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Chapter 1

Namespace Index

1.1 Namespace List

Here is a list of all namespaces with brief descriptions:

Glib 9
Gnome 9
Gnome::Glade 9

Chapter 2

Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

Glib::Exception
- Gnome::Glade::XmlError 22

Glib::Object
- Gnome::Glade::Xml 14

Gnome::Glade::VariablesMap 11

Chapter 3

Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

Gnome::Glade::VariablesMap
Associates named Glade widgets with member variables 11
Gnome::Glade::Xml 14
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Chapter 4

File Index

4.1 File List

Here is a list of all files with brief descriptions:

init.h 25
variablesmap.h 25
xml.h 25

Chapter 5

Namespace Documentation

5.1 Glib Namespace Reference

5.2 Gnome Namespace Reference

Namespaces

- namespace Glade

5.3 Gnome::Glade Namespace Reference

Classes

- class VariablesMap

  Associates named Glade widgets with member variables.
- class Xml
- class XmlError

Chapter 6

Class Documentation

6.1 Gnome::Glade::VariablesMap Class Reference

Associates named Glade widgets with member variables.

```
#include <variablesmap.h>
```

Public Member Functions

- VariablesMap (const Glib::RefPtr< Glade::Xml > &glade)
- virtual ~VariablesMap ()
- virtual void connect_widget (const Glib::ustring &widget_name, bool &variable)

  For ToggleButton (CheckBox and RadioButton)
- virtual void connect_widget (const Glib::ustring &widget_name, Glib::ustring &variable)

  For Entry, ComboBoxEntry and SpinBox.
- virtual void connect_widget (const Glib::ustring &widget_name, double &variable)

  For Scale (HScale and VScale)
- virtual void connect_widget (const Glib::ustring &widget_name, Glib::Date &variable)

  For Calendar.
- virtual void transfer_widgets_to_variables ()

  Transfer data from the widget to the variable.
- virtual void transfer_variables_to_widgets ()

  Transfer data from the variable to the widget.

Protected Types

- typedef std::map< Gtk::Widget *, void * > type_mapWidgetsToVariables

Protected Member Functions

- virtual bool validate_widgets ()

  Override this to validate the data that the user enters into the widgets.
- virtual void transfer_one_widget (Gtk::Widget *pWidget, bool to_variable)

Protected Attributes

- type_mapWidgetsToVariables m_mapWidgetsToVariables
- Glib::RefPtr< Glade::Xml > m_refGlade

6.1.1 Detailed Description

Associates named Glade widgets with member variables.

Use connect_widget() to link the widgets with variables that will contain their data. Then use transfer_widgets_to_variables() and transfer_variables_to_widgets() to get or set all of the variables at once.

This is meant to be a bit like MFC's "Dialog Data Exchange and Validation".

The association of widget and member varables follow this mapping:

Gtk::Entry --> Glib::ustring Gtk::SpinBox --> Glib::ustring Gtk::ComboBoxEntry --> Glib::ustring Gtk::Scale --> double Gtk::Calendar --> Glib::Date Gtk::CheckBox --> bool Gtk::RadioButton --> bool

6.1.2 Member Typedef Documentation

6.1.2.1 type_mapWidgetsToVariables

```
typedef std::map<Gtk::Widget*, void*> Gnome::Glade::VariablesMap::type_mapWidgetsToVariables
[protected]
```

6.1.3 Constructor & Destructor Documentation

6.1.3.1 VariablesMap()

```
Gnome::Glade::VariablesMap::VariablesMap (
            const Glib::RefPtr< Glade::Xml > & glade )  [explicit]
```

6.1.3.2 ~VariablesMap()

```
virtual Gnome::Glade::VariablesMap::~VariablesMap ( )  [virtual]
```

6.1.4 Member Function Documentation

6.1.4.1 connect_widget() [1/4]

```
virtual void Gnome::Glade::VariablesMap::connect_widget (
            const Glib::ustring & widget_name,
            bool & variable )  [virtual]
```

For ToggleButton (CheckBox and RadioButton)

6.1.4.2 connect_widget() [2/4]

```
virtual void Gnome::Glade::VariablesMap::connect_widget (
            const Glib::ustring & widget_name,
            double & variable )  [virtual]
```

For Scale (HScale and VScale)

6.1.4.3 connect_widget() [3/4]

```
virtual void Gnome::Glade::VariablesMap::connect_widget (
            const Glib::ustring & widget_name,
            Glib::Date & variable )  [virtual]
```

For Calendar.

6.1.4.4 connect_widget() [4/4]

```
virtual void Gnome::Glade::VariablesMap::connect_widget (
            const Glib::ustring & widget_name,
            Glib::ustring & variable )  [virtual]
```

For Entry, ComboBoxEntry and SpinBox.

