

MIGRATION Working with windows in KDE WINDOW VIEWS

Working with windows is an essential characteristic of graphical user interfaces – and under Linux this is just the same as it is in Windows. Anja M Wagner explains

There are lots of different window managers available under Linux to control the appearance and actions of the windows. In this workshop we'll explain the window configuration options for KDE, since KDE, which includes the window managers Kwin (version 2.x) and kwm (version 1.x), is very common and easy to use. For the purpose of this tutorial we'll be looking specifically at KDE 2.0.1 under SuSE Linux 7.1.

It's not hard to migrate from Windows to KDE, as the ways in which windows operate are very similar in both graphical user interfaces. In KDE an application can be opened in its own window by clicking on one of the symbol buttons in the panel – comparable with the taskbar in Windows – or activating it via the menus. The active window in the foreground can be closed by clicking on the X button on the far right; maximised by a click on the button containing a little box; and minimised via the button displaying a horizontal line (see Figure 1).

When maximising a window, KDE offers a simple option for maximising a window in the lengthwise direction only: hold down the Alt key whilst clicking on the maximise button. After minimising, a window shrinks down into a button in the window bar, which



Figure 3: Double-clicking on the header makes the window roll up into the header bar

is integrated into the right half of the KDE panel (see Figure 2). All it takes is a single click on this button to enlarge the window again.

The size of the window can be smoothly altered by grabbing and dragging the edge or a corner of the window with the mouse cursor. In some applications, the KDE control centre for example, minimising only functions up to a certain point – namely only so long as the application can still be adequately displayed by the window manager.

Differences

All this should be familiar to the average Windows user, but there are a few differences in the way things are done. Firstly, let's take the header of a window: this is where the name of an application and, where applicable, the name of the file opened in it are displayed. Double-clicking on this bar activates the "window winder", which causes the window to roll itself up into the header (see Figure 3). Another double-click unrolls the window again. This option makes it easy to get an overview of the desktop when there are lots of windows open at the

