()**

See *uniform1f/2*

```
uniform4i(Location, V0, V1, V2, V3) -> ok
```

Types:

**Location = integer()**
**V0 = integer()**
**V1 = integer()**
**V2 = integer()**
**V3 = integer()**

See *uniform1f/2*

```
uniform1fv(Location, Value) -> ok
```

Types:

**`Location = integer()`**
**`Value = [float()]`**

See *uniform1f/2*

```
uniform2fv(Location, Value) -> ok
```

Types:

**`Location = integer()`**
**`Value = [{float(), float()}]`**

See *uniform1f/2*

```
uniform3fv(Location, Value) -> ok
```

Types:

**`Location = integer()`**
**`Value = [{float(), float(), float()}]`**

See *uniform1f/2*

```
uniform4fv(Location, Value) -> ok
```

Types:

**`Location = integer()`**
**`Value = [{float(), float(), float(), float()}]`**

See *uniform1f/2*

```
uniform1iv(Location, Value) -> ok
```

Types:

**`Location = integer()`**
**`Value = [integer()]`**

See *uniform1f/2*

```
uniform2iv(Location, Value) -> ok
```

Types:

**`Location = integer()`**
**`Value = [{integer(), integer()}]`**

See *uniform1f/2*

```
uniform3iv(Location, Value) -> ok
```

Types:

**`Location = integer()`**
**`Value = [{integer(), integer(), integer()}]`**

See *uniform1f/2*

```
uniform4iv(Location, Value) -> ok
```

Types:

**Location = integer()**

**Value = [{integer(), integer(), integer(), integer()}]**

See *uniform1f/2*

```
uniformMatrix2fv(Location, Transpose, Value) -> ok
```

Types:

**Location = integer()**

**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float()}]**

See *uniform1f/2*

```
uniformMatrix3fv(Location, Transpose, Value) -> ok
```

Types:

**Location = integer()**

**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

```
uniformMatrix4fv(Location, Transpose, Value) -> ok
```

Types:

**Location = integer()**

**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

```
validateProgram(Program) -> ok
```

Types:

**Program = integer()**

Validates a program object

`gl:validateProgram` checks to see whether the executables contained in `Program` can execute given the current OpenGL state. The information generated by the validation process will be stored in `Program` 's information log. The validation information may consist of an empty string, or it may be a string containing information about how the current program object interacts with the rest of current OpenGL state. This provides a way for OpenGL implementers to convey more information about why the current program is inefficient, suboptimal, failing to execute, and so on.

See **external** documentation.

```
vertexAttrib1d(Index, X) -> ok
```

Types:

**Index = integer()**

**X = float()**

Specifies the value of a generic vertex attribute

The `gl:vertexAttrib` family of entry points allows an application to pass generic vertex attributes in numbered locations.

See **external** documentation.

`vertexAttrib1dv(Index::integer(), V) -> ok`

Types:

**V = {X::float()}**

Equivalent to *vertexAttrib1d(Index, X)*.

`vertexAttrib1f(Index, X) -> ok`

Types:

**Index = integer()**
**X = float()**

See *vertexAttrib1d/2*

`vertexAttrib1fv(Index::integer(), V) -> ok`

Types:

**V = {X::float()}**

Equivalent to *vertexAttrib1f(Index, X)*.

`vertexAttrib1s(Index, X) -> ok`

Types:

**Index = integer()**
**X = integer()**

See *vertexAttrib1d/2*

`vertexAttrib1sv(Index::integer(), V) -> ok`

Types:

**V = {X::integer()}**

Equivalent to *vertexAttrib1s(Index, X)*.

`vertexAttrib2d(Index, X, Y) -> ok`

Types:

**Index = integer()**
**X = float()**
**Y = float()**

See *vertexAttrib1d/2*

`vertexAttrib2dv(Index::integer(), V) -> ok`

Types:

**V = {X::float(), Y::float()}**

Equivalent to *vertexAttrib2d(Index, X, Y)*.

```
vertexAttrib2f(Index, X, Y) -> ok
```

Types:

**Index = integer()**
**X = float()**
**Y = float()**

See *vertexAttrib1d/2*

```
vertexAttrib2fv(Index::integer(), V) -> ok
```

Types:

**V = {X::float(), Y::float()}**

Equivalent to *vertexAttrib2f(Index, X, Y)*.

```
vertexAttrib2s(Index, X, Y) -> ok
```

Types:

**Index = integer()**
**X = integer()**
**Y = integer()**

See *vertexAttrib1d/2*

```
vertexAttrib2sv(Index::integer(), V) -> ok
```

Types:

**V = {X::integer(), Y::integer()}**

Equivalent to *vertexAttrib2s(Index, X, Y)*.

```
vertexAttrib3d(Index, X, Y, Z) -> ok
```

Types:

**Index = integer()**
**X = float()**
**Y = float()**
**Z = float()**

See *vertexAttrib1d/2*

```
vertexAttrib3dv(Index::integer(), V) -> ok
```

Types:

**V = {X::float(), Y::float(), Z::float()}**

Equivalent to *vertexAttrib3d(Index, X, Y, Z)*.

```
vertexAttrib3f(Index, X, Y, Z) -> ok
```

Types:

**Index = integer()**
**X = float()**

**Y = float()**
**Z = float()**

See *vertexAttrib1d/2*

`vertexAttrib3fv(Index::integer(), V) -> ok`

Types:

**V = {X::float(), Y::float(), Z::float()}**

Equivalent to *vertexAttrib3f(Index, X, Y, Z)*.

`vertexAttrib3s(Index, X, Y, Z) -> ok`

Types:

**Index = integer()**
**X = integer()**
**Y = integer()**
**Z = integer()**

See *vertexAttrib1d/2*

`vertexAttrib3sv(Index::integer(), V) -> ok`

Types:

**V = {X::integer(), Y::integer(), Z::integer()}**

Equivalent to *vertexAttrib3s(Index, X, Y, Z)*.

`vertexAttrib4Nbv(Index, V) -> ok`

Types:

**Index = integer()**
**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

`vertexAttrib4Niv(Index, V) -> ok`

Types:

**Index = integer()**
**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

`vertexAttrib4Nsv(Index, V) -> ok`

Types:

**Index = integer()**
**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

`vertexAttrib4Nub(Index, X, Y, Z, W) -> ok`

Types:

**Index = integer()**

**X = integer()**
**Y = integer()**
**Z = integer()**
**W = integer()**

See *vertexAttrib1d/2*

`vertexAttrib4Nubv(Index::integer(), V) -> ok`

Types:

**V = {X::integer(), Y::integer(), Z::integer(), W::integer()}**

Equivalent to *vertexAttrib4Nub(Index, X, Y, Z, W)*.

`vertexAttrib4Nuiv(Index, V) -> ok`

Types:

**Index = integer()**
**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

`vertexAttrib4Nusv(Index, V) -> ok`

Types:

**Index = integer()**
**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

`vertexAttrib4bv(Index, V) -> ok`

Types:

**Index = integer()**
**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

`vertexAttrib4d(Index, X, Y, Z, W) -> ok`

Types:

**Index = integer()**
**X = float()**
**Y = float()**
**Z = float()**
**W = float()**

See *vertexAttrib1d/2*

`vertexAttrib4dv(Index::integer(), V) -> ok`

Types:

**V = {X::float(), Y::float(), Z::float(), W::float()}**

Equivalent to *vertexAttrib4d(Index, X, Y, Z, W)*.

```
vertexAttrib4f(Index, X, Y, Z, W) -> ok
```

Types:

**Index = integer()**
**X = float()**
**Y = float()**
**Z = float()**
**W = float()**

See *vertexAttrib1d/2*

```
vertexAttrib4fv(Index::integer(), V) -> ok
```

Types:

**V = {X::float(), Y::float(), Z::float(), W::float()}**

Equivalent to *vertexAttrib4f(Index, X, Y, Z, W)*.

```
vertexAttrib4iv(Index, V) -> ok
```

Types:

**Index = integer()**
**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

```
vertexAttrib4s(Index, X, Y, Z, W) -> ok
```

Types:

**Index = integer()**
**X = integer()**
**Y = integer()**
**Z = integer()**
**W = integer()**

See *vertexAttrib1d/2*

```
vertexAttrib4sv(Index::integer(), V) -> ok
```

Types:

**V = {X::integer(), Y::integer(), Z::integer(), W::integer()}**

Equivalent to *vertexAttrib4s(Index, X, Y, Z, W)*.

```
vertexAttrib4ubv(Index, V) -> ok
```

Types:

**Index = integer()**
**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

```
vertexAttrib4uiv(Index, V) -> ok
```

Types:

**Index = integer()**

**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

`vertexAttrib4usv(Index, V) -> ok`

Types:

**Index = integer()**
**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

`vertexAttribPointer(Index, Size, Type, Normalized, Stride, Pointer) -> ok`

Types:

**Index = integer()**
**Size = integer()**
**Type = *enum()***
**Normalized = 0 | 1**
**Stride = integer()**
**Pointer = *offset()* | *mem()***

Define an array of generic vertex attribute data

`gl:vertexAttribPointer`, `gl:vertexAttribIPointer` and `gl:vertexAttribLPointer` specify the location and data format of the array of generic vertex attributes at index `Index` to use when rendering. `Size` specifies the number of components per attribute and must be 1, 2, 3, 4, or `?GL_BGRA`. `Type` specifies the data type of each component, and `Stride` specifies the byte stride from one attribute to the next, allowing vertices and attributes to be packed into a single array or stored in separate arrays.

See **external** documentation.

`uniformMatrix2x3fv(Location, Transpose, Value) -> ok`

Types:

**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

`uniformMatrix3x2fv(Location, Transpose, Value) -> ok`

Types:

**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

`uniformMatrix2x4fv(Location, Transpose, Value) -> ok`

Types:

**Location = integer()**
**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

`uniformMatrix4x2fv(Location, Transpose, Value) -> ok`

Types:

**Location = integer()**

**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

`uniformMatrix3x4fv(Location, Transpose, Value) -> ok`

Types:

**Location = integer()**

**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

`uniformMatrix4x3fv(Location, Transpose, Value) -> ok`

Types:

**Location = integer()**

**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

`colorMaski(Index, R, G, B, A) -> ok`

Types:

**Index = integer()**

**R = 0 | 1**

**G = 0 | 1**

**B = 0 | 1**

**A = 0 | 1**

glColorMaski

See *external* documentation.

`getBooleani_v(Target, Index) -> [0 | 1]`

Types:

**Target = *enum()***

**Index = integer()**

See *getBooleanv/1*

```
getIntegeri_v(Target, Index) -> [integer()]
```

Types:

**Target = *enum()***
**Index = integer()**

See *getBooleanv/1*

```
enablei(Target, Index) -> ok
```

Types:

**Target = *enum()***
**Index = integer()**

See *enable/1*

```
disablei(Target, Index) -> ok
```

Types:

**Target = *enum()***
**Index = integer()**

glEnablei

See *external* documentation.

```
isEnabledi(Target, Index) -> 0 | 1
```

Types:

**Target = *enum()***
**Index = integer()**

glIsEnabledi

See *external* documentation.

```
beginTransformFeedback(PrimitiveMode) -> ok
```

Types:

**PrimitiveMode = *enum()***

Start transform feedback operation

Transform feedback mode captures the values of varying variables written by the vertex shader (or, if active, the geometry shader). Transform feedback is said to be active after a call to `gl:beginTransformFeedback` until a subsequent call to *gl:beginTransformFeedback/1* . Transform feedback commands must be paired.

See **external** documentation.

```
endTransformFeedback() -> ok
```

See *beginTransformFeedback/1*

```
bindBufferRange(Target, Index, Buffer, Offset, Size) -> ok
```

Types:

**Target = *enum()***
**Index = integer()**
**Buffer = integer()**

**Offset = integer()**
**Size = integer()**

Bind a range within a buffer object to an indexed buffer target

`gl:bindBufferRange` binds a range the buffer object `Buffer` represented by `Offset` and `Size` to the binding point at index `Index` of the array of targets specified by `Target` . Each `Target` represents an indexed array of buffer binding points, as well as a single general binding point that can be used by other buffer manipulation functions such as *gl:bindBuffer/2* or see `glMapBuffer`. In addition to binding a range of `Buffer` to the indexed buffer binding target, `gl:bindBufferBase` also binds the range to the generic buffer binding point specified by `Target` .

See **external** documentation.

```
bindBufferBase(Target, Index, Buffer) -> ok
```

Types:

**Target = *enum()***
**Index = integer()**
**Buffer = integer()**

Bind a buffer object to an indexed buffer target

`gl:bindBufferBase` binds the buffer object `Buffer` to the binding point at index `Index` of the array of targets specified by `Target` . Each `Target` represents an indexed array of buffer binding points, as well as a single general binding point that can be used by other buffer manipulation functions such as *gl:bindBuffer/2* or see `glMapBuffer`. In addition to binding `Buffer` to the indexed buffer binding target, `gl:bindBufferBase` also binds `Buffer` to the generic buffer binding point specified by `Target` .

See **external** documentation.

```
transformFeedbackVaryings(Program, Varyings, BufferMode) -> ok
```

Types:

**Program = integer()**
**Varyings = iolist()**
**BufferMode = *enum()***

Specify values to record in transform feedback buffers

The names of the vertex or geometry shader outputs to be recorded in transform feedback mode are specified using `gl:transformFeedbackVaryings`. When a geometry shader is active, transform feedback records the values of selected geometry shader output variables from the emitted vertices. Otherwise, the values of the selected vertex shader outputs are recorded.

See **external** documentation.

```
getTransformFeedbackVarying(Program, Index, BufSize) -> {Size::integer(),
Type::enum(), Name::string()}
```

Types:

**Program = integer()**
**Index = integer()**
**BufSize = integer()**

Retrieve information about varying variables selected for transform feedback

Information about the set of varying variables in a linked program that will be captured during transform feedback may be retrieved by calling `gl:getTransformFeedbackVarying`. `gl:getTransformFeedbackVarying`

provides information about the varying variable selected by `Index` . An `Index` of 0 selects the first varying variable specified in the `Varyings` array passed to *gl:transformFeedbackVaryings/3* , and an `Index` of `?GL_TRANSFORM_FEEDBACK_VARYINGS-1` selects the last such variable.

