A Look at the qlwm Window Manager

A Lean Manager

Do you automatically think KDE when someone says Qt? If so, you have probably never heard of qlwm, a quick window manager that is easy on resources and also based on the Trolltech toolkit.
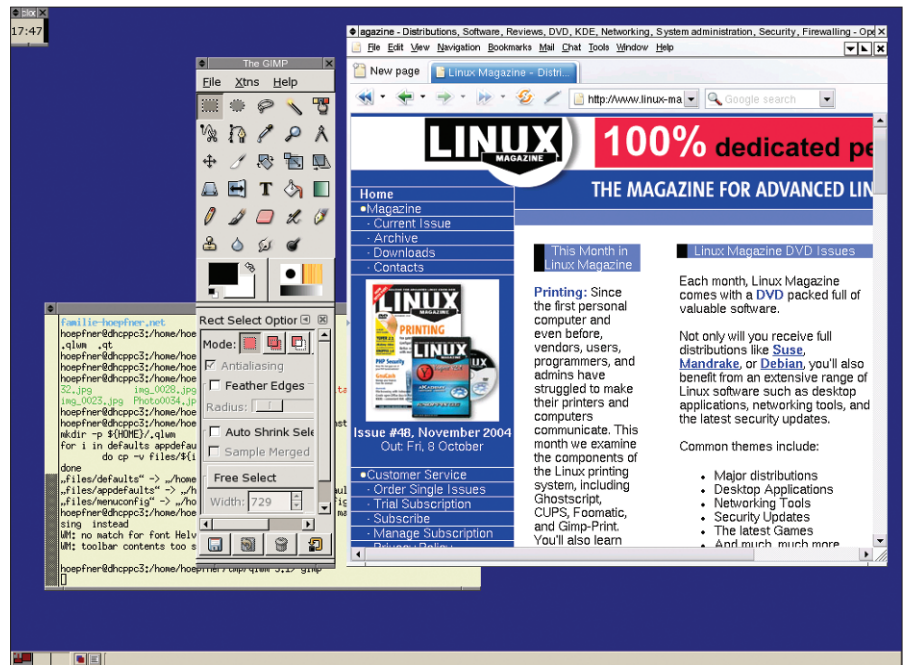
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Figure 1: qlwm offers a toolbar, including a start menu, a mail monitor, a clock, and a pager.

Putting a perfect Linux desktop together is not the easiest of tasks. Although most distributions come with a whole bunch of window managers, it is hard to find a perfect match. If you are looking for a powerful but comfortable desktop, take a look at the Qt-based *qlwm* [1] desktop.

qlwm is a fast window manager that has everything a well-equipped desktop needs: a toolbar, a mail monitor, a start menu, and virtual desktops.

Installation

qlwm is only available as a source code archive, so be prepared to fire up your compiler. To ensure that everything works as planned, you should have the Qt library and developer packages on your system before you install. Assum-

ing these packages exist, you can download the qlwm archive from the project website and unpack it by typing *tar -xzf qlwm-3.1.tar.gz*. Once you have unpacked the archive, change to the directory this step creates, *qlwm-3.1*, and type *make* to build the window manager. Then type *su -c "make install"* to install the window manager in */usr/local/ qlwm/*. *make install* additionally creates a symbolic link, */usr/local/bin/qlwm*.

To finish off the installation, type *make install-config* to copy the basic *qlwm* configuration to your home directory. Besides the window manager itself, the *make* command creates two applets for the qlwm toolbar, the ubiquitous clock, and an email reminder tool.

Getting Started

Log on to your system in text mode, and then add the following line

```
exec /usr/local/bin/qlwm
```

to *~/.xinitrc* to tell *startx* to launch the new *qlwm* window manager. Things are a bit more complicated if you log in via a

GUI-based login manager such as KDM or GDM.

When you launch *qlwm*, the window manager shows you a tidy desktop with a toolbar at the bottom of the screen (Figure 1). The toolbar has a few integrated tools: from left to right, a **pager**, a button that accesses a window list, and the menu button. The clock and the mail monitor are located on the right side of the desktop.