6.1.4.5 transfer_one_widget()

```
virtual void Gnome::Glade::VariablesMap::transfer_one_widget (
            Gtk::Widget * pWidget,
            bool to_variable )  [protected], [virtual]
```

6.1.4.6 transfer_variables_to_widgets()

```
virtual void Gnome::Glade::VariablesMap::transfer_variables_to_widgets ( )  [virtual]
```

Transfer data from the variable to the widget.

6.1.4.7 transfer_widgets_to_variables()

```
virtual void Gnome::Glade::VariablesMap::transfer_widgets_to_variables ( )  [virtual]
```

Transfer data from the widget to the variable.

6.1.4.8 validate_widgets()

```
virtual bool Gnome::Glade::VariablesMap::validate_widgets ( )  [protected], [virtual]
```

Override this to validate the data that the user enters into the widgets.

The return value indicates whether the widgets' data is valid.

6.1.5 Member Data Documentation

6.1.5.1 m_mapWidgetsToVariables

```
type_mapWidgetsToVariables Gnome::Glade::VariablesMap::m_mapWidgetsToVariables [protected]
```

6.1.5.2 m_refGlade

```
Glib::RefPtr<Glade::Xml> Gnome::Glade::VariablesMap::m_refGlade [protected]
```

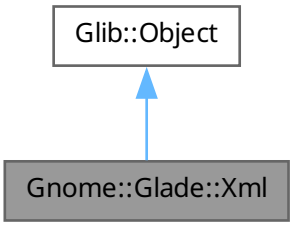
The documentation for this class was generated from the following file:

- variablesmap.h

6.2 Gnome::Glade::Xml Class Reference

```
#include <xml.h>
```

Inheritance diagram for Gnome::Glade::Xml:



Public Types

- typedef Gnome::Glade::XmlError Error

Public Member Functions

- virtual ~Xml ()
- GladeXML * gobj ()

  Provides access to the underlying C GObject.
- const GladeXML * gobj () const

  Provides access to the underlying C GObject.
- GladeXML * gobj_copy ()

  Provides access to the underlying C instance. The caller is responsible for unrefing it. Use when directly setting fields in structs.
- std::string get_filename () const
- Gtk::Widget * get_widget (const Glib::ustring &name)

  Get a widget from the Glade file.
- template<class T_Widget >
  T_Widget * get_widget (const Glib::ustring &name, T_Widget *&widget)

  More convenient way of getting a widget from the Glade file.
- template<class T_Widget >
  T_Widget * get_widget_derived (const Glib::ustring &name, T_Widget *&widget)

  This provides a pointer to a widget whose details are specified in the Glade file, but which is implemented by your own derived class.
- Glib::ListHandle< Gtk::Widget * > get_widget_prefix (const Glib::ustring &name)
- void reparent_widget (const Glib::ustring &name, Gtk::Container &container)

  Take the widget from the glade-generated container and put it in another container.
- std::string relative_file (const std::string &filename) const
- void connect_clicked (const Glib::ustring &name, const sigc::slot< void > &slot_)

  Connect a Gtk::Button's clicked signal or a Gtk::MenuItem's activated signal to a slot.

Static Public Member Functions

- static Glib::RefPtr< Xml > create (const std::string &filename, const Glib::ustring &root=Glib::ustring(), const Glib::ustring &domain=Glib::ustring())

  Loads a Glade XML file.
- static Glib::RefPtr< Xml > create_from_buffer (const char *buffer, int size, const Glib::ustring &root=Glib↩::ustring(), const Glib::ustring &domain=Glib::ustring())

  Reads glade XML data from memory.
- static Glib::ustring get_widget_name (Gtk::Widget &widget)
- static Glib::RefPtr< Xml > get_widget_tree (Gtk::Widget &widget)

Protected Member Functions

- Xml (const std::string &filename, const Glib::ustring &root, const Glib::ustring &domain)

  Loads a glade XML file.
- Xml (const char *buffer, int size, const Glib::ustring &root, const Glib::ustring &domain)

  Reads glade XML data from memory.
- Gtk::Widget * get_widget_checked (const Glib::ustring &name, GType type)
- GtkWidget * get_cwidget (const Glib::ustring &name)
- virtual GType lookup_type_vfunc (const Glib::ustring &classname)

Related Symbols

(Note that these are not member symbols.)

- Glib::RefPtr< Gnome::Glade::Xml > wrap (GladeXML *object, bool take_copy=false)

  A Glib::wrap() method for this object.