See **external** documentation.

```
clampColor(Target, Clamp) -> ok
```

Types:

**`Target = enum()`**
**`Clamp = enum()`**

specify whether data read via

*gl:readPixels/7* should be clamped

`gl:clampColor` controls color clamping that is performed during *gl:readPixels/7* . `Target` must be `?GL_CLAMP_READ_COLOR`. If `Clamp` is `?GL_TRUE`, read color clamping is enabled; if `Clamp` is `?GL_FALSE`, read color clamping is disabled. If `Clamp` is `?GL_FIXED_ONLY`, read color clamping is enabled only if the selected read buffer has fixed point components and disabled otherwise.

See **external** documentation.

```
beginConditionalRender(Id, Mode) -> ok
```

Types:

**`Id = integer()`**
**`Mode = enum()`**

Start conditional rendering

Conditional rendering is started using `gl:beginConditionalRender` and ended using `gl:endConditionalRender` . During conditional rendering, all vertex array commands, as well as *gl:clear/1* and *gl:clearBufferiv/3* have no effect if the (`?GL_SAMPLES_PASSED`) result of the query object `Id` is zero, or if the (`?GL_ANY_SAMPLES_PASSED`) result is `?GL_FALSE` . The results of commands setting the current vertex state, such as *gl:vertexAttrib1d/2* are undefined. If the (`?GL_SAMPLES_PASSED`) result is non-zero or if the (`?GL_ANY_SAMPLES_PASSED` ) result is `?GL_TRUE`, such commands are not discarded. The `Id` parameter to `gl:beginConditionalRender` must be the name of a query object previously returned from a call to *gl:genQueries/1* . `Mode` specifies how the results of the query object are to be interpreted. If `Mode` is `?GL_QUERY_WAIT`, the GL waits for the results of the query to be available and then uses the results to determine if subsequent rendering commands are discarded. If `Mode` is `?GL_QUERY_NO_WAIT`, the GL may choose to unconditionally execute the subsequent rendering commands without waiting for the query to complete.

See **external** documentation.

```
endConditionalRender() -> ok
```

See *beginConditionalRender/2*

```
vertexAttribIPointer(Index, Size, Type, Stride, Pointer) -> ok
```

Types:

**`Index = integer()`**
**`Size = integer()`**
**`Type = enum()`**
**`Stride = integer()`**
**`Pointer = offset() | mem()`**

glVertexAttribIPointer

See *external* documentation.

```
getVertexAttribIiv(Index, Pname) -> {integer(), integer(), integer(),
integer()}
```

Types:

**Index = integer()**

**Pname = *enum()***

See *getVertexAttribdv/2*

```
getVertexAttribIuiv(Index, Pname) -> {integer(), integer(), integer(),
integer()}
```

Types:

**Index = integer()**

**Pname = *enum()***

glGetVertexAttribI

See *external* documentation.

```
vertexAttribI1i(Index, X) -> ok
```

Types:

**Index = integer()**

**X = integer()**

See *vertexAttrib1d/2*

```
vertexAttribI2i(Index, X, Y) -> ok
```

Types:

**Index = integer()**

**X = integer()**

**Y = integer()**

See *vertexAttrib1d/2*

```
vertexAttribI3i(Index, X, Y, Z) -> ok
```

Types:

**Index = integer()**

**X = integer()**

**Y = integer()**

**Z = integer()**

See *vertexAttrib1d/2*

```
vertexAttribI4i(Index, X, Y, Z, W) -> ok
```

Types:

**Index = integer()**

**X = integer()**

**Y = integer()**
**Z = integer()**
**W = integer()**

See *vertexAttrib1d/2*

`vertexAttribI1ui(Index, X) -> ok`

Types:

**Index = integer()**
**X = integer()**

See *vertexAttrib1d/2*

`vertexAttribI2ui(Index, X, Y) -> ok`

Types:

**Index = integer()**
**X = integer()**
**Y = integer()**

See *vertexAttrib1d/2*

`vertexAttribI3ui(Index, X, Y, Z) -> ok`

Types:

**Index = integer()**
**X = integer()**
**Y = integer()**
**Z = integer()**

See *vertexAttrib1d/2*

`vertexAttribI4ui(Index, X, Y, Z, W) -> ok`

Types:

**Index = integer()**
**X = integer()**
**Y = integer()**
**Z = integer()**
**W = integer()**

See *vertexAttrib1d/2*

`vertexAttribI1iv(Index::integer(), V) -> ok`

Types:

**V = {X::integer()}**

Equivalent to *vertexAttribI1i(Index, X)*.

`vertexAttribI2iv(Index::integer(), V) -> ok`

Types:

**V = {X::integer(), Y::integer()}**

Equivalent to *vertexAttribI2i(Index, X, Y)*.

`vertexAttribI3iv(Index::integer(), V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer()}`**

Equivalent to *vertexAttribI3i(Index, X, Y, Z)*.

`vertexAttribI4iv(Index::integer(), V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer(), W::integer()}`**

Equivalent to *vertexAttribI4i(Index, X, Y, Z, W)*.

`vertexAttribI1uiv(Index::integer(), V) -> ok`

Types:

**`V = {X::integer()}`**

Equivalent to *vertexAttribI1ui(Index, X)*.

`vertexAttribI2uiv(Index::integer(), V) -> ok`

Types:

**`V = {X::integer(), Y::integer()}`**

Equivalent to *vertexAttribI2ui(Index, X, Y)*.

`vertexAttribI3uiv(Index::integer(), V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer()}`**

Equivalent to *vertexAttribI3ui(Index, X, Y, Z)*.

`vertexAttribI4uiv(Index::integer(), V) -> ok`

Types:

**`V = {X::integer(), Y::integer(), Z::integer(), W::integer()}`**

Equivalent to *vertexAttribI4ui(Index, X, Y, Z, W)*.

`vertexAttribI4bv(Index, V) -> ok`

Types:

**`Index = integer()`**

**`V = {integer(), integer(), integer(), integer()}`**

See *vertexAttrib1d/2*

`vertexAttribI4sv(Index, V) -> ok`

Types:

**`Index = integer()`**

**`V = {integer(), integer(), integer(), integer()}`**

See *vertexAttrib1d/2*

```
vertexAttribI4ubv(Index, V) -> ok
```

Types:

**Index = integer()**

**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

```
vertexAttribI4usv(Index, V) -> ok
```

Types:

**Index = integer()**

**V = {integer(), integer(), integer(), integer()}**

See *vertexAttrib1d/2*

```
getUniformuiv(Program, Location) -> {integer(), integer(), integer(),
integer(), integer(), integer(), integer(), integer(), integer(), integer(),
integer(), integer(), integer(), integer(), integer(), integer()}
```

Types:

**Program = integer()**

**Location = integer()**

See *getUniformfv/2*

```
bindFragDataLocation(Program, Color, Name) -> ok
```

Types:

**Program = integer()**

**Color = integer()**

**Name = string()**

Bind a user-defined varying out variable to a fragment shader color number

`gl:bindFragDataLocation` explicitly specifies the binding of the user-defined varying out variable `Name` to fragment shader color number `ColorNumber` for program `Program` . If `Name` was bound previously, its assigned binding is replaced with `ColorNumber` . `Name` must be a null-terminated string. `ColorNumber` must be less than `?GL_MAX_DRAW_BUFFERS` .

See **external** documentation.

```
getFragDataLocation(Program, Name) -> integer()
```

Types:

**Program = integer()**

**Name = string()**

Query the bindings of color numbers to user-defined varying out variables

`gl:getFragDataLocation` retrieves the assigned color number binding for the user-defined varying out variable `Name` for program `Program` . `Program` must have previously been linked. `Name` must be a null-terminated string. If `Name` is not the name of an active user-defined varying out fragment shader variable within `Program` , -1 will be returned.

See **external** documentation.

```
uniform1ui(Location, V0) -> ok
```

Types:

**Location = integer()**
**V0 = integer()**

See *uniform1f/2*

```
uniform2ui(Location, V0, V1) -> ok
```

Types:

**Location = integer()**
**V0 = integer()**
**V1 = integer()**

See *uniform1f/2*

```
uniform3ui(Location, V0, V1, V2) -> ok
```

Types:

**Location = integer()**
**V0 = integer()**
**V1 = integer()**
**V2 = integer()**

See *uniform1f/2*

```
uniform4ui(Location, V0, V1, V2, V3) -> ok
```

Types:

**Location = integer()**
**V0 = integer()**
**V1 = integer()**
**V2 = integer()**
**V3 = integer()**

See *uniform1f/2*

```
uniform1uiv(Location, Value) -> ok
```

Types:

**Location = integer()**
**Value = [integer()]**

See *uniform1f/2*

```
uniform2uiv(Location, Value) -> ok
```

Types:

**Location = integer()**
**Value = [{integer(), integer()}]**

See *uniform1f/2*

```
uniform3uiv(Location, Value) -> ok
```

Types:

**Location = integer()**
**Value = [{integer(), integer(), integer()}]**

See *uniform1f/2*

```
uniform4uiv(Location, Value) -> ok
```

Types:

**Location = integer()**
**Value = [{integer(), integer(), integer(), integer()}]**

See *uniform1f/2*

```
texParameterIiv(Target, Pname, Params) -> ok
```

Types:

**Target = *enum()***
**Pname = *enum()***
**Params = tuple()**

See *texParameterf/3*

```
texParameterIuiv(Target, Pname, Params) -> ok
```

Types:

**Target = *enum()***
**Pname = *enum()***
**Params = tuple()**

glTexParameterI

See *external* documentation.

```
getTexParameterIiv(Target, Pname) -> {integer(), integer(), integer(),
integer()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

See *getTexParameterfv/2*

```
getTexParameterIuiv(Target, Pname) -> {integer(), integer(), integer(),
integer()}
```

Types:

**Target = *enum()***
**Pname = *enum()***

glGetTexParameterI

See *external* documentation.

`clearBufferiv(Buffer, Drawbuffer, Value) -> ok`

Types:

**`Buffer = enum()`**
**`Drawbuffer = integer()`**
**`Value = tuple()`**

Clear individual buffers of the currently bound draw framebuffer

`gl:clearBuffer*` clears the specified buffer to the specified value(s). If `Buffer` is `?GL_COLOR`, a particular draw buffer `?GL_DRAWBUFFER I` is specified by passing `I` as `DrawBuffer` . In this case, `Value` points to a four-element vector specifying the R, G, B and A color to clear that draw buffer to. If `Buffer` is one of `?GL_FRONT`, `?GL_BACK`, `?GL_LEFT`, `?GL_RIGHT`, or `?GL_FRONT_AND_BACK` , identifying multiple buffers, each selected buffer is cleared to the same value. Clamping and conversion for fixed-point color buffers are performed in the same fashion as *gl:clearColor/4* .

See **external** documentation.

`clearBufferuiv(Buffer, Drawbuffer, Value) -> ok`

Types:

**`Buffer = enum()`**
**`Drawbuffer = integer()`**
**`Value = tuple()`**

See *clearBufferiv/3*

`clearBufferfv(Buffer, Drawbuffer, Value) -> ok`

Types:

**`Buffer = enum()`**
**`Drawbuffer = integer()`**
**`Value = tuple()`**

See *clearBufferiv/3*

`clearBufferfi(Buffer, Drawbuffer, Depth, Stencil) -> ok`

Types:

**`Buffer = enum()`**
**`Drawbuffer = integer()`**
**`Depth = float()`**
**`Stencil = integer()`**

glClearBufferfi

See *external* documentation.

`getStringi(Name, Index) -> string()`

Types:

**`Name = enum()`**
**`Index = integer()`**

See *getString/1*

```
drawArraysInstanced(Mode, First, Count, Primcount) -> ok
```

Types:

**Mode = *enum()***
**First = integer()**
**Count = integer()**
**Primcount = integer()**

glDrawArraysInstance

See *external* documentation.

```
drawElementsInstanced(Mode, Count, Type, Indices, Primcount) -> ok
```

Types:

**Mode = *enum()***
**Count = integer()**
**Type = *enum()***
**Indices = *offset()* | *mem()***
**Primcount = integer()**

glDrawElementsInstance

See *external* documentation.

```
texBuffer(Target, Internalformat, Buffer) -> ok
```

Types:

**Target = *enum()***
**Internalformat = *enum()***
**Buffer = integer()**

Attach the storage for a buffer object to the active buffer texture

`gl:texBuffer` attaches the storage for the buffer object named `Buffer` to the active buffer texture, and specifies the internal format for the texel array found in the attached buffer object. If `Buffer` is zero, any buffer object attached to the buffer texture is detached and no new buffer object is attached. If `Buffer` is non-zero, it must be the name of an existing buffer object. `Target` must be `?GL_TEXTURE_BUFFER` . `Internalformat` specifies the storage format, and must be one of the following sized internal formats:

See **external** documentation.

```
primitiveRestartIndex(Index) -> ok
```

Types:

**Index = integer()**

Specify the primitive restart index

`gl:primitiveRestartIndex` specifies a vertex array element that is treated specially when primitive restarting is enabled. This is known as the primitive restart index.

See **external** documentation.

```
getInteger64i_v(Target, Index) -> [integer()]
```

Types:

**Target = *enum()***

**Index = integer()**

See *getBooleanv/1*

`getBufferParameteri64v(Target, Pname) -> [integer()]`

Types:

**Target = *enum()***

**Pname = *enum()***

glGetBufferParameteri64v

See *external* documentation.

`framebufferTexture(Target, Attachment, Texture, Level) -> ok`

Types:

**Target = *enum()***

**Attachment = *enum()***

**Texture = integer()**

**Level = integer()**

Attach a level of a texture object as a logical buffer to the currently bound framebuffer object

`gl:framebufferTexture`, `gl:framebufferTexture1D`, `gl:framebufferTexture2D`, and `gl:framebufferTexture` attach a selected mipmap level or image of a texture object as one of the logical buffers of the framebuffer object currently bound to `Target` . `Target` must be `?GL_DRAW_FRAMEBUFFER`, `?GL_READ_FRAMEBUFFER`, or `?GL_FRAMEBUFFER` . `?GL_FRAMEBUFFER` is equivalent to `?GL_DRAW_FRAMEBUFFER`.

See **external** documentation.

`vertexAttribDivisor(Index, Divisor) -> ok`

Types:

**Index = integer()**

**Divisor = integer()**

Modify the rate at which generic vertex attributes advance during instanced rendering

`gl:vertexAttribDivisor` modifies the rate at which generic vertex attributes advance when rendering multiple instances of primitives in a single draw call. If `Divisor` is zero, the attribute at slot `Index` advances once per vertex. If `Divisor` is non-zero, the attribute advances once per `Divisor` instances of the set(s) of vertices being rendered. An attribute is referred to as instanced if its `?GL_VERTEX_ATTRIB_ARRAY_DIVISOR` value is non-zero.

See **external** documentation.

`minSampleShading(Value) -> ok`

Types:

**Value = *clamp()***

Specifies minimum rate at which sample shaing takes place

`gl:minSampleShading` specifies the rate at which samples are shaded within a covered pixel. Sample-rate shading is enabled by calling *gl:enable/1* with the parameter `?GL_SAMPLE_SHADING` . If `?GL_MULTISAMPLE` or `?GL_SAMPLE_SHADING` is disabled, sample shading has no effect. Otherwise, an implementation must provide at least as many unique color values for each covered fragment as specified by `Value` times `Samples` where `Samples` is the value of `?GL_SAMPLES` for the current framebuffer. At least 1 sample for each covered fragment is generated.

See **external** documentation.

