

Switchboard Extension

The Switchboard extension generates a Switchboard/Main Menu interface to access Base forms and reports. The switchboard can be grouped into categories, each of which can contain any number of menu entries. Furthermore, you can specify the size and screen location of the form to be opened. The generators creates three database objects.

- 1) The SWITCHBOARD table which has some basic information about the switchboard such as size and location of main form as well as size and positioning of menu entries.
- 2) The SWITCHBOARDITEMS table which has the menu entries configuration information.
- 3) The SWITCHBOARD form. This is a blank form generated by the wizard, and is populated with the menu entries. This form document can be modified by the user—keeping in mind that the menu entries need to be positioned at runtime.

All these items are generated automatically when the extension main hook is invoked, and that database document does not have said objects. The main hook is accessed through the Tools | Add-ons | OpenOffice.org Base menu option. The extension can only be invoked from a *Registered* Base document.

Currently, there are four types of menu entries that can be generated. Forms, Reports, Switchboards, and Switchboard Links. The Form and Report entries open a form or report, respectively. At runtime, the difference between a Switchboard and Switchboard Link is trivial. A Switchboard is an entry which can appear as the parent of other entries (a menu). A Switchboard Link is an entry that links to another Switchboard menu—but does not have entries; this is useful to get back to another menu (such as main menu) from an entry that may be nested somewhere down the hierarchy.

A Database form or report need not be located in the database where the Switchboard is located. This feature makes it possible to have a main switchboard that gives access to forms and reports from any number of databases.

Switchboard Settings

The first page of the wizard allows for configuration of the switchboard form document. This information is written to the SWITCHBOARD table create by the wizard. Illustration 1 shows the first page of the wizard. In the current version (1.0.0) the first option is disabled. I kept the database selection list box should you want to create a switchboard for a non-registered database; this requires other changes, so I will attempt to implement it later if time permits.

The first (enabled) setting, *Main Title*, indicates the main title for the switchboard. Unfortunately the current version does not actually set that value on the switchboard form; therefore it is not necessary. I will try to make that change in the next release. Every menu entry has a button and a label. The *Entry Label Width* indicates the width of the label control (for the entry label) and the *Button Size* indicates width and height of the entry button. The *Vertical* and *Horizontal Offsets* indicate the offset (position of the first entry). If you add other elements or text to the form document, it becomes important to change these settings such that the menu entries are not drawn on top of your custom items. The *Vertical Spacing* indicates the distance between a given entry and the previous entry; and the *Horizontal Spacing* indicates the distance between the entry button and label. The size and position settings indicate the size and position of the form document. You can leave the default values as the default settings.

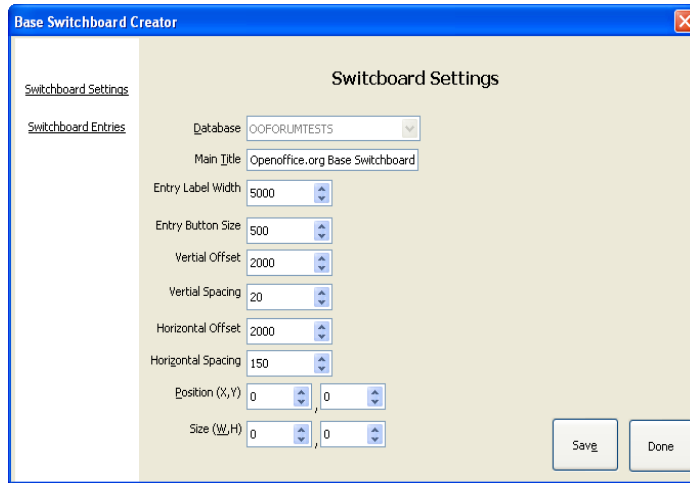


Illustration 1: Switchboard Settings

Note

It is very important to note that dialogs are not data aware. Therefore, you must always press the **Save** button every time you make a change, else the changes will **not** be committed to the database. These default values are written by the generator when the table is initially created.

Illustration 1 shows a sample switchboard with setting annotations.

