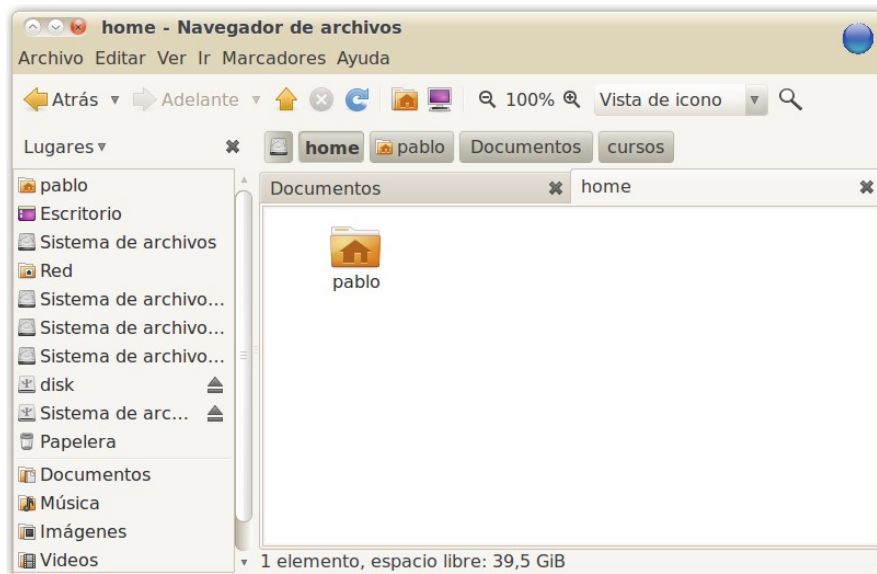


# New UI element for windows: Esfera

by Pablo Quirós

Esfera is a new element to be placed in the top-right area of the windows. It is a circular spherical button, about 3 times wider than the normal ones, which offers a variety of possibilities to the user. Esfera *represents* the window. Any action performed with Esfera is an action that affects the whole window where it is placed.



It's draggable, and it responds to different movements performed by the user with it. This are some of the possibilities I see:

## Easy-to-implement actions

**Moved to the top:** the window is maximized. User clicks on Esfera, moves it a little bit to the top, and the window is maximized even before he releases the button. If he changes his mind, he moves it down without releasing the Esfera, and it gets back to the previous unmaximized state.

**Moved to the bottom:** the window is minimized; same behavior than maximizing, but the user moves Esfera down to perform it.

**Moved right:** the window is moved to the workspace on the right.

**Moved left:** the window is moved to the workspace on the left.

**Moved performing an "X":** the window is closed. User clicks on esfera, moves it to make an "X", and the window becomes transparent to show that it's about to be closed. If he releases Esfera, the application is closed. If he changes his mind, he moves Esfera back and the window gets opaque again; then, if he releases Esfera, the window will stay opened.

**Clicked:** the user sees a menu, in which he can choose between the different options of Esfera: close, minimise, maximise, switch workspace... this menu is thought to make easier the life of new users.

## Not-so-easy-to-implement actions

**Moved to another application's Esfera or window:** this produces an interaction between two applications. Some of the possibilities I see are:

- Esfera of Nautilus moved to Esfera of another Nautilus window: the two windows are mixed. If I was browsing a folder called “home” in the first one, and “Documents” in the second one, now I only have a window with two tabs showing “home” and “Documents”.
- Esfera of Firefox moved to Esfera of another Firefox window: same thing; windows are mixed.
- Esfera of Totem moved to Pitivi's window: the video being watched in Totem is opened by video editor Pitivi.
- Esfera of OpenOffice moved to Nautilus' window: the document opened in OpenOffice is saved in the location displayed in Nautilus.
- **Any other interactions you can think about.**

**Moved in a semicircle from right to left:** the window is turned, and the back of it is shown to the user. The back of a window is a new UI concept. It has been explored previously, I think Metisse did; it was a Compiz-like proposal by Mandriva in which windows could be folded, turned, mirrored... but their proposal was too complex and full of unuseful options, and the industry opted for the simplicity of Compiz.

The idea is that we have a “front” side of a window, which is what we normally see, and a “back” side, which offers some possibilities that there is no space to display in the front side.

This offers lots of possibilities. In the back of the window, we can show:

- Activities related to the application, or related to the objects opened by the application. For example, if we are viewing a file in Totem, we can see recent films opened by totem, other applications we can use to open the film with (video editing...), properties of the video...
- Notes. Sometimes it's useful to write notes related to the things we are doing. For example, we could write in a film a note saying in which minute we stop watching it to remember it later. In Nautilus, we can write notes related to the folder we are seeing, and to the files that are inside that folder.
- Whatever you can think about. The idea is to show info related to the things we are viewing in the front side, that would benefit by lots of space to be displayed without worrying to make the front (ie: the normal) interface too cluttered.

Another concept that could be explored, instead of “turning” the window, is to think about this as another layer on top of the window, which shows contextual information about the application and the objects inside it, and offers the chance to interact with this information. For example: the user see a normal window. He makes the semicircle gesture with Esfera, and he sees this new layer. Now, when placing the mouse over an icon in Nautilus, the user will see the properties of the file, the comments he has previously written, the applications he can use to open it... and has the chance to edit this information. If he moves the mouse to another icon, he sees the info about the other icon. In this mode, user would only see objects such as icons and the information related to them; menus, etc., would disappear, and this space would be filled with other useful information.

Whatever design is chosen (turning the window, or showing a layer on top of the window), if the user moves Esfera in a semicircle from left to right, he will come back to the normal mode.

**Any other actions you can think about.**

## Keylights and benefits

- Only one UI element to perform lots of actions. It simplifies the interface.
- If users like it, in the future the buttons on the left (maximize, minimize, close) could be removed. At first, I'd suggest a coexistence so that users can test which way is easier for them.
- The button is bigger than usual, and it's the only button in this area of the window. This means: a) it is easier to reach, and b) it is quicker, as there is no danger of pushing another button; user doesn't need to wait and see what he wants to push, as it happens right now with three tiny buttons together on the top left.
- Bigger means easier to use with touchpads. Some touchpad gestures could be designed to improve the usage experience with them.
- Very fast. The actions performed with Esfera should be fast: a little movement should be enough to make the action. Action result is seen before Esfera is released. If the action is unwanted, it should be easy to undo it before releasing Esfera doing the opposite movement. To avoid frustration by actions poorly recognized, gestures should be very different to each other.
- At first, we could try with the easier actions to implement (minimize, maximize, close, switch workspaces...), and leave the more complex ones to the future in case users like it.
- Intuitive. Once the user learns the basic movements, he won't forget what he needs to do. For new users, it will seem like a normal button; pressing it will display the different actions to do, and he can select them with a mouse click. Of course, this will be much slower for him, so one of the options should be something like "learn how to use Esfera", so that he is taught how to perform the gestures, and it would be highlighted.
- Really innovative. It's a completely new concept, which will bring attractive new paths to explore, and will give the Ubuntu desktop a distinctive look while improving usability.
- Modern and appealing. With the right visual effects, the user will feel he is using an amazing new element.