```
blendEquationi(Buf, Mode) -> ok
```

Types:

**Buf = integer()**
**Mode = *enum()***

See *blendEquation/1*

```
blendEquationSeparatei(Buf, ModeRGB, ModeAlpha) -> ok
```

Types:

**Buf = integer()**
**ModeRGB = *enum()***
**ModeAlpha = *enum()***

See *blendEquationSeparate/2*

```
blendFunci(Buf, Src, Dst) -> ok
```

Types:

**Buf = integer()**
**Src = *enum()***
**Dst = *enum()***

glBlendFunci

See *external* documentation.

```
blendFuncSeparatei(Buf, SrcRGB, DstRGB, SrcAlpha, DstAlpha) -> ok
```

Types:

**Buf = integer()**
**SrcRGB = *enum()***
**DstRGB = *enum()***
**SrcAlpha = *enum()***
**DstAlpha = *enum()***

See *blendFuncSeparate/4*

```
loadTransposeMatrixfARB(M) -> ok
```

Types:

**M = *matrix()***

glLoadTransposeMatrixARB

See *external* documentation.

```
loadTransposeMatrixdARB(M) -> ok
```

Types:

**M = *matrix()***

glLoadTransposeMatrixARB

See *external* documentation.

`multTransposeMatrixfARB(M) -> ok`

Types:

**`M = matrix()`**

glMultTransposeMatrixARB

See *external* documentation.

`multTransposeMatrixdARB(M) -> ok`

Types:

**`M = matrix()`**

glMultTransposeMatrixARB

See *external* documentation.

`weightbvARB(Weights) -> ok`

Types:

**`Weights = [integer()]`**

glWeightARB

See *external* documentation.

`weightsvARB(Weights) -> ok`

Types:

**`Weights = [integer()]`**

glWeightARB

See *external* documentation.

`weightivARB(Weights) -> ok`

Types:

**`Weights = [integer()]`**

glWeightARB

See *external* documentation.

`weightfvARB(Weights) -> ok`

Types:

**`Weights = [float()]`**

glWeightARB

See *external* documentation.

`weightdvARB(Weights) -> ok`

Types:

**`Weights = [float()]`**

glWeightARB

See *external* documentation.

`weightubvARB(Weights) -> ok`

Types:

**`Weights = [integer()]`**

glWeightARB

See *external* documentation.

`weightusvARB(Weights) -> ok`

Types:

**`Weights = [integer()]`**

glWeightARB

See *external* documentation.

`weightuivARB(Weights) -> ok`

Types:

**`Weights = [integer()]`**

glWeightARB

See *external* documentation.

`vertexBlendARB(Count) -> ok`

Types:

**`Count = integer()`**

glVertexBlenARB

See *external* documentation.

`currentPaletteMatrixARB(Index) -> ok`

Types:

**`Index = integer()`**

glCurrentPaletteMatrixARB

See *external* documentation.

`matrixIndexubvARB(Indices) -> ok`

Types:

**`Indices = [integer()]`**

glMatrixIndexARB

See *external* documentation.

`matrixIndexusvARB(Indices) -> ok`

Types:

**`Indices = [integer()]`**

glMatrixIndexARB

See *external* documentation.

```
matrixIndexuivARB(Indices) -> ok
```

Types:

**Indices = [integer()]**

glMatrixIndexARB

See *external* documentation.

```
programStringARB(Target, Format, String) -> ok
```

Types:

**Target = *enum()***
**Format = *enum()***
**String = string()**

glProgramStringARB

See *external* documentation.

```
bindProgramARB(Target, Program) -> ok
```

Types:

**Target = *enum()***
**Program = integer()**

glBindProgramARB

See *external* documentation.

```
deleteProgramsARB(Programs) -> ok
```

Types:

**Programs = [integer()]**

glDeleteProgramsARB

See *external* documentation.

```
genProgramsARB(N) -> [integer()]
```

Types:

**N = integer()**

glGenProgramsARB

See *external* documentation.

```
programEnvParameter4dARB(Target, Index, X, Y, Z, W) -> ok
```

Types:

**Target = *enum()***
**Index = integer()**
**X = float()**
**Y = float()**
**Z = float()**

**W = float()**

glProgramEnvParameterARB

See *external* documentation.

`programEnvParameter4dvARB(Target, Index, Params) -> ok`

Types:

**Target = *enum()***
**Index = integer()**
**Params = {float(), float(), float(), float()}**

glProgramEnvParameterARB

See *external* documentation.

`programEnvParameter4fARB(Target, Index, X, Y, Z, W) -> ok`

Types:

**Target = *enum()***
**Index = integer()**
**X = float()**
**Y = float()**
**Z = float()**
**W = float()**

glProgramEnvParameterARB

See *external* documentation.

`programEnvParameter4fvARB(Target, Index, Params) -> ok`

Types:

**Target = *enum()***
**Index = integer()**
**Params = {float(), float(), float(), float()}**

glProgramEnvParameterARB

See *external* documentation.

`programLocalParameter4dARB(Target, Index, X, Y, Z, W) -> ok`

Types:

**Target = *enum()***
**Index = integer()**
**X = float()**
**Y = float()**
**Z = float()**
**W = float()**

glProgramLocalParameterARB

See *external* documentation.

```
programLocalParameter4dvARB(Target, Index, Params) -> ok
```

Types:

**Target = *enum()***
**Index = integer()**
**Params = {float(), float(), float(), float()}**

glProgramLocalParameterARB

See *external* documentation.

```
programLocalParameter4fARB(Target, Index, X, Y, Z, W) -> ok
```

Types:

**Target = *enum()***
**Index = integer()**
**X = float()**
**Y = float()**
**Z = float()**
**W = float()**

glProgramLocalParameterARB

See *external* documentation.

```
programLocalParameter4fvARB(Target, Index, Params) -> ok
```

Types:

**Target = *enum()***
**Index = integer()**
**Params = {float(), float(), float(), float()}**

glProgramLocalParameterARB

See *external* documentation.

```
getProgramEnvParameterdvARB(Target, Index) -> {float(), float(), float(),
float()}
```

Types:

**Target = *enum()***
**Index = integer()**

glGetProgramEnvParameterARB

See *external* documentation.

```
getProgramEnvParameterfvARB(Target, Index) -> {float(), float(), float(),
float()}
```

Types:

**Target = *enum()***
**Index = integer()**

glGetProgramEnvParameterARB

See *external* documentation.

```
getProgramLocalParameterdvARB(Target, Index) -> {float(), float(), float(),
float()}
```

Types:

**Target = *enum()***

**Index = integer()**

glGetProgramLocalParameterARB

See *external* documentation.

```
getProgramLocalParameterfvARB(Target, Index) -> {float(), float(), float(),
float()}
```

Types:

**Target = *enum()***

**Index = integer()**

glGetProgramLocalParameterARB

See *external* documentation.

```
getProgramStringARB(Target, Pname, String) -> ok
```

Types:

**Target = *enum()***

**Pname = *enum()***

**String = *mem()***

glGetProgramStringARB

See *external* documentation.

```
getBufferParameterivARB(Target, Pname) -> [integer()]
```

Types:

**Target = *enum()***

**Pname = *enum()***

glGetBufferParameterARB

See *external* documentation.

```
deleteObjectARB(Obj) -> ok
```

Types:

**Obj = integer()**

glDeleteObjectARB

See *external* documentation.

```
getHandleARB(Pname) -> integer()
```

Types:

**Pname = *enum()***

glGetHandleARB

See *external* documentation.

```
detachObjectARB(ContainerObj, AttachedObj) -> ok
```

Types:

**ContainerObj = integer()**

**AttachedObj = integer()**

glDetachObjectARB

See *external* documentation.

```
createShaderObjectARB(ShaderType) -> integer()
```

Types:

**ShaderType = *enum()***

glCreateShaderObjectARB

See *external* documentation.

```
shaderSourceARB(ShaderObj, String) -> ok
```

Types:

**ShaderObj = integer()**

**String = iolist()**

glShaderSourceARB

See *external* documentation.

```
compileShaderARB(ShaderObj) -> ok
```

Types:

**ShaderObj = integer()**

glCompileShaderARB

See *external* documentation.

```
createProgramObjectARB() -> integer()
```

glCreateProgramObjectARB

See *external* documentation.

```
attachObjectARB(ContainerObj, Obj) -> ok
```

Types:

**ContainerObj = integer()**

**Obj = integer()**

glAttachObjectARB

See *external* documentation.

```
linkProgramARB(ProgramObj) -> ok
```

Types:

**ProgramObj = integer()**

glLinkProgramARB

See *external* documentation.

```
useProgramObjectARB(ProgramObj) -> ok
```

Types:

**ProgramObj = integer()**

glUseProgramObjectARB

See *external* documentation.

```
validateProgramARB(ProgramObj) -> ok
```

Types:

**ProgramObj = integer()**

glValidateProgramARB

See *external* documentation.

```
getObjectParameterfvARB(Obj, Pname) -> float()
```

Types:

**Obj = integer()**

**Pname = *enum()***

glGetObjectParameterARB

See *external* documentation.

```
getObjectParameterivARB(Obj, Pname) -> integer()
```

Types:

**Obj = integer()**

**Pname = *enum()***

glGetObjectParameterARB

See *external* documentation.

```
getInfoLogARB(Obj, MaxLength) -> string()
```

Types:

**Obj = integer()**

**MaxLength = integer()**

glGetInfoLogARB

See *external* documentation.

```
getAttachedObjectsARB(ContainerObj, MaxCount) -> [integer()]
```

Types:

**ContainerObj = integer()**

**MaxCount = integer()**

glGetAttachedObjectsARB

See *external* documentation.

```
getUniformLocationARB(ProgramObj, Name) -> integer()
```

Types:

**ProgramObj = integer()**

**Name = string()**

glGetUniformLocationARB

See *external* documentation.

```
getActiveUniformARB(ProgramObj, Index, MaxLength) -> {Size::integer(),
Type::enum(), Name::string()}
```

Types:

**ProgramObj = integer()**

**Index = integer()**

**MaxLength = integer()**

glGetActiveUniformARB

See *external* documentation.

```
getUniformfvARB(ProgramObj, Location) -> matrix()
```

Types:

**ProgramObj = integer()**

**Location = integer()**

glGetUniformARB

See *external* documentation.

```
getUniformivARB(ProgramObj, Location) -> {integer(), integer(), integer(),
integer(), integer(), integer(), integer(), integer(), integer(), integer(),
integer(), integer(), integer(), integer(), integer(), integer()}
```

Types:

**ProgramObj = integer()**

**Location = integer()**

glGetUniformARB

See *external* documentation.

```
getShaderSourceARB(Obj, MaxLength) -> string()
```

Types:

**Obj = integer()**

**MaxLength = integer()**

glGetShaderSourceARB

See *external* documentation.

```
bindAttribLocationARB(ProgramObj, Index, Name) -> ok
```

Types:

**ProgramObj = integer()**

**Index = integer()**

**Name = string()**

glBindAttribLocationARB

See *external* documentation.

```
getActiveAttribARB(ProgramObj, Index, MaxLength) -> {Size::integer(),
Type::enum(), Name::string()}
```

Types:

**ProgramObj = integer()**

**Index = integer()**

**MaxLength = integer()**

glGetActiveAttribARB

See *external* documentation.

```
getAttribLocationARB(ProgramObj, Name) -> integer()
```

Types:

**ProgramObj = integer()**

**Name = string()**

glGetAttribLocationARB

See *external* documentation.

```
isRenderbuffer(Renderbuffer) -> 0 | 1
```

Types:

**Renderbuffer = integer()**

Determine if a name corresponds to a renderbuffer object

`gl:isRenderbuffer` returns `?GL_TRUE` if `Renderbuffer` is currently the name of a renderbuffer object. If `Renderbuffer` is zero, or if `Renderbuffer` is not the name of a renderbuffer object, or if an error occurs, `gl:isRenderbuffer` returns `?GL_FALSE`. If `Renderbuffer` is a name returned by *gl:genRenderbuffers/1* , by that has not yet been bound through a call to *gl:bindRenderbuffer/2* or *gl:framebufferRenderbuffer/4* , then the name is not a renderbuffer object and `gl:isRenderbuffer` returns `?GL_FALSE` .

See **external** documentation.

```
bindRenderbuffer(Target, Renderbuffer) -> ok
```

Types:

**Target = *enum()***

**Renderbuffer = integer()**

Bind a renderbuffer to a renderbuffer target

`gl:bindRenderbuffer` binds the renderbuffer object with name `Renderbuffer` to the renderbuffer target specified by `Target` . `Target` must be `?GL_RENDERBUFFER` . `Renderbuffer` is the name of a renderbuffer object previously returned from a call to *gl:genRenderbuffers/1* , or zero to break the existing binding of a renderbuffer object to `Target` .

See **external** documentation.

```
deleteRenderbuffers(Renderbuffers) -> ok
```

Types:

**Renderbuffers = [integer()]**

Delete renderbuffer objects

`gl:deleteRenderbuffers` deletes the `N` renderbuffer objects whose names are stored in the array addressed by `Renderbuffers` . The name zero is reserved by the GL and is silently ignored, should it occur in `Renderbuffers` , as are other unused names. Once a renderbuffer object is deleted, its name is again unused and it has no contents. If a renderbuffer that is currently bound to the target `?GL_RENDERBUFFER` is deleted, it is as though *gl:bindRenderbuffer/2* had been executed with a `Target` of `?GL_RENDERBUFFER` and a `Name` of zero.

See **external** documentation.