Figure 1: Components of the desktop and windows

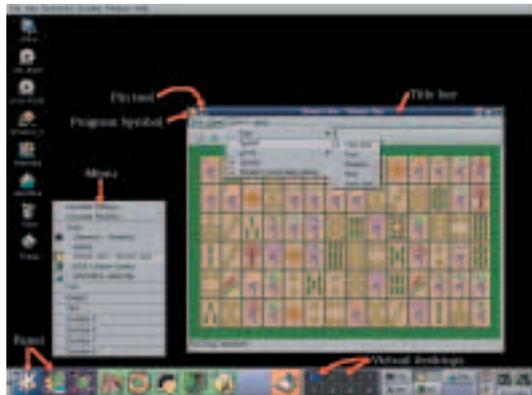


Figure 2: Panel with window bar

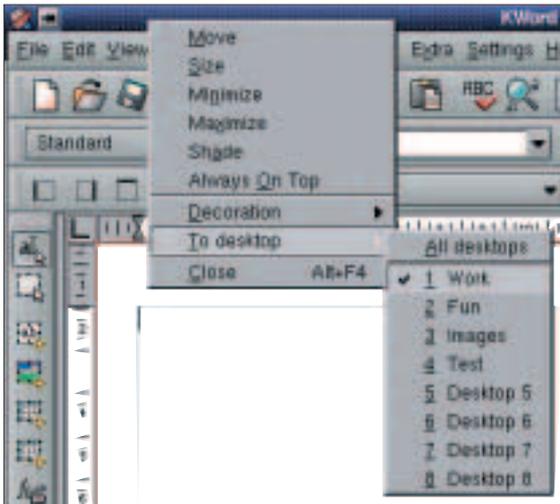


Figure 4: The window menu as alternative to the mouse

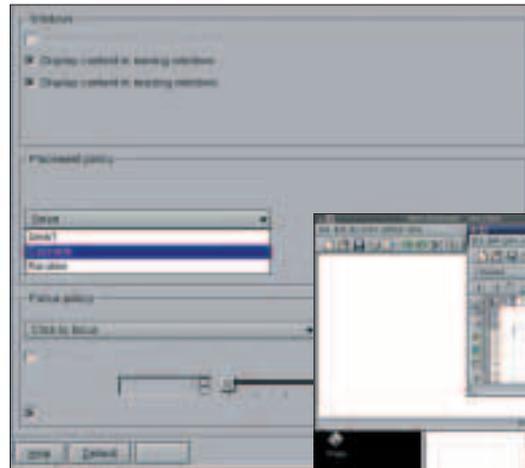


Figure 7: There are three modes to choose from for positioning windows

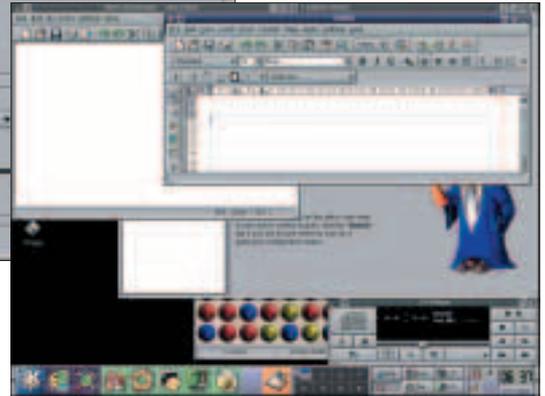


Figure 8: When there are lots of windows, one can lose the overview



Figure 9: It's getting cramped in the window bar, too

same time. On the far left in the header bar there is a small symbol button: a click on this opens the window menu.

Window menu

The window menu (see Figure 4) can also be opened via the key combination Alt+F3 or by right-clicking on the header bar. In this menu, in addition to the usual actions such as closing, maximising and minimising, it's also possible to change to another of KDE's virtual desktops. There is also the option of always showing a window in the foreground. If you activate this and later want to bring a different window to the foreground, you must first deactivate this option.

On the header you'll also find a button with a drawing pin. This will be pointing horizontally if the window has just been opened (see Figure 5).

The window is not "pinned on" and only appears on the desktop on which you have opened it. If you want a window to appear on all the installed virtual desktops, all it takes is a click on this button, and the window is "pinned down" (see Figure 6). If you close a pinned window in one of your desktops, this action will also apply to all your other desktops.

Unlike Windows, KDE enables you to make and configure a maximum of 16 desktops. You can do this in the Look & Feel/ Desktop area of the KDE control centre. If you open several windows on one desktop, the window manager will arrange these so

they overlap. There are three possible modes for defining this arrangement. In the KDE control centre, select Look & Feel/ Window Behavior/ Actions.

In the Positioning action field, a drop-down menu enables you to select whether the windows should be arranged in a smart, cascading or random manner (see Figure 7). With the Smart option, the window manager tries to keep the overlap as low as possible, so that as much of each window is visible as possible.

This arrangement is the default, but does not differ substantially from cascading. Whichever arrangement mode you select, at some point it will become difficult to locate a window that is almost hidden. This is when the window bar on the right-hand side of the KDE panel can help (see Figure 9). Since KDE offers up to 16 desktops, the display of the window bar can be set such that either all windows are displayed on all desktops or only the windows on the currently active desktop.

Both variants have their advantages and disadvantages. In desktops where a number of windows are open at the same time, clarity is likely to suffer (see figure 9). If only the windows of the respective desktop are displayed, on the other hand, you must click through all the desktops until you find the window you're looking for. The configuration to display the window bar is done in the KDE control



Figure 5: When the drawing pin stands upright, the window is "loose"



Figure 6: Firmly "pinned" onto all desktops

Panel

The panel (control bar) in KDE is located by default on the lower edge of the screen. In the left part there are important menu and program buttons. The K button at the far left opens a menu list and has the same function as the Start button in Windows. The window list is integrated into the right part of the panel.



Figure 10: Making space by moving

centre under Look & Feel/ Taskbar. Activate the option Display all windows. If a window is minimised, by the way, its title will be placed in brackets in the window bar.

More space for the window bar

To make more room in the panel for the window bar, you can shift the border of the window bar to the left. To do this, you first have to push together the panel's symbol buttons. When the central mouse button is pressed, the appearance of the mouse cursor changes, and you will be able to shift the symbol buttons (see Figure 10). Click again with the middle button on the two vertical lines in the panel, which separate the window bar, and drag the separating lines as far as possible to the left (see Figure 11).

When a large number of windows are open, the easiest way to find a window is to select it from the window list (see Figure 12). This is reached by means of a symbol button in the panel.

If, after the installation of KDE, this button is missing, press the right mouse button over a clear area of the window bar and select Add/ Window list. The Window list menu enables you to change the desktop and lists all open windows sorted by desktops. KDE wouldn't be KDE if there wasn't another way. Press Alt+Tab and a window will appear in the middle of the desktop displaying an opened application with its name and symbol (see Figure 13). Hold down the Alt key and leaf through all the windows by pressing the Tab key.

When the one you want is displayed, release Alt and the window will jump to the front. You can also

Virtual desktop

The graphical user interfaces of Linux have at their disposal more than one desktop, in order to provide sufficient space for lots of open windows. KDE offers four of these desktops as standard, and a maximum of 16. Every desktop can be separately configured. This improves the working conditions considerably, for example if one matches the desktop properties to the respective working area.



Figure 12: The window list makes it easier to get an overview

browse through your desktops in a similar way. Instead of pressing Alt+Tab, you just have to use Ctrl+Tab.

