

K Desktop Environment

The KDE Team,
v pre1.0-1, 24 December 1998

This is the KDE User's Guide, a complete documentation of the K Desktop Environment from the user perspective. The programming issues will be covered in a separate book, coming soon. The K Desktop Environment is a collection of tools that will make your UNIX life easier and more enjoyable.

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1. About This Preview

Welcome to the KDE User Guide! Although this book is not yet complete and much of the information will need to be rewritten for the final version of KDE, I hope this preview version will be useful in answering some of the questions that a new KDE user may have.

1.1 Status of This Book

This book includes a complete introduction, a guide to KDE installation, a description of the user interface, three practical examples on how to use KDE for daily work, and a description on how to customize the KDE desktop. Also included is a table of shortcuts and some tips & tricks.

1.2 What is Missing

The reference part containing detailed descriptions (not the introductions) to the base KDE software is outdated and will be rewritten from scratch. Also, the Tips & Tricks chapter needs more content.

1.3 What I Urgently Need

I would also appreciate it if someone could keep an eye on the consistency of the expressions used (e.g., telling me if I once again used X-Windows instead of The X Window System). If someone volunteers to write an unwritten chapter or to contribute changes/additional material, I would place his/her photo on my desktop with a golden border :-).

Although this book is nice for the beginner, we need more in-depth documentation for the specific KDE applications. If you would like to contribute, please contact me immediately.

2. Introduction

"640kB ought to be enough for everybody"
(The CEO of a big software company, at the beginning of the 80s...)

Since the beginning of UNIX development, there has been one great problem: There were stable kernels, and good, powerful software. Unfortunately, only a few people could use UNIX, because it was written mainly for those students and professionals who had studied the system for a long time. For example, the standard method for reading USENET news was

```
find /var/spool/news -name '[0-9]*' -exec cat {} \;|more
```

This problem has been solved. Today, there are many good frontends available, like *tin* and *knews*, which provide easy-to-use, intuitive graphical user interfaces (GUIs). Unfortunately, the GUIs lack a common "look-and-feel". Commercial libraries for programmers like *Motif* promised a solution to this, but these libraries remain far too expensive and far too slow.

The configuration of programs is also often difficult. While compiling is usually done with

```
./configure && make && make install
```

only a very few programs can be configured with menus or scripts. In most cases, you must edit text configuration files yourself. It often happens that a misplaced period ruins the whole file, forcing you to restart the configuration process. Whenever you need to change your settings or reconfigure a program, the whole mess comes up again.

All this contributes to the fact that Linux and other UNIX's fail to reach a wider audience. At the same time, many people are not satisfied with their current operating system, mainly because of the lack of stability and performance found in those operating systems. Other people hate to buy a new computer each time a new version of the program they cannot live without comes out, because it needs more RAM and more disk space. Often the new version provides functions few people really need.

KDE is different. Although we do not try to replace the standard UNIX shell, we are working on a tool that will make using UNIX easier. We also want to attract more users to the UNIX environment. Simple things will be made easy and complex things will still be possible. Also, a single interface will be provided, instead of the dozens currently required.

2.1 What KDE Can Do For You

We designed KDE mainly for those new to UNIX, and others who wish to avoid the complicated process of learning new technologies and commands not found in their old operating systems. We also provide, however, something for experienced UNIX users.

- **You are new to UNIX.** Do not even try to use anything else, because you are exactly the sort of person for whom we wrote this software. :-) For you, we provide:
 - A good-looking, easy to use windowing environment
 - A powerful, easy to use file manager
 - A simple, centralized configuration
 - An online help that will support you in every situation
- **You already have experience in UNIX.** As an experienced UNIX user, you will welcome the new features KDE has to offer:
 - A good, handy, and fast window manager
 - A consistent interface for your applications. You will no longer need to guess if the right or the left mouse button does what you expect
 - A lean terminal emulator that does not fill up your memory when multiple windows are open simultaneously
 - A stylish desktop that makes your friends jealous

2.2 Background of KDE

In October 1996, German LyX developer Matthias Ettrich initiated the development of KDE with a USENET posting. Soon after, a couple of interested developers began planning and programming parts of the new project. One year later, the window- and file-manager, the terminal emulator, the help system and the display configuration tool were released for ALPHA and Beta testing and proved to be relatively stable.