```
genRenderbuffers(N) -> [integer()]
```

Types:

**N = integer()**

Generate renderbuffer object names

`gl:genRenderbuffers` returns `N` renderbuffer object names in `Renderbuffers` . There is no guarantee that the names form a contiguous set of integers; however, it is guaranteed that none of the returned names was in use immediately before the call to `gl:genRenderbuffers` .

See **external** documentation.

```
renderbufferStorage(Target, Internalformat, Width, Height) -> ok
```

Types:

**Target = *enum()***

**Internalformat = *enum()***

**Width = integer()**

**Height = integer()**

Establish data storage, format and dimensions of a renderbuffer object's image

`gl:renderbufferStorage` is equivalent to calling *gl:renderbufferStorageMultisample/5* with the `Samples` set to zero.

See **external** documentation.

```
getRenderbufferParameteriv(Target, Pname) -> integer()
```

Types:

**Target = *enum()***

**Pname = *enum()***

Retrieve information about a bound renderbuffer object

`gl:getRenderbufferParameteriv` retrieves information about a bound renderbuffer object. `Target` specifies the target of the query operation and must be `?GL_RENDERBUFFER` . `Pname` specifies the parameter whose value to query and must be one of `?GL_RENDERBUFFER_WIDTH` , `?GL_RENDERBUFFER_HEIGHT`, `?GL_RENDERBUFFER_INTERNAL_FORMAT`, `?GL_RENDERBUFFER_RED_SIZE` , `?GL_RENDERBUFFER_GREEN_SIZE`, `?GL_RENDERBUFFER_BLUE_SIZE`, `?GL_RENDERBUFFER_ALPHA_SIZE` , `?GL_RENDERBUFFER_DEPTH_SIZE`, `?GL_RENDERBUFFER_DEPTH_SIZE`, `?GL_RENDERBUFFER_STENCIL_SIZE` , or `?GL_RENDERBUFFER_SAMPLES`.

See **external** documentation.

```
isFramebuffer(Framebuffer) -> 0 | 1
```

Types:

**Framebuffer = integer()**

Determine if a name corresponds to a framebuffer object

`gl:isFramebuffer` returns `?GL_TRUE` if `Framebuffer` is currently the name of a framebuffer object. If `Framebuffer` is zero, or if `?framebuffer` is not the name of a framebuffer object, or if an error occurs, `gl:isFramebuffer` returns `?GL_FALSE`. If `Framebuffer` is a name returned by *gl:genFramebuffers/1* , by that has not yet been bound through a call to *gl:bindFramebuffer/2* , then the name is not a framebuffer object and `gl:isFramebuffer` returns `?GL_FALSE`.

See **external** documentation.

```
bindFramebuffer(Target, Framebuffer) -> ok
```

Types:

**Target = *enum()***

**Framebuffer = integer()**

Bind a framebuffer to a framebuffer target

`gl:bindFramebuffer` binds the framebuffer object with name `Framebuffer` to the framebuffer target specified by `Target` . `Target` must be either `?GL_DRAW_FRAMEBUFFER` , `?GL_READ_FRAMEBUFFER` or `?GL_FRAMEBUFFER`. If a framebuffer object is bound to `?GL_DRAW_FRAMEBUFFER` or `?GL_READ_FRAMEBUFFER`, it becomes the target for rendering or readback operations, respectively, until it is deleted or another framebuffer is bound to the corresponding bind point. Calling `gl:bindFramebuffer` with `Target` set to `?GL_FRAMEBUFFER` binds `Framebuffer` to both the read and draw framebuffer targets. `Framebuffer` is the name of a framebuffer object previously returned from a call to *gl:genFramebuffers/1* , or zero to break the existing binding of a framebuffer object to `Target` .

See **external** documentation.

```
deleteFramebuffers(Framebuffers) -> ok
```

Types:

**Framebuffers = [integer()]**

Delete framebuffer objects

`gl:deleteFramebuffers` deletes the `N` framebuffer objects whose names are stored in the array addressed by `Framebuffers` . The name zero is reserved by the GL and is silently ignored, should it occur in `Framebuffers` , as are other unused names. Once a framebuffer object is deleted, its name is again unused and it has no attachments. If a framebuffer that is currently bound to one or more of the targets `?GL_DRAW_FRAMEBUFFER` or `?GL_READ_FRAMEBUFFER` is deleted, it is as though *gl:bindFramebuffer/2* had been executed with the corresponding `Target` and `Framebuffer` zero.

See **external** documentation.

```
genFramebuffers(N) -> [integer()]
```

Types:

**N = integer()**

Generate framebuffer object names

gl:genFramebuffers returns N framebuffer object names in Ids . There is no guarantee that the names form a contiguous set of integers; however, it is guaranteed that none of the returned names was in use immediately before the call to gl:genFramebuffers .

See **external** documentation.

checkFramebufferStatus(Target) -> enum()

Types:

**Target = *enum()***

Check the completeness status of a framebuffer

gl:checkFramebufferStatus queries the completeness status of the framebuffer object currently bound to Target . Target must be ?GL_DRAW_FRAMEBUFFER, ?GL_READ_FRAMEBUFFER or ?GL_FRAMEBUFFER. ?GL_FRAMEBUFFER is equivalent to ?GL_DRAW_FRAMEBUFFER .

See **external** documentation.

framebufferTexture1D(Target, Attachment, Textarget, Texture, Level) -> ok

Types:

**Target = *enum()***
**Attachment = *enum()***
**Textarget = *enum()***
**Texture = integer()**
**Level = integer()**

See *framebufferTexture/4*

framebufferTexture2D(Target, Attachment, Textarget, Texture, Level) -> ok

Types:

**Target = *enum()***
**Attachment = *enum()***
**Textarget = *enum()***
**Texture = integer()**
**Level = integer()**

See *framebufferTexture/4*

framebufferTexture3D(Target, Attachment, Textarget, Texture, Level, Zoffset) -> ok

Types:

**Target = *enum()***
**Attachment = *enum()***
**Textarget = *enum()***
**Texture = integer()**
**Level = integer()**
**Zoffset = integer()**

See *framebufferTexture/4*

```
framebufferRenderbuffer(Target, Attachment, Renderbuffertarget, Renderbuffer)
-> ok
```

Types:

**Target = *enum()***

**Attachment = *enum()***

**Renderbuffertarget = *enum()***

**Renderbuffer = integer()**

Attach a renderbuffer as a logical buffer to the currently bound framebuffer object

`gl:framebufferRenderbuffer` attaches a renderbuffer as one of the logical buffers of the currently bound framebuffer object. `Renderbuffer` is the name of the renderbuffer object to attach and must be either zero, or the name of an existing renderbuffer object of type `Renderbuffertarget` . If `Renderbuffer` is not zero and if `gl:framebufferRenderbuffer` is successful, then the renderbuffer name `Renderbuffer` will be used as the logical buffer identified by `Attachment` of the framebuffer currently bound to `Target` .

See **external** documentation.

```
getFramebufferAttachmentParameteriv(Target, Attachment, Pname) -> integer()
```

Types:

**Target = *enum()***

**Attachment = *enum()***

**Pname = *enum()***

Retrieve information about attachments of a bound framebuffer object

`gl:getFramebufferAttachmentParameter` returns information about attachments of a bound framebuffer object. `Target` specifies the framebuffer binding point and must be `?GL_DRAW_FRAMEBUFFER`, `?GL_READ_FRAMEBUFFER` or `?GL_FRAMEBUFFER`. `?GL_FRAMEBUFFER` is equivalent to `?GL_DRAW_FRAMEBUFFER`.

See **external** documentation.

```
generateMipmap(Target) -> ok
```

Types:

**Target = *enum()***

Generate mipmaps for a specified texture target

`gl:generateMipmap` generates mipmaps for the texture attached to `Target` of the active texture unit. For cube map textures, a `?GL_INVALID_OPERATION` error is generated if the texture attached to `Target` is not cube complete.

See **external** documentation.

```
blitFramebuffer(SrcX0, SrcY0, SrcX1, SrcY1, DstX0, DstY0, DstX1, DstY1, Mask,
Filter) -> ok
```

Types:

**SrcX0 = integer()**

**SrcY0 = integer()**

**SrcX1 = integer()**

**SrcY1 = integer()**

**DstX0 = integer()**

**DstY0 = integer()**
**DstX1 = integer()**
**DstY1 = integer()**
**Mask = integer()**
**Filter = *enum()***

Copy a block of pixels from the read framebuffer to the draw framebuffer

`gl:blitFramebuffer` transfers a rectangle of pixel values from one region of the read framebuffer to another region in the draw framebuffer. `Mask` is the bitwise OR of a number of values indicating which buffers are to be copied. The values are `?GL_COLOR_BUFFER_BIT` , `?GL_DEPTH_BUFFER_BIT`, and `?GL_STENCIL_BUFFER_BIT`. The pixels corresponding to these buffers are copied from the source rectangle bounded by the locations ( `SrcX0` ; `SrcY0` ) and ( `SrcX1` ; `SrcY1` ) to the destination rectangle bounded by the locations ( `DstX0` ; `DstY0` ) and ( `DstX1` ; `DstY1` ). The lower bounds of the rectangle are inclusive, while the upper bounds are exclusive.

See **external** documentation.

`renderbufferStorageMultisample(Target, Samples, Internalformat, Width, Height) -> ok`

Types:

**Target = *enum()***
**Samples = integer()**
**Internalformat = *enum()***
**Width = integer()**
**Height = integer()**

Establish data storage, format, dimensions and sample count of a renderbuffer object's image

`gl:renderbufferStorageMultisample` establishes the data storage, format, dimensions and number of samples of a renderbuffer object's image.

See **external** documentation.

`framebufferTextureLayer(Target, Attachment, Texture, Level, Layer) -> ok`

Types:

**Target = *enum()***
**Attachment = *enum()***
**Texture = integer()**
**Level = integer()**
**Layer = integer()**

See *framebufferTexture/4*

`framebufferTextureFaceARB(Target, Attachment, Texture, Level, Face) -> ok`

Types:

**Target = *enum()***
**Attachment = *enum()***
**Texture = integer()**
**Level = integer()**
**Face = *enum()***

See *framebufferTexture/4*

`flushMappedBufferRange(Target, Offset, Length) -> ok`

Types:

**`Target = enum()`**
**`Offset = integer()`**
**`Length = integer()`**

Indicate modifications to a range of a mapped buffer

`gl:flushMappedBufferRange` indicates that modifications have been made to a range of a mapped buffer. The buffer must previously have been mapped with the `?GL_MAP_FLUSH_EXPLICIT` flag. `Offset` and `Length` indicate the modified subrange of the mapping, in basic units. The specified subrange to flush is relative to the start of the currently mapped range of the buffer. `gl:flushMappedBufferRange` may be called multiple times to indicate distinct subranges of the mapping which require flushing.

See **external** documentation.

`bindVertexArray(Array) -> ok`

Types:

**`Array = integer()`**

Bind a vertex array object

`gl:bindVertexArray` binds the vertex array object with name `Array`. `Array` is the name of a vertex array object previously returned from a call to *gl:genVertexArrays/1* , or zero to break the existing vertex array object binding.

See **external** documentation.

`deleteVertexArrays(Arrays) -> ok`

Types:

**`Arrays = [integer()]`**

Delete vertex array objects

`gl:deleteVertexArrays` deletes `N` vertex array objects whose names are stored in the array addressed by `Arrays` . Once a vertex array object is deleted it has no contents and its name is again unused. If a vertex array object that is currently bound is deleted, the binding for that object reverts to zero and the default vertex array becomes current. Unused names in `Arrays` are silently ignored, as is the value zero.

See **external** documentation.

`genVertexArrays(N) -> [integer()]`

Types:

**`N = integer()`**

Generate vertex array object names

`gl:genVertexArrays` returns `N` vertex array object names in `Arrays` . There is no guarantee that the names form a contiguous set of integers; however, it is guaranteed that none of the returned names was in use immediately before the call to `gl:genVertexArrays` .

See **external** documentation.

```
isVertexArray(Array) -> 0 | 1
```

Types:

**Array = integer()**

Determine if a name corresponds to a vertex array object

`gl:isVertexArray` returns `?GL_TRUE` if `Array` is currently the name of a renderbuffer object. If `Renderbuffer` is zero, or if `Array` is not the name of a renderbuffer object, or if an error occurs, `gl:isVertexArray` returns `?GL_FALSE` . If `Array` is a name returned by *gl:genVertexArrays/1* , by that has not yet been bound through a call to *gl:bindVertexArray/1* , then the name is not a vertex array object and `gl:isVertexArray` returns `?GL_FALSE`.

See **external** documentation.

```
getUniformIndices(Program, UniformNames) -> [integer()]
```

Types:

**Program = integer()**
**UniformNames = iolist()**

Retrieve the index of a named uniform block

`gl:getUniformIndices` retrieves the indices of a number of uniforms within `Program` .

See **external** documentation.

```
getActiveUniformsiv(Program, UniformIndices, Pname) -> [integer()]
```

Types:

**Program = integer()**
**UniformIndices = [integer()]**
**Pname = *enum()***

glGetActiveUniforms

See *external* documentation.