6.2.1 Member Typedef Documentation

6.2.1.1 Error

```
typedef Gnome::Glade::XmlError Gnome::Glade::Xml::Error
```

6.2.2 Constructor & Destructor Documentation

6.2.2.1 ~Xml()

```
virtual Gnome::Glade::Xml::~Xml ( )  [virtual]
```

6.2.2.2 Xml() [1/2]

```
Gnome::Glade::Xml::Xml (
            const std::string & filename,
            const Glib::ustring & root,
            const Glib::ustring & domain )  [protected]
```

Loads a glade XML file.

Exceptions

XmlError	

6.2.2.3 Xml() [2/2]

```
Gnome::Glade::Xml::Xml (
            const char * buffer,
            int size,
            const Glib::ustring & root,
            const Glib::ustring & domain )  [protected]
```

Reads glade XML data from memory.

Exceptions

XmlError	

6.2.3 Member Function Documentation

6.2.3.1 connect_clicked()

```
void Gnome::Glade::Xml::connect_clicked (
            const Glib::ustring & name,
            const sigc::slot< void > & slot_ )
```

Connect a Gtk::Button's clicked signal or a Gtk::MenuItem's activated signal to a slot.

For instance:
`refXml->connect_button("button", sigc::mem_fun(*this, &ExampleWindow::on_button_clicked) );`

Parameters

name	The name of the widget.
pslot	The slot to connect to.

6.2.3.2 create()

```
static Glib::RefPtr< Xml > Gnome::Glade::Xml::create (
            const std::string & filename,
            const Glib::ustring & root = Glib::ustring(),
            const Glib::ustring & domain = Glib::ustring() )  [static]
```

Loads a Glade XML file.

This will instantiate the widgets in the XML file. You can use the root parameter to only instantiate a certain widget and its children. The returned Xml object keeps pointers to the instantiated widgets which you can retrieve with get_widget().

Note that the Xml object does not delete the widgets it instantiates, but instead leaves the responsibility to you. See get_widget(). This means that you can safely let the Xml object go out of scope after you have retrieved the pointers you need from it.

Exceptions

XmlError	

6.2.3.3 create_from_buffer()

```
static Glib::RefPtr< Xml > Gnome::Glade::Xml::create_from_buffer (
            const char * buffer,
            int size,
            const Glib::ustring & root = Glib::ustring(),
            const Glib::ustring & domain = Glib::ustring() )  [static]
```

Reads glade XML data from memory.

Exceptions

XmlError	

See also

create()

6.2.3.4 get_cwidget()

```
GtkWidget * Gnome::Glade::Xml::get_cwidget (
            const Glib::ustring & name )  [protected]
```

6.2.3.5 get_filename()

```
std::string Gnome::Glade::Xml::get_filename ( ) const
```

6.2.3.6 get_widget() [1/2]

```
Gtk::Widget * Gnome::Glade::Xml::get_widget (
            const Glib::ustring & name )
```

Get a widget from the Glade file.

For instance:
```
Gtk::Table* pTable = dynamic_cast<Gtk::Table*>(refXml->get_widget("mytable"));
```

Note that you are responsible for deleting top-level widgets (windows and dialogs). Other widgets are instantiated as managed so they will be deleted automatically if you add them to a container.

Parameters

name	The name of the widget.

Returns

A pointer to the widget, or 0 on failure.

6.2.3.7 get_widget() [2/2]

```
template<class T_Widget >
T_Widget * Gnome::Glade::Xml::get_widget (
            const Glib::ustring & name,
            T_Widget *& widget )  [inline]
```

More convenient way of getting a widget from the Glade file.

It allows for a shorter syntax with less repetition. For instance:

```
Gtk::Table* pTable = 0;
refXml->get_widget("mytable", pTable);
```

This method prints a warning message to the console if the widget doesn't exist or has the wrong type, so you don't need to check that manually.

Note that you are responsible for deleting top-level widgets (windows and dialogs) instantiated by the Xml object. Other widgets are instantiated as managed so they will be deleted automatically if you add them to a container widget.

Parameters

name	The name of the widget.

Return values

widget	A pointer to the widget, or 0 on failure.

Returns

The value of *widget*.

6.2.3.8 get_widget_checked()

```
Gtk::Widget * Gnome::Glade::Xml::get_widget_checked (
            const Glib::ustring & name,
            GType type )  [protected]
```

6.2.3.9 get_widget_derived()

```
template<class T_Widget >
T_Widget * Gnome::Glade::Xml::get_widget_derived (
            const Glib::ustring & name,
            T_Widget *& widget )  [inline]
```

This provides a pointer to a widget whose details are specified in the Glade file, but which is implemented by your own derived class.

