Idesk

Food for Desktop Rodents

Users with simple window managers often have to do without convenient features, such as being able to launch programs with a mouse click. Idesk provides the functions of the bigger Desktop Environments and at the same time livens up the appearance of your desktop without all the extra bloatware that would otherwise take away the advantages of your small, fast and efficeint window manager.

BY ANDREA MÜLLER

A single click on a desktop icon and your application launches. This functionality that gives users of more complex desktop environments that split-second advantage when launching a program, is sorely missed by users with more simple window managers. *Idesk* [1] by Chris Roberts – Tim Finley is continuing the development work – puts an end to grinning and bearing it, or even claiming that windows full of thumbnails were not your thing anyway.

KDE users will not benefit from this tool, however, as you cannot see the Idesk icons if an application background has already occupied the X Server's root window, which is the case of the K Desktop Environment.

DESKTOPIA

Only you can decide how your desktop looks. With deskTOPia we regularly take you with us on a journey into the land of window managers and desktop environments, presenting the useful and the colorful viewers and pretty toys.

Basic Ingredients

As the Idesk source package (from [1]) places the files in the current directory when expanded, it makes sense to create a new directory for the archive file first. Type *mkdir idesk* to do so, and then change to the newly-created directory. When you get there, type *tar -xzf /path/to/idesk-0.5.6.tar.gz*.

You need *librsvg*, *gdk-pixbuf-2*, **pkg-config**, and the appropriate development packages to compile the program. In addition, the software also requires a few GTK/GNOME libraries, such as *glib2(-devel)*, *libxml2(-devel)*, *pango(-devel)*, and *libart_lgpl(-devel)* (these are the package names for SuSE). Some distributions (but not SuSE) require you to have these before you can install *librsvg*. This library allows *Idesk* to display icons both in PNG and **SVG** format.

Type *make* to compile the program, then su to *root*, and launch *make install* to copy the executable to */usr/local/bin*.

On SuSE Linux the call to *make* crashed, despite an *imlib-devel* installation, issuing a number of error messages

that complained of "undefined references" to the Imlib library:

```
undefined reference to ➚
 'Imlib_kill_image'
```

The reason for this is that SuSE supplies a version of the library that does not support *pkg-config*. To compile Idesk, you first need to edit the Makefile.

Well Set Up

Idesk reads its configuration from the *~/.ideskrc* file, which you will need to create. You can use the *README* file supplied with the source code as a template.

Listing 1: ~/.idesktop/ Konqueror.lnk

```
table Icon
  Caption: Home
  Command: konqueror
  Icon:
/usr/share/icons/ikons/32x32/file
systems/folder_home.png
end
```

The file also provides explanations for the individual options.

The *table Config* section specifies the general behavior of the program. If you use a light desktop background, you might like to change the font color in the

```
FontColor: #ffffff
```

line from white (*#ffffff*) to black (*#000000*), to ensure that the icon captions are readable. In the line beginning with *FontSize:* you may adjust the size of the icon caption. It must be given in pixels and working with a resolution of 1024x768. *FontSize: 14* or *FontSize: 16* are good choices.

Thanks to the *CaptionOnHover: true* option, Idesk will only display the captions on mouse over. *SnapShadow: true* activates the feature that allows you to see where an icon will be placed when you move it with drag & drop. *Transparency: 150* specifies the degree of transparency, which you should set to *0*, if you do not require any degree of transparency for your icons (as shown in Figures 1 and 2).

Controlling Actions

The *table Actions* sections handles mouse activity, making sure that a double-click will launch the application linked to the icon and allowing you to use drag&drop with the left mouse button to move icons. However, you will need to introduce Idesk to the icons it will be looking after.

Surfing to [2] and similar websites should be proof enough that there are any number of freely available icons for every taste. If you prefer

Figure 1: ideskConf.pl is a GUI tool for defining new icons

something closer to home, take a look at the icons in */usr/share/icons*, which should be available on your very own hard disk. SuSE Linux users should also investigate */opt/kde3/share/icons* and */opt/gnome/share/icons*. Users with an artistic background might take a look at babygimp [3]. With this tool you can design your own icons and provide your desktop with a touch of individuality.