```
getActiveUniformName(Program, UniformIndex, BufSize) -> string()
```

Types:

**Program = integer()**
**UniformIndex = integer()**
**BufSize = integer()**

Query the name of an active uniform

`gl:getActiveUniformName` returns the name of the active uniform at `UniformIndex` within `Program` . If `UniformName` is not NULL, up to `BufSize` characters (including a nul-terminator) will be written into the array whose address is specified by `UniformName` . If `Length` is not NULL, the number of characters that were (or would have been) written into `UniformName` (not including the nul-terminator) will be placed in the variable whose address is specified in `Length` . If `Length` is NULL, no length is returned. The length of the longest uniform name in `Program` is given by the value of `?GL_ACTIVE_UNIFORM_MAX_LENGTH`, which can be queried with *gl:getProgramiv/2* .

See **external** documentation.

`getUniformBlockIndex(Program, UniformBlockName) -> integer()`

Types:

**`Program = integer()`**
**`UniformBlockName = string()`**

Retrieve the index of a named uniform block

`gl:getUniformBlockIndex` retrieves the index of a uniform block within `Program` .

See **external** documentation.

`getActiveUniformBlockiv(Program, UniformBlockIndex, Pname, Params) -> ok`

Types:

**`Program = integer()`**
**`UniformBlockIndex = integer()`**
**`Pname = enum()`**
**`Params = mem()`**

Query information about an active uniform block

`gl:getActiveUniformBlockiv` retrieves information about an active uniform block within `Program` .

See **external** documentation.

`getActiveUniformBlockName(Program, UniformBlockIndex, BufSize) -> string()`

Types:

**`Program = integer()`**
**`UniformBlockIndex = integer()`**
**`BufSize = integer()`**

Retrieve the name of an active uniform block

`gl:getActiveUniformBlockName` retrieves the name of the active uniform block at `UniformBlockIndex` within `Program` .

See **external** documentation.

`uniformBlockBinding(Program, UniformBlockIndex, UniformBlockBinding) -> ok`

Types:

**`Program = integer()`**
**`UniformBlockIndex = integer()`**
**`UniformBlockBinding = integer()`**

Assign a binding point to an active uniform block

Binding points for active uniform blocks are assigned using `gl:uniformBlockBinding`. Each of a program's active uniform blocks has a corresponding uniform buffer binding point. `Program` is the name of a program object for which the command *gl:linkProgram/1* has been issued in the past.

See **external** documentation.

`copyBufferSubData(ReadTarget, WriteTarget, ReadOffset, WriteOffset, Size) -> ok`

Types:

**ReadTarget = *enum()***
**WriteTarget = *enum()***
**ReadOffset = integer()**
**WriteOffset = integer()**
**Size = integer()**

Copy part of the data store of a buffer object to the data store of another buffer object

`gl:copyBufferSubData` copies part of the data store attached to `Readtarget` to the data store attached to `Writetarget` . The number of basic machine units indicated by `Size` is copied from the source, at offset `Readoffset` to the destination at `Writeoffset` , also in basic machine units.

See **external** documentation.

`drawElementsBaseVertex(Mode, Count, Type, Indices, Basevertex) -> ok`

Types:

**Mode = *enum()***
**Count = integer()**
**Type = *enum()***
**Indices = *offset()* | *mem()***
**Basevertex = integer()**

Render primitives from array data with a per-element offset

`gl:drawElementsBaseVertex` behaves identically to *gl:drawElements/4* except that the `i`th element transferred by the corresponding draw call will be taken from element `Indices` [i] + `Basevertex` of each enabled array. If the resulting value is larger than the maximum value representable by `Type` , it is as if the calculation were upconverted to 32-bit unsigned integers (with wrapping on overflow conditions). The operation is undefined if the sum would be negative.

See **external** documentation.

`drawRangeElementsBaseVertex(Mode, Start, End, Count, Type, Indices, Basevertex) -> ok`

Types:

**Mode = *enum()***
**Start = integer()**
**End = integer()**
**Count = integer()**
**Type = *enum()***
**Indices = *offset()* | *mem()***
**Basevertex = integer()**

Render primitives from array data with a per-element offset

`gl:drawRangeElementsBaseVertex` is a restricted form of *gl:drawElementsBaseVertex/5* . `Mode` , `Start` , `End` , `Count` and `Basevertex` match the corresponding arguments to *gl:drawElementsBaseVertex/5* , with the additional constraint that all values in the array `Indices` must lie between `Start` and `End` , inclusive, prior to adding `Basevertex` . Index values lying outside the range [ `Start` , `End` ] are treated in the same way as *gl:drawElementsBaseVertex/5* . The `i` th element transferred by the corresponding draw call will be taken from element `Indices` [i] + `Basevertex` of each enabled array. If the resulting value is larger than the maximum value

representable by Type , it is as if the calculation were upconverted to 32-bit unsigned integers (with wrapping on overflow conditions). The operation is undefined if the sum would be negative.

See **external** documentation.

```
drawElementsInstancedBaseVertex(Mode, Count, Type, Indices, Primcount,
Basevertex) -> ok
```

Types:

**Mode = *enum()***
**Count = integer()**
**Type = *enum()***
**Indices = *offset()* | *mem()***
**Primcount = integer()**
**Basevertex = integer()**

Render multiple instances of a set of primitives from array data with a per-element offset

gl:drawElementsInstancedBaseVertex behaves identically to *gl:drawElementsInstanced/5* except that the ith element transferred by the corresponding draw call will be taken from element Indices [i] + Basevertex of each enabled array. If the resulting value is larger than the maximum value representable by Type , it is as if the calculation were upconverted to 32-bit unsigned integers (with wrapping on overflow conditions). The operation is undefined if the sum would be negative.

See **external** documentation.

```
provokingVertex(Mode) -> ok
```

Types:

**Mode = *enum()***

Specifiy the vertex to be used as the source of data for flat shaded varyings

Flatshading a vertex shader varying output means to assign all vetices of the primitive the same value for that output. The vertex from which these values is derived is known as the provoking vertex and gl:provokingVertex specifies which vertex is to be used as the source of data for flat shaded varyings.

See **external** documentation.

```
fenceSync(Condition, Flags) -> integer()
```

Types:

**Condition = *enum()***
**Flags = integer()**

Create a new sync object and insert it into the GL command stream

gl:fenceSync creates a new fence sync object, inserts a fence command into the GL command stream and associates it with that sync object, and returns a non-zero name corresponding to the sync object.

See **external** documentation.

```
isSync(Sync) -> 0 | 1
```

Types:

**Sync = integer()**

Determine if a name corresponds to a sync object

gl:isSync returns ?GL_TRUE if Sync is currently the name of a sync object. If Sync is not the name of a sync object, or if an error occurs, gl:isSync returns ?GL_FALSE. Note that zero is not the name of a sync object.

See **external** documentation.

```
deleteSync(Sync) -> ok
```

Types:

**Sync = integer()**

Delete a sync object

gl:deleteSync deletes the sync object specified by Sync . If the fence command corresponding to the specified sync object has completed, or if no *gl:waitSync/3* or *gl:clientWaitSync/3* commands are blocking on Sync , the object is deleted immediately. Otherwise, Sync is flagged for deletion and will be deleted when it is no longer associated with any fence command and is no longer blocking any *gl:waitSync/3* or *gl:clientWaitSync/3* command. In either case, after gl:deleteSync returns, the name Sync is invalid and can no longer be used to refer to the sync object.

See **external** documentation.

```
clientWaitSync(Sync, Flags, Timeout) -> enum()
```

Types:

**Sync = integer()**
**Flags = integer()**
**Timeout = integer()**

Block and wait for a sync object to become signaled

gl:clientWaitSync causes the client to block and wait for the sync object specified by Sync to become signaled. If Sync is signaled when gl:clientWaitSync is called, gl:clientWaitSync returns immediately, otherwise it will block and wait for up to Timeout nanoseconds for Sync to become signaled.

See **external** documentation.

```
waitSync(Sync, Flags, Timeout) -> ok
```

Types:

**Sync = integer()**
**Flags = integer()**
**Timeout = integer()**

Instruct the GL server to block until the specified sync object becomes signaled

gl:waitSync causes the GL server to block and wait until Sync becomes signaled. Sync is the name of an existing sync object upon which to wait. Flags and Timeout are currently not used and must be set to zero and the special value ?GL_TIMEOUT_IGNORED , respectively

Flags and Timeout are placeholders for anticipated future extensions of sync object capabilities. They must have these reserved values in order that existing code calling gl:waitSync operate properly in the presence of such extensions.

See **external** documentation.

```
getInteger64v(Pname) -> [integer()]
```

Types:

**Pname = *enum()***

See *getBooleanv/1*

```
getSynciv(Sync, Pname, BufSize) -> [integer()]
```

Types:

**Sync = integer()**
**Pname = *enum()***
**BufSize = integer()**

Query the properties of a sync object

`gl:getSynciv` retrieves properties of a sync object. `Sync` specifies the name of the sync object whose properties to retrieve.

See **external** documentation.

```
texImage2DMultisample(Target, Samples, Internalformat, Width, Height,
Fixedsamplelocations) -> ok
```

Types:

**Target = *enum()***
**Samples = integer()**
**Internalformat = integer()**
**Width = integer()**
**Height = integer()**
**Fixedsamplelocations = 0 | 1**

Establish the data storage, format, dimensions, and number of samples of a multisample texture's image

`gl:texImage2DMultisample` establishes the data storage, format, dimensions and number of samples of a multisample texture's image.

See **external** documentation.

```
texImage3DMultisample(Target, Samples, Internalformat, Width, Height, Depth,
Fixedsamplelocations) -> ok
```

Types:

**Target = *enum()***
**Samples = integer()**
**Internalformat = integer()**
**Width = integer()**
**Height = integer()**
**Depth = integer()**
**Fixedsamplelocations = 0 | 1**

Establish the data storage, format, dimensions, and number of samples of a multisample texture's image

`gl:texImage3DMultisample` establishes the data storage, format, dimensions and number of samples of a multisample texture's image.

See **external** documentation.

```
getMultisamplefv(Pname, Index) -> {float(), float()}
```

Types:

**Pname = *enum()***
**Index = integer()**

Retrieve the location of a sample

`gl:getMultisamplefv` queries the location of a given sample. `Pname` specifies the sample parameter to retrieve and must be `?GL_SAMPLE_POSITION`. `Index` corresponds to the sample for which the location should be returned. The sample location is returned as two floating-point values in `Val[0]` and `Val[1]` , each between 0 and 1, corresponding to the `X` and `Y` locations respectively in the GL pixel space of that sample. (0.5, 0.5) this corresponds to the pixel center. `Index` must be between zero and the value of `?GL_SAMPLES` - 1.

See **external** documentation.

`sampleMaski(Index, Mask) -> ok`

Types:

**Index = integer()**
**Mask = integer()**

Set the value of a sub-word of the sample mask

`gl:sampleMaski` sets one 32-bit sub-word of the multi-word sample mask, `?GL_SAMPLE_MASK_VALUE` .

See **external** documentation.

`namedStringARB(Type, Name, String) -> ok`

Types:

**Type = *enum()***
**Name = string()**
**String = string()**

glNamedStringARB

See *external* documentation.

`deleteNamedStringARB(Name) -> ok`

Types:

**Name = string()**

glDeleteNamedStringARB

See *external* documentation.

`compileShaderIncludeARB(Shader, Path) -> ok`

Types:

**Shader = integer()**
**Path = iolist()**

glCompileShaderIncludeARB

See *external* documentation.

`isNamedStringARB(Name) -> 0 | 1`

Types:

**Name = string()**

glIsNamedStringARB

See *external* documentation.

`getNamedStringARB(Name, BufSize) -> string()`

Types:

**`Name = string()`**

**`BufSize = integer()`**

glGetNamedStringARB

See *external* documentation.

`getNamedStringivARB(Name, Pname) -> integer()`

Types:

**`Name = string()`**

**`Pname = enum()`**

glGetNamedStringARB

See *external* documentation.

`bindFragDataLocationIndexed(Program, ColorNumber, Index, Name) -> ok`

Types:

**`Program = integer()`**

**`ColorNumber = integer()`**

**`Index = integer()`**

**`Name = string()`**

glBindFragDataLocationIndexe

See *external* documentation.

`getFragDataIndex(Program, Name) -> integer()`

Types:

**`Program = integer()`**

**`Name = string()`**

Query the bindings of color indices to user-defined varying out variables

`gl:getFragDataIndex` returns the index of the fragment color to which the variable `Name` was bound when the program object `Program` was last linked. If `Name` is not a varying out variable of `Program` , or if an error occurs, -1 will be returned.

See **external** documentation.

`genSamplers(Count) -> [integer()]`

Types:

**`Count = integer()`**

Generate sampler object names

gl:genSamplers returns N sampler object names in Samplers . There is no guarantee that the names form a contiguous set of integers; however, it is guaranteed that none of the returned names was in use immediately before the call to gl:genSamplers .

See **external** documentation.

```
deleteSamplers(Samplers) -> ok
```

Types:

**Samplers = [integer()]**

Delete named sampler objects

gl:deleteSamplers deletes N sampler objects named by the elements of the array Ids . After a sampler object is deleted, its name is again unused. If a sampler object that is currently bound to a sampler unit is deleted, it is as though *gl:bindSampler/2* is called with unit set to the unit the sampler is bound to and sampler zero. Unused names in samplers are silently ignored, as is the reserved name zero.

See **external** documentation.

```
isSampler(Sampler) -> 0 | 1
```

Types:

**Sampler = integer()**

Determine if a name corresponds to a sampler object

gl:isSampler returns ?GL_TRUE if Id is currently the name of a sampler object. If Id is zero, or is a non-zero value that is not currently the name of a sampler object, or if an error occurs, gl:isSampler returns ?GL_FALSE.

See **external** documentation.

```
bindSampler(Unit, Sampler) -> ok
```

Types:

**Unit = integer()**
**Sampler = integer()**

Bind a named sampler to a texturing target

gl:bindSampler binds Sampler to the texture unit at index Unit . Sampler must be zero or the name of a sampler object previously returned from a call to *gl:genSamplers/1* . Unit must be less than the value of ? GL_MAX_COMBINED_TEXTURE_IMAGE_UNITS.

See **external** documentation.

```
samplerParameteri(Sampler, Pname, Param) -> ok
```

Types:

**Sampler = integer()**
**Pname = *enum()***
**Param = integer()**

Set sampler parameters

gl:samplerParameter assigns the value or values in Params to the sampler parameter specified as Pname . Sampler specifies the sampler object to be modified, and must be the name of a sampler object previously returned from a call to *gl:genSamplers/1* . The following symbols are accepted in Pname :

See **external** documentation.

```
samplerParameteriv(Sampler, Pname, Param) -> ok
```

Types:

**Sampler = integer()**
**Pname = *enum()***
**Param = [integer()]**

See *samplerParameteri/3*

```
samplerParameterf(Sampler, Pname, Param) -> ok
```

Types:

**Sampler = integer()**
**Pname = *enum()***
**Param = float()**

See *samplerParameteri/3*

```
samplerParameterfv(Sampler, Pname, Param) -> ok
```

Types:

**Sampler = integer()**
**Pname = *enum()***
**Param = [float()]**

See *samplerParameteri/3*

```
samplerParameterIiv(Sampler, Pname, Param) -> ok
```

Types:

**Sampler = integer()**
**Pname = *enum()***
**Param = [integer()]**

See *samplerParameteri/3*

```
samplerParameterIuiv(Sampler, Pname, Param) -> ok
```

Types:

**Sampler = integer()**
**Pname = *enum()***
**Param = [integer()]**

glSamplerParameterI

See *external* documentation.