Your class must have a constructor like so:

```
DerivedDialog::DerivedDialog(BaseObjectType* cobject, const Glib::RefPtr<Gnome::Glade::Xml>& refGlade)
: Gtk::Dialog(cobject) //Calls the base class constructor
```

For instance:

```
Gtk::DerivedBox* pBox = 0;
refXml->get_widget_derived("mybox", pBox);
```

Parameters

name	The name of the widget.

Return values

widget	A pointer to the widget, or 0 on failure.

Returns

The value of *widget*.

6.2.3.10 get_widget_name()

```
static Glib::ustring Gnome::Glade::Xml::get_widget_name (
            Gtk::Widget & widget )  [static]
```

6.2.3.11 get_widget_prefix()

```
Glib::ListHandle< Gtk::Widget * > Gnome::Glade::Xml::get_widget_prefix (
            const Glib::ustring & name )
```

6.2.3.12 get_widget_tree()

```
static Glib::RefPtr< Xml > Gnome::Glade::Xml::get_widget_tree (
            Gtk::Widget & widget )  [static]
```

6.2.3.13 gobj() [1/2]

```
GladeXML * Gnome::Glade::Xml::gobj ( )  [inline]
```

Provides access to the underlying C GObject.

6.2.3.14 gobj() [2/2]

```
const GladeXML * Gnome::Glade::Xml::gobj ( ) const  [inline]
```

Provides access to the underlying C GObject.

6.2.3.15 gobj_copy()

```
GladeXML * Gnome::Glade::Xml::gobj_copy ( )
```

Provides access to the underlying C instance. The caller is responsible for unrefing it. Use when directly setting fields in structs.

6.2.3.16 lookup_type_vfunc()

```
virtual GType Gnome::Glade::Xml::lookup_type_vfunc (
            const Glib::ustring & classname )  [protected], [virtual]
```

- interface for changing the custom widget handling */

6.2.3.17 relative_file()

```
std::string Gnome::Glade::Xml::relative_file (
            const std::string & filename ) const
```

6.2.3.18 reparent_widget()

```
void Gnome::Glade::Xml::reparent_widget (
            const Glib::ustring & name,
            Gtk::Container & container )
```

Take the widget from the glade-generated container and put it in another container.

6.2.4 Friends And Related Symbol Documentation

6.2.4.1 wrap()

```
Glib::RefPtr< Gnome::Glade::Xml > wrap (
            GladeXML * object,
            bool take_copy = false )  [related]
```

A Glib::wrap() method for this object.

Parameters

object	The C instance.
take_copy	False if the result should take ownership of the C instance. True if it should take a new copy or ref.

Returns

A C++ instance that wraps this C instance.

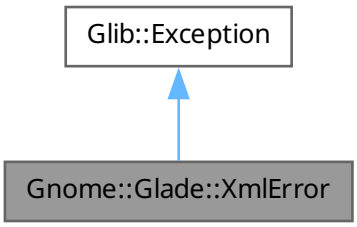
The documentation for this class was generated from the following file:

- xml.h

6.3 Gnome::Glade::XmlError Class Reference

```
#include <xml.h>
```

Inheritance diagram for Gnome::Glade::XmlError:



Public Member Functions

- XmlError (const Glib::ustring &message)
- virtual ~XmlError () throw ()
- XmlError (const XmlError &other)
- XmlError & operator= (const XmlError &other)
- virtual Glib::ustring what () const

6.3.1 Constructor & Destructor Documentation

6.3.1.1 XmlError() [1/2]

```
Gnome::Glade::XmlError::XmlError (
            const Glib::ustring & message )  [explicit]
```

6.3.1.2 ~XmlError()

```
virtual Gnome::Glade::XmlError::~XmlError ( ) throw ( )   [virtual]
```

6.3.1.3 XmlError() [2/2]

```
Gnome::Glade::XmlError::XmlError (
            const XmlError & other )
```

6.3.2 Member Function Documentation

6.3.2.1 operator=()

```
XmlError & Gnome::Glade::XmlError::operator= (
            const XmlError & other )
```

6.3.2.2 what()

```
virtual Glib::ustring Gnome::Glade::XmlError::what ( ) const  [virtual]
```

The documentation for this class was generated from the following file:

- xml.h

Chapter 7

File Documentation

7.1 init.h File Reference

Namespaces

- namespace Gnome
- namespace Gnome::Glade

7.2 variablesmap.h File Reference

Classes

- class Gnome::Glade::VariablesMap

  Associates named Glade widgets with member variables.

Namespaces

- namespace Gnome
- namespace Gnome::Glade

7.3 xml.h File Reference

Classes

- class Gnome::Glade::XmlError
- class Gnome::Glade::Xml

Namespaces

- namespace Gnome
- namespace Gnome::Glade
- namespace Glib

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