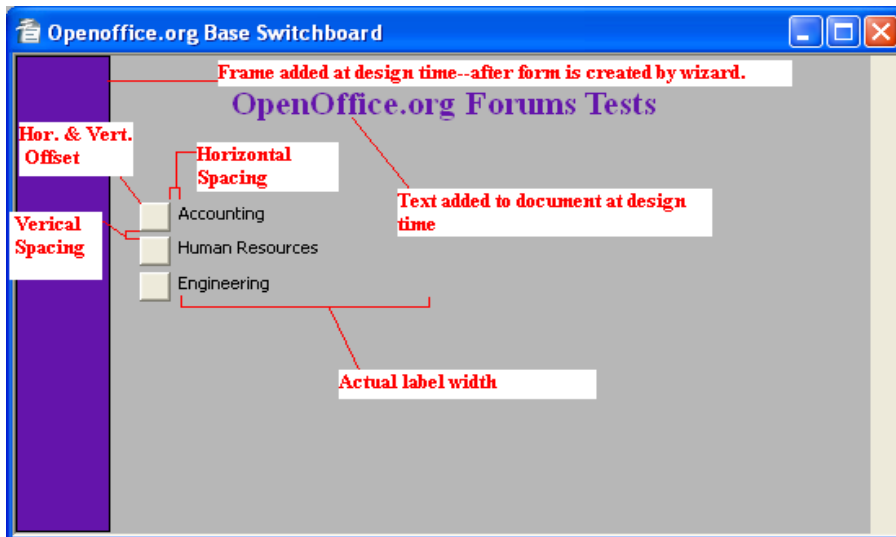


Illustration 2: Annotated sample Switchboard

This example shows a switchboard form document with some modifications—the purple bar along the left margin, and the label at the top. You can open a switchboard form document in design mode and make any modifications you want. However, keep in mind that the offsets must be modified such that the menu entries are not drawn over your modifications, unless that is your intent.

Switchboard Entries

The Switchboard Entries are the actual menu entries. These are written to the SWITCHBOARDITEMS table create by the wizard. The wizard also makes one entry into this table which is the main (root) menu. This is simply an entry of type *Switchboard*, *ParentID* of 0, and *Main Menu* as the item label.

The first text box (on the left) indicates the title for the currently selected switchboard. The list box shows all the entries, if any, for that switchboard. The two arrows to the right of the list box move entries up and down respectively. This indicates the sequence in which the entries will be drawn on the form document. The button labeled *Remove* removes the currently selected entry, and the button labeled *New Entry* enables the form on the right such that a new entry can be made.

Note that the current database is selected as the *Target Database* by default. However, if you want to include a form or report from a different database, simply make the necessary selection. If the entry type is *Switchboard*, you do not need to select a *Menu Item*, as the switchboard entry is its own item. Otherwise select a form, report, or switchboard for entry type of *Form*, *Report*, or *Switchboard Link* respectively. Furthermore, you can set the size and position for the target document.

I have left entries for a group and user, as I may want, in a future release, to allow the menu to be generated specifically for the logged user. This setting would allow the menu generator to query only those entries that match the current user and groups to which the current user belongs, and thus one generic switchboard generator can create menus that are entirely different for each type of user. Another possibility is to allow the user to set a filter for the form or report.

The final step is to save the new entry by clicking on the *Save* button. The entry is not saved until you click on this button. The new entry is appended to the currently selected switchboard (the main switchboard by default). To open a new switchboard, double click on the list box item. If this item is a switchboard, that item will become the current switchboard, and all sub-entries loaded in the list box. Illustration 3 shows the Switchboard Entries page, and illustration 4 shows the entries loaded after double clicking on the *Accounting* entry (as shown on illustration 3) which is a switchboard.

Illustration 3: Switchboard Entries

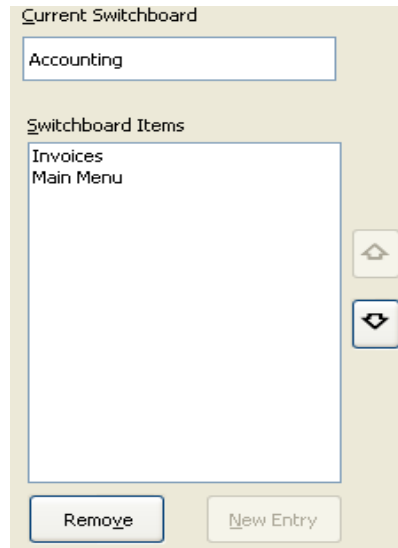


Illustration 4: Switchboard entries (sub-menu)

Note that this switchboard (sub-menu) as an entry called *Main Menu*. While you can call it what ever you want, you **MUST** have a way to return to the previous item in the hierarchy. This is true for the wizard as well as for the actual menu generated. Without this entry, you would not be able to return to the main menu to add other items; and when the menu is generated, you (or your user) will not be able to return to the previous menu to make other selections.

Summary

This wraps it all up. You can append items to the switchboard at any time—it is not necessary to create them all at once. Note, however, that if for whatever reason you drop the SWITCHBOARDITEMS table, all entries will be lost.

Currently, the extension does not work all that well with the OpenOffice.org 3.0 Beta release—the entry label is generated with a very small font. I will wait for the final release of OpenOffice.org to either attempt to change the zoom factor (which has not helped so far in my tests) or perhaps try to figure out how to change the font size.