```
getSamplerParameteriv(Sampler, Pname) -> [integer()]
```

Types:

**Sampler = integer()**
**Pname = *enum()***

Return sampler parameter values

gl:getSamplerParameter returns in Params the value or values of the sampler parameter specified as Pname . Sampler defines the target sampler, and must be the name of an existing sampler object, returned from a previous call to *gl:genSamplers/1* . Pname accepts the same symbols as *gl:samplerParameteri/3* , with the same interpretations:

See **external** documentation.

```
getSamplerParameterIiv(Sampler, Pname) -> [integer()]
```

Types:

**Sampler = integer()**
**Pname = *enum()***

See *getSamplerParameteriv/2*

```
getSamplerParameterfv(Sampler, Pname) -> [float()]
```

Types:

**Sampler = integer()**
**Pname = *enum()***

See *getSamplerParameteriv/2*

```
getSamplerParameterIuiv(Sampler, Pname) -> [integer()]
```

Types:

**Sampler = integer()**
**Pname = *enum()***

glGetSamplerParameterI

See *external* documentation.

```
queryCounter(Id, Target) -> ok
```

Types:

**Id = integer()**
**Target = *enum()***

Record the GL time into a query object after all previous commands have reached the GL server but have not yet necessarily executed.

gl:queryCounter causes the GL to record the current time into the query object named Id . Target must be ?GL_TIMESTAMP. The time is recorded after all previous commands on the GL client and server state and the framebuffer have been fully realized. When the time is recorded, the query result for that object is marked available. gl:queryCounter timer queries can be used within a *gl:beginQuery/2* / *gl:beginQuery/2* block where the target is ?GL_TIME_ELAPSED and it does not affect the result of that query object.

See **external** documentation.

```
getQueryObjecti64v(Id, Pname) -> integer()
```

Types:

**Id = integer()**
**Pname = *enum()***

glGetQueryObjecti64v

See *external* documentation.

`getQueryObjectui64v(Id, Pname) -> integer()`

Types:

**`Id = integer()`**

**`Pname = enum()`**

glGetQueryObjectui64v

See *external* documentation.

`drawArraysIndirect(Mode, Indirect) -> ok`

Types:

**`Mode = enum()`**

**`Indirect = offset() | mem()`**

Render primitives from array data, taking parameters from memory

`gl:drawArraysIndirect` specifies multiple geometric primitives with very few subroutine calls. `gl:drawArraysIndirect` behaves similarly to *gl:drawArraysInstancedBaseInstance/5* , execept that the parameters to *gl:drawArraysInstancedBaseInstance/5* are stored in memory at the address given by `Indirect` .

See **external** documentation.

`drawElementsIndirect(Mode, Type, Indirect) -> ok`

Types:

**`Mode = enum()`**

**`Type = enum()`**

**`Indirect = offset() | mem()`**

Render indexed primitives from array data, taking parameters from memory

`gl:drawElementsIndirect` specifies multiple indexed geometric primitives with very few subroutine calls. `gl:drawElementsIndirect` behaves similarly to *gl:drawElementsInstancedBaseVertexBaseInstance/7* , execpt that the parameters to *gl:drawElementsInstancedBaseVertexBaseInstance/7* are stored in memory at the address given by `Indirect` .

See **external** documentation.

`uniform1d(Location, X) -> ok`

Types:

**`Location = integer()`**

**`X = float()`**

See *uniform1f/2*

`uniform2d(Location, X, Y) -> ok`

Types:

**`Location = integer()`**

**`X = float()`**

**`Y = float()`**

See *uniform1f/2*

```
uniform3d(Location, X, Y, Z) -> ok
```

Types:

**Location = integer()**
**X = float()**
**Y = float()**
**Z = float()**

See *uniform1f/2*

```
uniform4d(Location, X, Y, Z, W) -> ok
```

Types:

**Location = integer()**
**X = float()**
**Y = float()**
**Z = float()**
**W = float()**

See *uniform1f/2*

```
uniform1dv(Location, Value) -> ok
```

Types:

**Location = integer()**
**Value = [float()]**

See *uniform1f/2*

```
uniform2dv(Location, Value) -> ok
```

Types:

**Location = integer()**
**Value = [{float(), float()}]**

See *uniform1f/2*

```
uniform3dv(Location, Value) -> ok
```

Types:

**Location = integer()**
**Value = [{float(), float(), float()}]**

See *uniform1f/2*

```
uniform4dv(Location, Value) -> ok
```

Types:

**Location = integer()**
**Value = [{float(), float(), float(), float()}]**

See *uniform1f/2*

```
uniformMatrix2dv(Location, Transpose, Value) -> ok
```

Types:

**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float()}]**

See *uniform1f/2*

uniformMatrix3dv(Location, Transpose, Value) -> ok

Types:

**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

uniformMatrix4dv(Location, Transpose, Value) -> ok

Types:

**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

uniformMatrix2x3dv(Location, Transpose, Value) -> ok

Types:

**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

uniformMatrix2x4dv(Location, Transpose, Value) -> ok

Types:

**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

uniformMatrix3x2dv(Location, Transpose, Value) -> ok

Types:

**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float()}]**

See *uniform1f/2*

`uniformMatrix3x4dv(Location, Transpose, Value) -> ok`

Types:

**`Location = integer()`**

**`Transpose = 0 | 1`**

**`Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]`**

See *uniform1f/2*

`uniformMatrix4x2dv(Location, Transpose, Value) -> ok`

Types:

**`Location = integer()`**

**`Transpose = 0 | 1`**

**`Value = [{float(), float(), float(), float(), float(), float(), float(), float()}]`**

See *uniform1f/2*

`uniformMatrix4x3dv(Location, Transpose, Value) -> ok`

Types:

**`Location = integer()`**

**`Transpose = 0 | 1`**

**`Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]`**

See *uniform1f/2*

`getUniformdv(Program, Location) -> matrix()`

Types:

**`Program = integer()`**

**`Location = integer()`**

See *getUniformfv/2*

`getSubroutineUniformLocation(Program, Shadertype, Name) -> integer()`

Types:

**`Program = integer()`**

**`Shadertype = enum()`**

**`Name = string()`**

Retrieve the location of a subroutine uniform of a given shader stage within a program

`gl:getSubroutineUniformLocation` returns the location of the subroutine uniform variable `Name` in the shader stage of type `Shadertype` attached to `Program` , with behavior otherwise identical to *gl:getUniformLocation/2* .

See **external** documentation.

`getSubroutineIndex(Program, Shadertype, Name) -> integer()`

Types:

**Program = integer()**
**Shadertype = *enum()***
**Name = string()**

Retrieve the index of a subroutine uniform of a given shader stage within a program

`gl:getSubroutineIndex` returns the index of a subroutine uniform within a shader stage attached to a program object. `Program` contains the name of the program to which the shader is attached. `Shadertype` specifies the stage from which to query shader subroutine index. `Name` contains the null-terminated name of the subroutine uniform whose name to query.

See **external** documentation.

`getActiveSubroutineUniformName(Program, Shadertype, Index, Bufsize) -> string()`

Types:

**Program = integer()**
**Shadertype = *enum()***
**Index = integer()**
**Bufsize = integer()**

Query the name of an active shader subroutine uniform

`gl:getActiveSubroutineUniformName` retrieves the name of an active shader subroutine uniform. `Program` contains the name of the program containing the uniform. `Shadertype` specifies the stage for which which the uniform location, given by `Index` , is valid. `Index` must be between zero and the value of ? `GL_ACTIVE_SUBROUTINE_UNIFORMS` minus one for the shader stage.

See **external** documentation.

`getActiveSubroutineName(Program, Shadertype, Index, Bufsize) -> string()`

Types:

**Program = integer()**
**Shadertype = *enum()***
**Index = integer()**
**Bufsize = integer()**

Query the name of an active shader subroutine

`gl:getActiveSubroutineName` queries the name of an active shader subroutine uniform from the program object given in `Program` . `Index` specifies the index of the shader subroutine uniform within the shader stage given by `Stage` , and must between zero and the value of `?GL_ACTIVE_SUBROUTINES` minus one for the shader stage.

See **external** documentation.

`uniformSubroutinesuiv(Shadertype, Indices) -> ok`

Types:

**Shadertype = *enum()***
**Indices = [integer()]**

Load active subroutine uniforms

`gl:uniformSubroutines` loads all active subroutine uniforms for shader stage `Shadertype` of the current program with subroutine indices from `Indices` , storing `Indices[i]` into the uniform at location `I` . `Count`

must be equal to the value of ?GL_ACTIVE_SUBROUTINE_UNIFORM_LOCATIONS for the program currently in use at shader stage Shadertype . Furthermore, all values in Indices must be less than the value of ? GL_ACTIVE_SUBROUTINES for the shader stage.

See **external** documentation.

```
getUniformSubroutineuiv(Shadertype, Location) -> {integer(), integer(),
integer(), integer(), integer(), integer(), integer(), integer(), integer(),
integer(), integer(), integer(), integer(), integer(), integer(), integer()}
```

Types:

**Shadertype = *enum()***

**Location = integer()**

Retrieve the value of a subroutine uniform of a given shader stage of the current program

gl:getUniformSubroutine retrieves the value of the subroutine uniform at location Location for shader stage Shadertype of the current program. Location must be less than the value of ? GL_ACTIVE_SUBROUTINE_UNIFORM_LOCATIONS for the shader currently in use at shader stage Shadertype . The value of the subroutine uniform is returned in Values .

See **external** documentation.

```
getProgramStageiv(Program, Shadertype, Pname) -> integer()
```

Types:

**Program = integer()**

**Shadertype = *enum()***

**Pname = *enum()***

Retrieve properties of a program object corresponding to a specified shader stage

gl:getProgramStage queries a parameter of a shader stage attached to a program object. Program contains the name of the program to which the shader is attached. Shadertype specifies the stage from which to query the parameter. Pname specifies which parameter should be queried. The value or values of the parameter to be queried is returned in the variable whose address is given in Values .

See **external** documentation.

```
patchParameteri(Pname, Value) -> ok
```

Types:

**Pname = *enum()***

**Value = integer()**

Specifies the parameters for patch primitives

gl:patchParameter specifies the parameters that will be used for patch primitives. Pname specifies the parameter to modify and must be either ?GL_PATCH_VERTICES, ?GL_PATCH_DEFAULT_OUTER_LEVEL or ?GL_PATCH_DEFAULT_INNER_LEVEL. For gl:patchParameteri, Value specifies the new value for the parameter specified by Pname . For gl:patchParameterfv, Values specifies the address of an array containing the new values for the parameter specified by Pname .

See **external** documentation.

```
patchParameterfv(Pname, Values) -> ok
```

Types:

**Pname = *enum()***
**Values = [float()]**

See *patchParameteri/2*

```
bindTransformFeedback(Target, Id) -> ok
```

Types:

**Target = *enum()***
**Id = integer()**

Bind a transform feedback object

`gl:bindTransformFeedback` binds the transform feedback object with name `Id` to the current GL state. `Id` must be a name previously returned from a call to *gl:genTransformFeedbacks/1* . If `Id` has not previously been bound, a new transform feedback object with name `Id` and initialized with with the default transform state vector is created.

See **external** documentation.

```
deleteTransformFeedbacks(Ids) -> ok
```

Types:

**Ids = [integer()]**

Delete transform feedback objects

`gl:deleteTransformFeedbacks` deletes the `N` transform feedback objects whose names are stored in the array `Ids` . Unused names in `Ids` are ignored, as is the name zero. After a transform feedback object is deleted, its name is again unused and it has no contents. If an active transform feedback object is deleted, its name immediately becomes unused, but the underlying object is not deleted until it is no longer active.

See **external** documentation.

```
genTransformFeedbacks(N) -> [integer()]
```

Types:

**N = integer()**

Reserve transform feedback object names

`gl:genTransformFeedbacks` returns `N` previously unused transform feedback object names in `Ids` . These names are marked as used, for the purposes of `gl:genTransformFeedbacks` only, but they acquire transform feedback state only when they are first bound.

See **external** documentation.

```
isTransformFeedback(Id) -> 0 | 1
```

Types:

**Id = integer()**

Determine if a name corresponds to a transform feedback object

`gl:isTransformFeedback` returns `?GL_TRUE` if `Id` is currently the name of a transform feedback object. If `Id` is zero, or if `?id` is not the name of a transform feedback object, or if an error occurs, `gl:isTransformFeedback` returns `?GL_FALSE`. If `Id` is a name returned by *gl:genTransformFeedbacks/1* , but that has not yet been bound through a call to *gl:bindTransformFeedback/2* , then the name is not a transform feedback object and `gl:isTransformFeedback` returns `?GL_FALSE` .

See **external** documentation.

```
pauseTransformFeedback() -> ok
```

Pause transform feedback operations

`gl:pauseTransformFeedback` pauses transform feedback operations on the currently active transform feedback object. When transform feedback operations are paused, transform feedback is still considered active and changing most transform feedback state related to the object results in an error. However, a new transform feedback object may be bound while transform feedback is paused.

See **external** documentation.

```
resumeTransformFeedback() -> ok
```

Resume transform feedback operations

`gl:resumeTransformFeedback` resumes transform feedback operations on the currently active transform feedback object. When transform feedback operations are paused, transform feedback is still considered active and changing most transform feedback state related to the object results in an error. However, a new transform feedback object may be bound while transform feedback is paused.

See **external** documentation.

```
drawTransformFeedback(Mode, Id) -> ok
```

Types:

**`Mode = enum()`**
**`Id = integer()`**

Render primitives using a count derived from a transform feedback object

`gl:drawTransformFeedback` draws primitives of a type specified by `Mode` using a count retrieved from the transform feedback specified by `Id` . Calling `gl:drawTransformFeedback` is equivalent to calling *gl:drawArrays/3* with `Mode` as specified, `First` set to zero, and `Count` set to the number of vertices captured on vertex stream zero the last time transform feedback was active on the transform feedback object named by `Id` .

See **external** documentation.

```
drawTransformFeedbackStream(Mode, Id, Stream) -> ok
```

Types:

**`Mode = enum()`**
**`Id = integer()`**
**`Stream = integer()`**

Render primitives using a count derived from a specifed stream of a transform feedback object

`gl:drawTransformFeedbackStream` draws primitives of a type specified by `Mode` using a count retrieved from the transform feedback stream specified by `Stream` of the transform feedback object specified by `Id` . Calling `gl:drawTransformFeedbackStream` is equivalent to calling *gl:drawArrays/3* with `Mode` as specified, `First` set to zero, and `Count` set to the number of vertices captured on vertex stream `Stream` the last time transform feedback was active on the transform feedback object named by `Id` .

See **external** documentation.