Focussing

As in Windows, a program window can be brought to the front by clicking on a visible part – this is called giving the window focus, as the active window is now the focus of all keyboard inputs. You can also configure the desktop to focus on a window through contact with the mouse cursor, rather than just clicking. To configure this in the KDE control centre, select Look & Feel/ Window Behavior/ Actions. Here you can set whether window content should be displayed when a window is moved or its size altered. If you have little in the way of computing capacity then you would be advised to deactivate both



Figure 13: Leafing through the windows with the keyboard



Figure 11: A little clearer

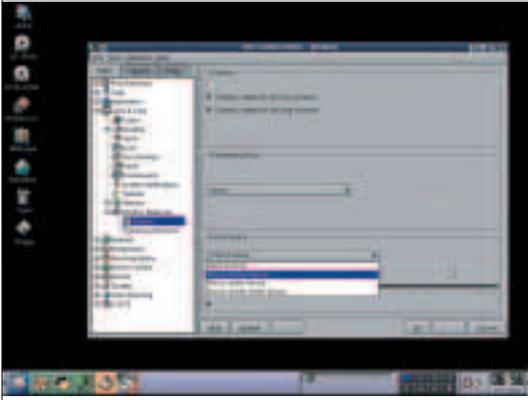


Figure 14: Mouse contact is all it takes to activate

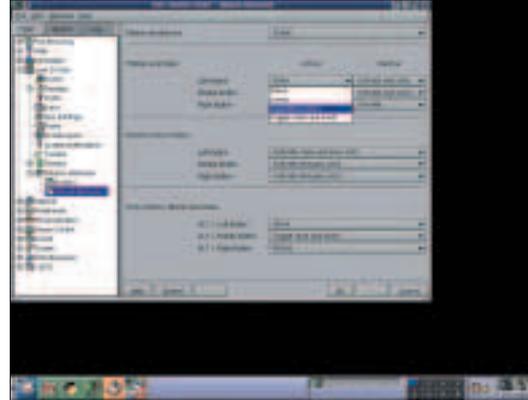


Figure 15: Three buttons and any number of options

options. You have already met the area of Positioning action. As standards for the activation of a window, there are several options available:

- Activation following a click is the default.
- Activation by mouse contact activates a window if the mouse touches any part of that window (see Figure 14). In addition to this, the option Automatically to the fore can also be selected. You can set how fast the window should come to the foreground by using the slide controller.
- If instead you select To the fore by a click, the window reacts to a click on any part of the window.
- Unlike the option Activate under mouse cursor: Here you have to click on the title bar in order to bring a window forward. The automatic option does not apply in this case.
- Activation precisely under mouse cursor triggers the same actions as activation on mouse contact.
- What happens if you click with one of the three mouse buttons on an active or inactive window? KDE offers a pretty bewildering range of possible combinations. These settings are made in the KDE control centre under Look & Feel/ Window Behavior/ Mouse Behavior. The default settings are largely similar to the action of the mouse under Windows. Left-clicking on the title bar of an active window brings this to the fore; a click on an inactive window activates it and again brings it forwards.

If you've always wanted to do this with the right mouse button, then that's not a problem. For example, the left mouse button can move the window backwards and the middle key can open an actions menu (see Figure 15). There are almost no limits to the fun you can have experimenting. It should also be pointed out that the edges of the windows are equipped with "magic" zones. These ensure that if a window is shoved near to the edge of the desktop, it "sticks" to the edge. The width of

these zones can be varied between 0 and 50 pixels via a slide controller in the Magic Edges area. This is in the control centre under Look & Feel/ Desktop/ Edges.

If you work with multiple virtual desktops it's possible to move a window from one desktop to another. You can do this by pinning on the window in one desktop, then deactivating the pin in the desktop of your choice. Another way of doing this is to right-click on the title bar or the edge of the window to be moved. Select the menu item On desktop and choose the desktop you want the window to be moved to. You will still need to change to that desktop, where you will find the window placed exactly the same as before.

This also works in the opposite direction. If you're working on one desktop it's possible to fetch a window from a different one. Right-click on the button of the corresponding window in the window bar. (Obviously this only works if you've configured the window bar to display the windows on all desktops). From the pop-up menu select On desktop and choose your desired option. The desired window will now appear on your current desktop.

Shot down

As well as closing a window from the X button on the title bar, you can also press Alt+F4 or select the relevant option from the window menu. If a window refuses to close you can force it to do so, although this option should be saved for when there really is no other option. Press Ctrl+Alt+Esc and the mouse cursor will turn into a death's head. By left-clicking on a window you can now kill this window – this usually also ends the corresponding application at the same time. In order to get rid of the death's head mouse cursor simply press Esc.

In the next issue we shall be dealing with Konqueror, KDE's counterpart to the Windows Explorer. Just like Windows Explorer, Konqueror combines the functionality of a file manager and a Web browser all in one compact package.

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