Files with the *.lnk* suffix in the userdefinable *~/.idesktop* folder, allow you to place icons on your desktop that launch applications when you click on them. The *~/.idesktop/Konqueror.lnk* file defines a quick launcher for the Konqueror file manager. Listing 1 contains a sample for Mandrake Linux.

The icon caption follows the *Caption:* keyword, *Command:* introduces the command line for the executable, and the *Icon:* item tells Idesk which icon to use. It makes sense to create similar definition files for any applications you use regularly.
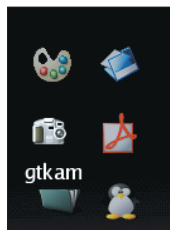

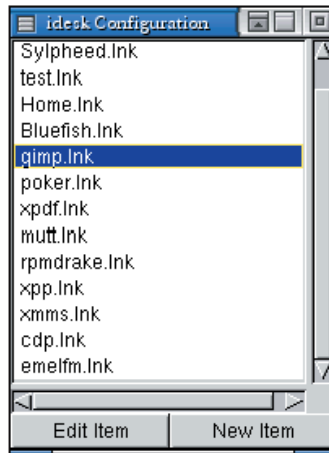**Figure 2: Idesk can display Icons with various transparency effects**

Brave New Desktop

After populating your *~/.idesktop* directory, it is time to launch Idesk for the first time. Type the *idesk &* command in a shell to dump the icons you have defined in the top right corner of your screen. You can then

hold down the left mouse button and use drag&drop to distribute the icons (see Figure 1). Idesk adds the final position to the appropriate *.lnk* file.

When you drag the mouse over an icon, Idesk toggles the transparency function off, displaying the original bold colors assigned to the icon (see Figure 2). In addition, an icon caption is displayed. You can double click on an icon to launch the application linked to that icon.

You do not need to re-launch *Idesk* if you create new links while the desktop is running. Double click with the center mouse button on an icon to tell the icon to parse its configuration and update the desktop. This approach is also recommended after changing the wallpaper, as artefacts left over from the

Box 1: Two-step Compilation

To compile Idesk from the sources on SuSE, remove the *imlib* keyword from the following line

```
libs = `pkg-config imlib ⏎
gdk-2.0 gdk-pixbuf-xlib-2.0 ⏎
libart-2.0 libxml-2.0 pangoft2⏎
 librsvg-2.0 --libs`
```

in the *src/Makefile*, to avoid running *pkg-config --libs* against the Imlib library. This call collects appropriate compiler and LINKER options for the other libraries. To find out what you need for Imlib, add the *imlib-config --libs* command (the backticks ``allow the command to run and send its output to the *libs* variable when *make* is called):

```
libs = `pkg-config gdk-2.0 ⏎
gdk-pixbuf-xlib-2.0 libart-2.0 ⏎
libxml-2.0 pangoft2 librsvg-2.0 -
-libs` `imlib-config --libs`
```

Now call *make* in the parent directory above *src*, and then su to *root* before launching *make install*.

GLOSSARY

pkg-config: *A programming tool that outputs information about the libraries installed on a system. It is gradually replacing the "library-name-config" shell scripts that accompany many libraries, and cause a lot of trouble when multiple versions of a single library are installed. pkg-config is typically called by Makefiles to discover the appropriate compiler options.*

SVG: *The "Scalable Vector Graphics" format does not store the color values of individual pixels – in contrast to pixel-oriented graphics formats, such as PNG or JPG – but instead defines the object to be drawn by reference to its co-ordinates. This allows you to draw a square that will scale without any degradation using just two co-ordinates, a color value, and a reference to the fact that the object is a square.*

Linker: *Strictly speaking, a compiler simply translates the source code, and leaves it to the linker to create an executable from the object files the compiler produces, and ensure that the program knows which shared libraries it needs to access. These libraries need to be loaded when the program is executed, if they have not already been launched by other programs.*

previous wallpaper may spoil the appearance of your icons.