The mail checker included with the *qlwm* package monitors */var/spool/mail/ filename* and shows red when a new message arrives. This mail notification feature allows you to monitor your mailbox status, if you use *fetchmail* , to collect your mail from your provider.

qlwm has simple window dressing comprised of a title bar and two tabs at the bottom of each window that allow

GLOSSARY

Pager: *Nearly every window manager supports multiple desktops. A pager allows you to toggle between desktops. Some pagers give you a rough overview of the active windows on each desktop.*

Figure 2: Use this menu to define window settings.

users to scale the window size up or down. Three functions are accessible via the top left button; depending on your mouse, there are different ways of calling them. A left click iconizes the window, and a right click maximizes it. Right clicking anywhere in the title bar has the same effect.

You can click the button with the center mouse button to enable tile mode. This tells *qlwm* to line up the windows side by side, rather than allowing windows to overlap, and means that you can keep an eye on several windows at the same time. The right button closes the window.

Click on the title bar, hold down the left mouse button, and drag the mouse to move the window. Click the bar with the center button to open the window menu shown in Figure 2, where you can specify whether you want the window to appear on all three desktops, for example, by selecting the *Sticky* option.

There is a slight glitch under distributions with too recent a version of Qt, such as Suse Linux 9.1: the clock and the mail monitor launch in a window of their own, and not as toolbar applets. The reason for this is that the class names have been changed; they now start with capital letters. To tell *qlwm* to embed the clock in the toolbar, you need

to modify ~/.qlwm/ appdefaults.

Open the file in your favorite editor and change *dclock ToolBar* to *Dclock ToolBar*; and while you are there, change *biff* to *Biff*.

Configuration

Besides the configuration file with the basic application settings, there are two additional config files below ~/.qlwm/. The *menuconfig* file contains the entries for the qlwm start menu, and the *defaults* file defines the window manager's default behavior.

If the toolbar is too small for your liking, you can change its size by setting the parameter for *ToolbarHeight* to a larger value.

The autostart configuration for *qlwm* is at the end of this file. The entries start with *Exec* followed by the program to be launched. For example, if you want to launch the *kpowersave* powersaving front-end on Suse Linux, you need to add an entry for *Exec kpowersave*. Then assign the value to the applet in the toolbar, and add *Kpowersave ToolBar* to ~/.qlwm/appdefaults to embed the *kpowersave* applet next to the clock (Figure 3).

It is just as simple to add more program launchers to the start menu. To add additional program launchers, modify the ~/.qlwm/menuconfig file. The file is well-structured, and you only need to know three options to be able to modify the start menu. *Separator* adds a separating line to the menu, *Entry Name Program* adds a program entry. *Entry* is a

Figure 3: qlwm can also handle KDE applets.

qlwm keyword. *Name* can be selected freely and specifies the name of the entry.

For *Program*, add the name of the command you want the window manager to run when you select this menu entry. Menu entries are stored by topic in folders; and to keep the desktop tidy, qlwm also supports sub-menus.

Sub-menus always start with *Menu Name*, and then the programs to be launched in separate lines, followed by the *End* keyword, which closes the sub-menu. For example, the following entry would launch Sylpheed and Thunderbird:

```
Menu Internet
Entry "Thunderbird" thunderbird
Entry "Sylpheed" sylpheed
End
```

Conclusion

qlwm is a lean and fast window manager. If you are looking for a simple window manager that doesn't overcrowd you with gadgets but still offers some handy tools and provides good performance, *qlwm* may be what you are looking for.

Unfortunately, the *qlwm* package does not have an option for customized keyboard shortcuts and is thus better suited to point and click oriented users.

Also, although *qlwm* offers a few predefined shortcuts, as shown in Table 1, you cannot change them, and *qlwm* does not give you the option of assigning keyboard shortcuts to launch specific applications. ∎

Table 1: Keyboard Shortcuts in qlwm

Shortcut	Function
[Alt-Shift-Tab]	Changes to the previous window on the current desktop.
[ALT-Tab]	Moves to the next window on the current desktop.
[Ctrl-Shift-Tab]	Changes to the previous virtual desktop.
[Ctrl-Tab]	Changes to the next virtual desktop.
[Alt-F12]	Moves the window which is furthest in the background to the foreground.
[Alt-F11]	Enables and disables full-screen mode for the windows on the current desktop. In full-screen mode, you cannot switch to another desktop.
[Alt-F10]	Enables tile mode for the current desktop.
[Alt-F9]	Hides the current window. It appears in the window list, but not in the toolbar.
[Ctrl-Esc]	Opens the window list.
[Alt-Esc]	Opens the start menu.

THE AUTHOR

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