```
beginQueryIndexed(Target, Index, Id) -> ok
```

Types:

**`Target = enum()`**
**`Index = integer()`**

**Id = integer()**

glBeginQueryIndexe

See *external* documentation.

`endQueryIndexed(Target, Index) -> ok`

Types:

**Target = *enum()***

**Index = integer()**

Delimit the boundaries of a query object on an indexed target

`gl:beginQueryIndexed` and *gl:endQueryIndexed/2* delimit the boundaries of a query object. `Query` must be a name previously returned from a call to *gl:genQueries/1* . If a query object with name `Id` does not yet exist it is created with the type determined by `Target` . `Target` must be one of `?GL_SAMPLES_PASSED`, `?GL_ANY_SAMPLES_PASSED` , `?GL_PRIMITIVES_GENERATED`, `?GL_TRANSFORM_FEEDBACK_PRIMITIVES_WRITTEN`, or `?GL_TIME_ELAPSED` . The behavior of the query object depends on its type and is as follows.

See **external** documentation.

`getQueryIndexediv(Target, Index, Pname) -> integer()`

Types:

**Target = *enum()***

**Index = integer()**

**Pname = *enum()***

Return parameters of an indexed query object target

`gl:getQueryIndexediv` returns in `Params` a selected parameter of the indexed query object target specified by `Target` and `Index` . `Index` specifies the index of the query object target and must be between zero and a target-specific maxiumum.

See **external** documentation.

`releaseShaderCompiler() -> ok`

Release resources consumed by the implementation's shader compiler

`gl:releaseShaderCompiler` provides a hint to the implementation that it may free internal resources associated with its shader compiler. *gl:compileShader/1* may subsequently be called and the implementation may at that time reallocate resources previously freed by the call to `gl:releaseShaderCompiler`.

See **external** documentation.

`shaderBinary(Shaders, Binaryformat, Binary) -> ok`

Types:

**Shaders = [integer()]**

**Binaryformat = *enum()***

**Binary = binary()**

Load pre-compiled shader binaries

gl:shaderBinary loads pre-compiled shader binary code into the Count shader objects whose handles are given in Shaders . Binary points to Length bytes of binary shader code stored in client memory. BinaryFormat specifies the format of the pre-compiled code.

See **external** documentation.

```
getShaderPrecisionFormat(Shadertype, Precisiontype) -> {Range::{integer(),
integer()}, Precision::integer()}
```

Types:

**Shadertype = *enum()***

**Precisiontype = *enum()***

Retrieve the range and precision for numeric formats supported by the shader compiler

gl:getShaderPrecisionFormat retrieves the numeric range and precision for the implementation's representation of quantities in different numeric formats in specified shader type. ShaderType specifies the type of shader for which the numeric precision and range is to be retrieved and must be one of ?GL_VERTEX_SHADER or ?GL_FRAGMENT_SHADER. PrecisionType specifies the numeric format to query and must be one of ?GL_LOW_FLOAT, ?GL_MEDIUM_FLOAT ?GL_HIGH_FLOAT, ?GL_LOW_INT, ?GL_MEDIUM_INT, or ?GL_HIGH_INT.

See **external** documentation.

```
depthRangef(N, F) -> ok
```

Types:

**N = *clamp()***

**F = *clamp()***

See *depthRange/2*

```
clearDepthf(D) -> ok
```

Types:

**D = *clamp()***

glClearDepthf

See *external* documentation.

```
getProgramBinary(Program, BufSize) -> {BinaryFormat::enum(),
Binary::binary()}
```

Types:

**Program = integer()**

**BufSize = integer()**

Return a binary representation of a program object's compiled and linked executable source

gl:getProgramBinary returns a binary representation of the compiled and linked executable for Program into the array of bytes whose address is specified in Binary . The maximum number of bytes that may be written into Binary is specified by BufSize . If the program binary is greater in size than BufSize bytes, then an error is generated, otherwise the actual number of bytes written into Binary is returned in the variable whose address is given by Length . If Length is ?NULL, then no length is returned.

See **external** documentation.

```
programBinary(Program, BinaryFormat, Binary) -> ok
```

Types:

**Program = integer()**

**BinaryFormat = *enum()***

**Binary = binary()**

Load a program object with a program binary

`gl:programBinary` loads a program object with a program binary previously returned from *gl:getProgramBinary/2* . `BinaryFormat` and `Binary` must be those returned by a previous call to *gl:getProgramBinary/2* , and `Length` must be the length returned by *gl:getProgramBinary/2* , or by *gl:getProgramiv/2* when called with `Pname` set to `?GL_PROGRAM_BINARY_LENGTH`. If these conditions are not met, loading the program binary will fail and `Program` 's `?GL_LINK_STATUS` will be set to `?GL_FALSE`.

See **external** documentation.

```
programParameteri(Program, Pname, Value) -> ok
```

Types:

**Program = integer()**

**Pname = *enum()***

**Value = integer()**

Specify a parameter for a program object

`gl:programParameter` specifies a new value for the parameter nameed by `Pname` for the program object `Program` .

See **external** documentation.

```
useProgramStages(Pipeline, Stages, Program) -> ok
```

Types:

**Pipeline = integer()**

**Stages = integer()**

**Program = integer()**

Bind stages of a program object to a program pipeline

`gl:useProgramStages` binds executables from a program object associated with a specified set of shader stages to the program pipeline object given by `Pipeline` . `Pipeline` specifies the program pipeline object to which to bind the executables. `Stages` contains a logical combination of bits indicating the shader stages to use within `Program` with the program pipeline object `Pipeline` . `Stages` must be a logical combination of `?GL_VERTEX_SHADER_BIT`, `?GL_TESS_CONTROL_SHADER_BIT`, `?GL_TESS_EVALUATION_SHADER_BIT` , `?GL_GEOMETRY_SHADER_BIT`, and `?GL_FRAGMENT_SHADER_BIT`. Additionally, the special value `?GL_ALL_SHADER_BITS` may be specified to indicate that all executables contained in `Program` should be installed in `Pipeline` .

See **external** documentation.

```
activeShaderProgram(Pipeline, Program) -> ok
```

Types:

**Pipeline = integer()**

**Program = integer()**

Set the active program object for a program pipeline object

`gl:activeShaderProgram` sets the linked program named by `Program` to be the active program for the program pipeline object `Pipeline` . The active program in the active program pipeline object is the target of calls to *gl:uniform1f/2* when no program has been made current through a call to *gl:useProgram/1* .

See **external** documentation.

```
createShaderProgramv(Type, Strings) -> integer()
```

Types:

**Type = *enum()***
**Strings = iolist()**

glCreateShaderProgramv

See *external* documentation.

```
bindProgramPipeline(Pipeline) -> ok
```

Types:

**Pipeline = integer()**

Bind a program pipeline to the current context

`gl:bindProgramPipeline` binds a program pipeline object to the current context. `Pipeline` must be a name previously returned from a call to *gl:genProgramPipelines/1* . If no program pipeline exists with name `Pipeline` then a new pipeline object is created with that name and initialized to the default state vector.

See **external** documentation.

```
deleteProgramPipelines(Pipelines) -> ok
```

Types:

**Pipelines = [integer()]**

Delete program pipeline objects

`gl:deleteProgramPipelines` deletes the `N` program pipeline objects whose names are stored in the array `Pipelines` . Unused names in `Pipelines` are ignored, as is the name zero. After a program pipeline object is deleted, its name is again unused and it has no contents. If program pipeline object that is currently bound is deleted, the binding for that object reverts to zero and no program pipeline object becomes current.

See **external** documentation.

```
genProgramPipelines(N) -> [integer()]
```

Types:

**N = integer()**

Reserve program pipeline object names

`gl:genProgramPipelines` returns `N` previously unused program pipeline object names in `Pipelines` . These names are marked as used, for the purposes of `gl:genProgramPipelines` only, but they acquire program pipeline state only when they are first bound.

See **external** documentation.

```
isProgramPipeline(Pipeline) -> 0 | 1
```

Types:

**Pipeline = integer()**

Determine if a name corresponds to a program pipeline object

`gl:isProgramPipeline` returns `?GL_TRUE` if `Pipeline` is currently the name of a program pipeline object. If `Pipeline` is zero, or if `?pipeline` is not the name of a program pipeline object, or if an error occurs, `gl:isProgramPipeline` returns `?GL_FALSE`. If `Pipeline` is a name returned by *gl:genProgramPipelines/1* , but that has not yet been bound through a call to *gl:bindProgramPipeline/1* , then the name is not a program pipeline object and `gl:isProgramPipeline` returns `?GL_FALSE` .

See **external** documentation.

`getProgramPipelineiv(Pipeline, Pname) -> integer()`

Types:

**`Pipeline = integer()`**

**`Pname = enum()`**

Retrieve properties of a program pipeline object

`gl:getProgramPipelineiv` retrieves the value of a property of the program pipeline object `Pipeline` . `Pname` specifies the name of the parameter whose value to retrieve. The value of the parameter is written to the variable whose address is given by `Params` .

See **external** documentation.

`programUniform1i(Program, Location, V0) -> ok`

Types:

**`Program = integer()`**

**`Location = integer()`**

**`V0 = integer()`**

Specify the value of a uniform variable for a specified program object

`gl:programUniform` modifies the value of a uniform variable or a uniform variable array. The location of the uniform variable to be modified is specified by `Location` , which should be a value returned by *gl:getUniformLocation/2* . `gl:programUniform` operates on the program object specified by `Program` .

See **external** documentation.

`programUniform1iv(Program, Location, Value) -> ok`

Types:

**`Program = integer()`**

**`Location = integer()`**

**`Value = [integer()]`**

See *programUniform1i/3*

`programUniform1f(Program, Location, V0) -> ok`

Types:

**`Program = integer()`**

**`Location = integer()`**

**`V0 = float()`**

See *programUniform1i/3*

```
programUniform1fv(Program, Location, Value) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**Value = [float()]**

See *programUniform1i/3*

```
programUniform1d(Program, Location, V0) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**V0 = float()**

See *programUniform1i/3*

```
programUniform1dv(Program, Location, Value) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**Value = [float()]**

See *programUniform1i/3*

```
programUniform1ui(Program, Location, V0) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**V0 = integer()**

See *programUniform1i/3*

```
programUniform1uiv(Program, Location, Value) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**Value = [integer()]**

See *programUniform1i/3*

```
programUniform2i(Program, Location, V0, V1) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**V0 = integer()**
**V1 = integer()**

See *programUniform1i/3*

```
programUniform2iv(Program, Location, Value) -> ok
```

Types:

```
   Program = integer()
   Location = integer()
   Value = [{integer(), integer()}]
```

See *programUniform1i/3*

```
programUniform2f(Program, Location, V0, V1) -> ok
```

Types:

```
   Program = integer()
   Location = integer()
   V0 = float()
   V1 = float()
```

See *programUniform1i/3*

```
programUniform2fv(Program, Location, Value) -> ok
```

Types:

```
   Program = integer()
   Location = integer()
   Value = [{float(), float()}]
```

See *programUniform1i/3*

```
programUniform2d(Program, Location, V0, V1) -> ok
```

Types:

```
   Program = integer()
   Location = integer()
   V0 = float()
   V1 = float()
```

See *programUniform1i/3*

```
programUniform2dv(Program, Location, Value) -> ok
```

Types:

```
   Program = integer()
   Location = integer()
   Value = [{float(), float()}]
```

See *programUniform1i/3*

```
programUniform2ui(Program, Location, V0, V1) -> ok
```

Types:

```
   Program = integer()
   Location = integer()
   V0 = integer()
   V1 = integer()
```

See *programUniform1i/3*

```
programUniform2uiv(Program, Location, Value) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**Value = [{integer(), integer()}]**

See *programUniform1i/3*

```
programUniform3i(Program, Location, V0, V1, V2) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**V0 = integer()**
**V1 = integer()**
**V2 = integer()**

See *programUniform1i/3*

```
programUniform3iv(Program, Location, Value) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**Value = [{integer(), integer(), integer()}]**

See *programUniform1i/3*

```
programUniform3f(Program, Location, V0, V1, V2) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**V0 = float()**
**V1 = float()**
**V2 = float()**

See *programUniform1i/3*

```
programUniform3fv(Program, Location, Value) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**Value = [{float(), float(), float()}]**

See *programUniform1i/3*

```
programUniform3d(Program, Location, V0, V1, V2) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**V0 = float()**
**V1 = float()**
**V2 = float()**

See *programUniform1i/3*

```
programUniform3dv(Program, Location, Value) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**Value = [{float(), float(), float()}]**

See *programUniform1i/3*

```
programUniform3ui(Program, Location, V0, V1, V2) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**V0 = integer()**
**V1 = integer()**
**V2 = integer()**

See *programUniform1i/3*

```
programUniform3uiv(Program, Location, Value) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**Value = [{integer(), integer(), integer()}]**

See *programUniform1i/3*

```
programUniform4i(Program, Location, V0, V1, V2, V3) -> ok
```

Types:

**Program = integer()**
**Location = integer()**
**V0 = integer()**
**V1 = integer()**
**V2 = integer()**
**V3 = integer()**

See *programUniform1i/3*

```
programUniform4iv(Program, Location, Value) -> ok
```

Types:

**Program = integer()**

**Location = integer()**
**Value = [{integer(), integer(), integer(), integer()}]**

See *programUniform1i/3*

`programUniform4f(Program, Location, V0, V1, V2, V3) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**V0 = float()**
**V1 = float()**
**V2 = float()**
**V3 = float()**

See *programUniform1i/3*

`programUniform4fv(Program, Location, Value) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**Value = [{float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniform4d(Program, Location, V0, V1, V2, V3) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**V0 = float()**
**V1 = float()**
**V2 = float()**
**V3 = float()**

See *programUniform1i/3*

`programUniform4dv(Program, Location, Value) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**Value = [{float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniform4ui(Program, Location, V0, V1, V2, V3) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**V0 = integer()**

**V1 = integer()**
**V2 = integer()**
**V3 = integer()**

See *programUniform1i/3*

`programUniform4uiv(Program, Location, Value) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**Value = [{integer(), integer(), integer(), integer()}]**

See *programUniform1i/3*

`programUniformMatrix2fv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix3fv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix4fv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix2dv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**
**Location = integer()**

**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float()}]**

See *programUniform1i/3*

programUniformMatrix3dv(Program, Location, Transpose, Value) -> ok

Types:

**Program = integer()**
**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

programUniformMatrix4dv(Program, Location, Transpose, Value) -> ok

Types:

**Program = integer()**
**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

programUniformMatrix2x3fv(Program, Location, Transpose, Value) -> ok

Types:

**Program = integer()**
**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

programUniformMatrix3x2fv(Program, Location, Transpose, Value) -> ok

Types:

**Program = integer()**
**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

programUniformMatrix2x4fv(Program, Location, Transpose, Value) -> ok

Types:

**Program = integer()**
**Location = integer()**

**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix4x2fv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**

**Location = integer()**

**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix3x4fv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**

**Location = integer()**

**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix4x3fv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**

**Location = integer()**

**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix2x3dv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**

**Location = integer()**

**Transpose = 0 | 1**

**Value = [{float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix3x2dv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**

**Location = integer()**

**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix2x4dv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix4x2dv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix3x4dv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`programUniformMatrix4x3dv(Program, Location, Transpose, Value) -> ok`

Types:

**Program = integer()**
**Location = integer()**
**Transpose = 0 | 1**
**Value = [{float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float(), float()}]**

See *programUniform1i/3*

`validateProgramPipeline(Pipeline) -> ok`

Types:

**Pipeline = integer()**

Validate a program pipeline object against current GL state

`gl:validateProgramPipeline` instructs the implementation to validate the shader executables contained in `Pipeline` against the current GL state. The implementation may use this as an opportunity to perform any internal shader modifications that may be required to ensure correct operation of the installed shaders given the current GL state.