Fine Tuning

To avoid having to use the mouse to arrange the stash of Idesk icons when you first launch the desktop, you can specify starting coordinates in the *.lnk* files for each icon. To do so, imagine that your desktop is a coordinate system where zero is in the top left corner. The following entry

```
X: 20
Y: 25
```

in a *.lnk* file, positions the icon in the top left corner of your desktop at a distance of 20 pixels from the left border and 25 pixels from the top.

If you use SVG format icons, don't forget to specify the size in the *.lnk* file. Use the *Width:* and *Height:* parameters, plus a value in pixels to do so. You can use an image editor to discover the size of your icons. Typically, they will be 32x32 or 48x48 pixels.

Size to fit

Ensure that *.svg* icons do not protrude over the edge of the screen, as this will cause Idesk to crash. If you use a 1024x768 screen resolution, the total $X + Width$ must not exceed 1024 and the total $Y + Height$ must not exceed 768. To play safe, you can simply specify *0* for *X* and *Y* and use your mouse to arrange the icons.

Idesk is just as touchy when faced with unknown formats. The *.svg* icons supplied with KDE are *gzip* compressed and recognizable by their *.svgz* suffix. To allow *Idesk* to use them, you will need to rename them to *icon.svg.gz* and then run *gunzip* to expand them.

Idesk will also interpret a double click with the right mouse button on an icon – although you will need to specify the corresponding command in the configuration file for the icon. If you want to launch Konqueror in your home directory, and alternatively in $\sim$*/images*, you can replace the *Command:* line in Listing 1 with the following entry to do so:

```
Command[0]: konqueror
Command[1]: konqueror ~/images/
```

Right double clicking the Konqueror icon will point the file manager to the $\sim$*/images* directory in future.

Cheats for Editor-Challenged Users

If you do not relish the thought of all that manual editing work on the configuration files, you can check the Idesk homepage at [1] for a Perl GUI tool, written in GTK, that creates icon definitions (see Figure 3).
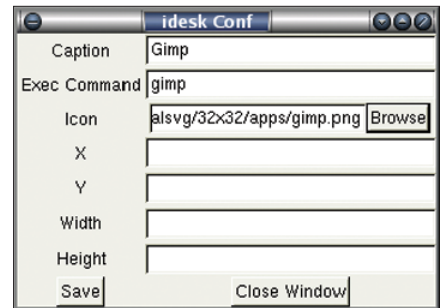
Figure 4: Creating icon-definitions graphically

ideskConf.pl can be made executable by typing *chmod + x ideskConf.pl*. To launch the tool – assuming that you have the *perl* and *perl-gtk* packages – type */path/to/ideskConfig.pl*. Click the *New Item* button to create a new icon.

In the opening dialogue you provide all the information Idesk needs to display a new entry (see Figure 4). *X* and *Y* are optional, but in the lines *Caption*, *Command* and *Icon* you have to provide entries. Use the *Browse* function to find an icon, for Idesk will unfortunately, crash immediately when a link points to a non-existing file.

Although the icon will not appear immediately in the preview window, this does not prevent the program from creating the appropriate *.lnk* files. As soon as you are satisfied with the appearance of your desktop, the *Locked:*-option in the table *Config* section of your $\sim$*/.ideskrc* becomes interesting. Changing the entry from *false* to *true* fixates the icons at their position and protects them from being moved inadvertently. ∎

INFO

[1] Idesk: *http://idesk.timmfin.net/*

[2] Icons: *http://themes.freshmeat.net/*

[2] Babygimp: *babygimp.sourceforge.net/*

THE AUTHOR

Andrea Müller is a law student who keeps herself busy with Linux whenever she gets tired of legal theory.

When time permits she additionally likes to take a peek at other operating systems, such as QNX, BeOS and NetBSD, or even tries to polish her Python skills. Apart from Linux and her university career Andrea is interested in literature, European history and cycling.

Figure 3: Many new icons make for a pretty desktop