See **external** documentation.

```
getProgramPipelineInfoLog(Pipeline, BufSize) -> string()
```

Types:

**`Pipeline = integer()`**
**`BufSize = integer()`**

Retrieve the info log string from a program pipeline object

`gl:getProgramPipelineInfoLog` retrieves the info log for the program pipeline object `Pipeline` . The info log, including its null terminator, is written into the array of characters whose address is given by `InfoLog` . The maximum number of characters that may be written into `InfoLog` is given by `BufSize` , and the actual number of characters written into `InfoLog` is returned in the integer whose address is given by `Length` . If `Length` is `?NULL`, no length is returned.

See **external** documentation.

```
vertexAttribL1d(Index, X) -> ok
```

Types:

**`Index = integer()`**
**`X = float()`**

glVertexAttribL

See *external* documentation.

```
vertexAttribL2d(Index, X, Y) -> ok
```

Types:

**`Index = integer()`**
**`X = float()`**
**`Y = float()`**

glVertexAttribL

See *external* documentation.

```
vertexAttribL3d(Index, X, Y, Z) -> ok
```

Types:

**`Index = integer()`**
**`X = float()`**
**`Y = float()`**
**`Z = float()`**

glVertexAttribL

See *external* documentation.

```
vertexAttribL4d(Index, X, Y, Z, W) -> ok
```

Types:

**Index = integer()**
**X = float()**
**Y = float()**
**Z = float()**
**W = float()**

glVertexAttribL

See *external* documentation.

```
vertexAttribL1dv(Index::integer(), V) -> ok
```

Types:

**V = {X::float()}**

Equivalent to *vertexAttribL1d(Index, X)*.

```
vertexAttribL2dv(Index::integer(), V) -> ok
```

Types:

**V = {X::float(), Y::float()}**

Equivalent to *vertexAttribL2d(Index, X, Y)*.

```
vertexAttribL3dv(Index::integer(), V) -> ok
```

Types:

**V = {X::float(), Y::float(), Z::float()}**

Equivalent to *vertexAttribL3d(Index, X, Y, Z)*.

```
vertexAttribL4dv(Index::integer(), V) -> ok
```

Types:

**V = {X::float(), Y::float(), Z::float(), W::float()}**

Equivalent to *vertexAttribL4d(Index, X, Y, Z, W)*.

```
vertexAttribLPointer(Index, Size, Type, Stride, Pointer) -> ok
```

Types:

**Index = integer()**
**Size = integer()**
**Type = *enum()***
**Stride = integer()**
**Pointer = *offset()* | *mem()***

glVertexAttribLPointer

See *external* documentation.

```
getVertexAttribLdv(Index, Pname) -> {float(), float(), float(), float()}
```

Types:

**Index = integer()**

**Pname = *enum()***

glGetVertexAttribL

See *external* documentation.

`viewportArrayv(First, V) -> ok`

Types:

**First = integer()**

**V = [{float(), float(), float(), float()}]**

glViewportArrayv

See *external* documentation.

`viewportIndexedf(Index, X, Y, W, H) -> ok`

Types:

**Index = integer()**

**X = float()**

**Y = float()**

**W = float()**

**H = float()**

Set a specified viewport

`gl:viewportIndexedf` and `gl:viewportIndexedfv` specify the parameters for a single viewport. `Index` specifies the index of the viewport to modify. `Index` must be less than the value of `?GL_MAX_VIEWPORTS`. For `gl:viewportIndexedf`, `X` , `Y` , `W` , and `H` specify the left, bottom, width and height of the viewport in pixels, respectively. For `gl:viewportIndexedfv`, `V` contains the address of an array of floating point values specifying the left ( x), bottom ( y), width ( w), and height ( h) of each viewport, in that order. x and y give the location of the viewport's lower left corner, and w and h give the width and height of the viewport, respectively. The viewport specifies the affine transformation of x and y from normalized device coordinates to window coordinates. Let (x nd y nd) be normalized device coordinates. Then the window coordinates (x w y w) are computed as follows:

See **external** documentation.

`viewportIndexedfv(Index, V) -> ok`

Types:

**Index = integer()**

**V = {float(), float(), float(), float()}**

See *viewportIndexedf/5*

`scissorArrayv(First, V) -> ok`

Types:

**First = integer()**

**V = [{integer(), integer(), integer(), integer()}]**

glScissorArrayv

See *external* documentation.

```
scissorIndexed(Index, Left, Bottom, Width, Height) -> ok
```

Types:

**Index = integer()**
**Left = integer()**
**Bottom = integer()**
**Width = integer()**
**Height = integer()**

glScissorIndexe

See *external* documentation.

```
scissorIndexedv(Index, V) -> ok
```

Types:

**Index = integer()**
**V = {integer(), integer(), integer(), integer()}**

glScissorIndexe

See *external* documentation.

```
depthRangeArrayv(First, V) -> ok
```

Types:

**First = integer()**
**V = [{*clamp()*, *clamp()*}]**

glDepthRangeArrayv

See *external* documentation.

```
depthRangeIndexed(Index, N, F) -> ok
```

Types:

**Index = integer()**
**N = *clamp()***
**F = *clamp()***

glDepthRangeIndexe

See *external* documentation.

```
getFloati_v(Target, Index) -> [float()]
```

Types:

**Target = *enum()***
**Index = integer()**

See *getBooleanv/1*

```
getDoublei_v(Target, Index) -> [float()]
```

Types:

**Target = *enum()***
**Index = integer()**

See *getBooleanv/1*

```
debugMessageControlARB(Source, Type, Severity, Ids, Enabled) -> ok
```

Types:

**Source = *enum()***
**Type = *enum()***
**Severity = *enum()***
**Ids = [integer()]**
**Enabled = 0 | 1**

glDebugMessageControlARB

See *external* documentation.

```
debugMessageInsertARB(Source, Type, Id, Severity, Buf) -> ok
```

Types:

**Source = *enum()***
**Type = *enum()***
**Id = integer()**
**Severity = *enum()***
**Buf = string()**

glDebugMessageInsertARB

See *external* documentation.

```
getDebugMessageLogARB(Count, Bufsize) -> {integer(), Sources::[enum()],
Types::[enum()], Ids::[integer()], Severities::[enum()], MessageLog::
[string()]}
```

Types:

**Count = integer()**
**Bufsize = integer()**

glGetDebugMessageLogARB

See *external* documentation.

```
getGraphicsResetStatusARB() -> enum()
```

glGetGraphicsResetStatusARB

See *external* documentation.

```
drawArraysInstancedBaseInstance(Mode, First, Count, Primcount, Baseinstance)
-> ok
```

Types:

**Mode = *enum()***
**First = integer()**
**Count = integer()**
**Primcount = integer()**
**Baseinstance = integer()**

Draw multiple instances of a range of elements with offset applied to instanced attributes

`gl:drawArraysInstancedBaseInstance` behaves identically to *gl:drawArrays/3* except that `Primcount` instances of the range of elements are executed and the value of the internal counter `InstanceID` advances for each iteration. `InstanceID` is an internal 32-bit integer counter that may be read by a vertex shader as `?gl_InstanceID`.

See **external** documentation.

```
drawElementsInstancedBaseInstance(Mode, Count, Type, Indices, Primcount,
Baseinstance) -> ok
```

Types:

**Mode = *enum()***
**Count = integer()**
**Type = *enum()***
**Indices = *offset()* | *mem()***
**Primcount = integer()**
**Baseinstance = integer()**

Draw multiple instances of a set of elements with offset applied to instanced attributes

`gl:drawElementsInstancedBaseInstance` behaves identically to *gl:drawElements/4* except that `Primcount` instances of the set of elements are executed and the value of the internal counter `InstanceID` advances for each iteration. `InstanceID` is an internal 32-bit integer counter that may be read by a vertex shader as `?gl_InstanceID`.

See **external** documentation.

```
drawElementsInstancedBaseVertexBaseInstance(Mode, Count, Type, Indices,
Primcount, Basevertex, Baseinstance) -> ok
```

Types:

**Mode = *enum()***
**Count = integer()**
**Type = *enum()***
**Indices = *offset()* | *mem()***
**Primcount = integer()**
**Basevertex = integer()**
**Baseinstance = integer()**

Render multiple instances of a set of primitives from array data with a per-element offset

`gl:drawElementsInstancedBaseVertexBaseInstance` behaves identically to *gl:drawElementsInstanced/5* except that the `i`th element transferred by the corresponding draw call will be taken from element `Indices` [i] + `Basevertex` of each enabled array. If the resulting value is larger than the maximum value representable by `Type`, it is as if the calculation were upconverted to 32-bit unsigned integers (with wrapping on overflow conditions). The operation is undefined if the sum would be negative. The `Basevertex` has no effect on the shader-visible value of `?gl_VertexID`.

See **external** documentation.

```
drawTransformFeedbackInstanced(Mode, Id, Primcount) -> ok
```

Types:

**Mode = *enum()***
**Id = integer()**
**Primcount = integer()**

glDrawTransformFeedbackInstance

See *external* documentation.

`drawTransformFeedbackStreamInstanced(Mode, Id, Stream, Primcount) -> ok`

Types:

**Mode = *enum()***
**Id = integer()**
**Stream = integer()**
**Primcount = integer()**

glDrawTransformFeedbackStreamInstance

See *external* documentation.

`getInternalformativ(Target, Internalformat, Pname, BufSize) -> [integer()]`

Types:

**Target = *enum()***
**Internalformat = *enum()***
**Pname = *enum()***
**BufSize = integer()**

glGetInternalformat

See *external* documentation.

`bindImageTexture(Unit, Texture, Level, Layered, Layer, Access, Format) -> ok`

Types:

**Unit = integer()**
**Texture = integer()**
**Level = integer()**
**Layered = 0 | 1**
**Layer = integer()**
**Access = *enum()***
**Format = *enum()***

Bind a level of a texture to an image unit

`gl:bindImageTexture` binds a single level of a texture to an image unit for the purpose of reading and writing it from shaders. `Unit` specifies the zero-based index of the image unit to which to bind the texture level. `Texture` specifies the name of an existing texture object to bind to the image unit. If `Texture` is zero, then any existing binding to the image unit is broken. `Level` specifies the level of the texture to bind to the image unit.

See **external** documentation.

`memoryBarrier(Barriers) -> ok`

Types:

**Barriers = integer()**

Defines a barrier ordering memory transactions

`gl:memoryBarrier` defines a barrier ordering the memory transactions issued prior to the command relative to those issued after the barrier. For the purposes of this ordering, memory transactions performed by shaders are considered to be issued by the rendering command that triggered the execution of the shader. `Barriers` is a bitfield indicating the set of operations that are synchronized with shader stores; the bits used in `Barriers` are as follows:

See **external** documentation.

```
texStorage1D(Target, Levels, Internalformat, Width) -> ok
```

Types:

**Target = *enum()***
**Levels = integer()**
**Internalformat = *enum()***
**Width = integer()**

Simultaneously specify storage for all levels of a one-dimensional texture

`gl:texStorage1D` specifies the storage requirements for all levels of a one-dimensional texture simultaneously. Once a texture is specified with this command, the format and dimensions of all levels become immutable unless it is a proxy texture. The contents of the image may still be modified, however, its storage requirements may not change. Such a texture is referred to as an `immutable-format` texture.

See **external** documentation.

```
texStorage2D(Target, Levels, Internalformat, Width, Height) -> ok
```

Types:

**Target = *enum()***
**Levels = integer()**
**Internalformat = *enum()***
**Width = integer()**
**Height = integer()**

Simultaneously specify storage for all levels of a two-dimensional or one-dimensional array texture

`gl:texStorage2D` specifies the storage requirements for all levels of a two-dimensional texture or one-dimensional texture array simultaneously. Once a texture is specified with this command, the format and dimensions of all levels become immutable unless it is a proxy texture. The contents of the image may still be modified, however, its storage requirements may not change. Such a texture is referred to as an `immutable-format` texture.

See **external** documentation.

```
texStorage3D(Target, Levels, Internalformat, Width, Height, Depth) -> ok
```

Types:

**Target = *enum()***
**Levels = integer()**
**Internalformat = *enum()***
**Width = integer()**
**Height = integer()**
**Depth = integer()**

Simultaneously specify storage for all levels of a three-dimensional, two-dimensional array or cube-map array texture

`gl:texStorage3D` specifies the storage requirements for all levels of a three-dimensional, two-dimensional array or cube-map array texture simultaneously. Once a texture is specified with this command, the format and dimensions of all levels become immutable unless it is a proxy texture. The contents of the image may still be modified, however, its storage requirements may not change. Such a texture is referred to as an `immutable-format` texture.

See **external** documentation.

`depthBoundsEXT(Zmin, Zmax) -> ok`

Types:

**`Zmin = clamp()`**
**`Zmax = clamp()`**

glDepthBoundsEXT

See *external* documentation.

`stencilClearTagEXT(StencilTagBits, StencilClearTag) -> ok`

Types:

**`StencilTagBits = integer()`**
**`StencilClearTag = integer()`**

glStencilClearTagEXT

See *external* documentation.