In July 1998, KDE 1.0 was released. It was the stable version for the next six months, while developers continued work on improving KDE without stability constraints. In January 1999, their improvements were consolidated and integrated to produce KDE 1.1, the new standard, stable version.

Developers and interested users communicate via several mailing lists as described in the *Contacting the authors* section. If you would like to help, please do so! We are still looking for helpers.

2.3 Legal Notices

KDE is free software under the [GNU General Public License \(GPL\)](#), which is included with every KDE component. You can copy and distribute KDE and its components as you like, as long as you always include the complete source code. See the [GNU General Public License \(GPL\)](#) section in the Appendix for details.

2.4 How to Get New Components

The main site for KDE is <http://www.kde.org>. Here, you can find all important information relating to KDE, including announcements, bugfixes, developer info, style guides, a considerable amount of documentation (including the newest version of this book), and much more. For software upgrades, please visit our ftp site, <ftp://ftp.kde.org> or use a mirror if one exists near you.

The directory `unstable` always contains brand new software, but it often is untested and may not even compile. If you are looking for more reliable components, please take a look in the `stable` directory, where we put Beta and release versions.

If you are interested in developing KDE applications on your own, you should also visit Troll Tech's server (<http://www.troll.no>) which features a great deal of information concerning the Qt library used by KDE. For development work, it is also advisable to join [the developer's mailing list](#).

2.5 Contacting the Authors

Contact rwilliam@kde.org for questions about and critiques of this book. Because several people contributed material to this book, everyone is also listed in [The K Documentation staff](#).

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3. Installation

"Core dumping fsck's tend to make me nervous."

(Linus Torvalds, after finding one of his file systems smashed by a new Beta kernel)

Don't worry! Although the use of some Beta software can cause considerable grief, it is unlikely that the installation of KDE will smash your hard disk. In fact, this chapter is designed to guide you through the installation process so that you can take a look at your new desktop as quickly (and with as little grief) as possible. As with all new Window Manager installs, it is recommended that you back up all your X11-specific configuration files before you begin the install. If you do not know the exact location of them, try all the hidden (.*) files in your home directory and the directory /usr/X11/lib/X11/xdm.

Because the software is in Beta stage at the moment, we strongly recommend that you back up ALL the critical data on your hard disk. We are NOT liable for any damage caused by the installation and usage of KDE!

3.1 Requirements

Before installing KDE, ascertain that your system fulfills the following requirements:

- A running POSIX compatible UNIX system. UNIX's that are known to work with KDE include: Linux, FreeBSD, Solaris, HP-UX, and MkLinux. We are working to make KDE available for more platforms soon.
- Some free hard disk space on the partition where /opt/kde will be created. We recommend that you reserve about 50MB if your system supports shared libraries, and considerably more if it does not. **Due to the fact that this software is currently in Beta stage, the requirements may change from one week to another. I recommend that you reserve additional space for forthcoming KDE applications.** If you need or want to build KDE from the source tree , please remember to reserve about 100MB in /usr/src.
- A running X11 system with or without xdm. If you have not installed the X Window System yet, first check your UNIX installation media for an installable version. If you cannot find any version working, visit [the XFree86 web site](#) for more information on how to get and install the X Window System, or contact your UNIX vendor support.
- The qt-libraries, version 1.31 or higher. You can get these at [Troll Tech's FTP Server](#) in both rpm and tgz format.
- **A warning before you start:** Before upgrading from a previous version of KDE, we recommend that you do the following:

```
cd /opt/kde
tar cfvz ~/KDE-old-version-backup.tar.gz *
```

3.2 Linux: Installing RPMs for RedHat, Caldera and SuSE.

Using RPMs is the easiest method to get KDE up and running. Just visit your favorite KDE mirror and visit the directory `/pub/kde/stable/distribution/rpm`. There, you can see directories for different operating systems. Currently, the i386, alpha and sparc architectures are supported. The rpm packages can also be found on the Red Hat contrib sites like `sunsite.unc.edu` or `ftp.redhat.com`.

The basic system consists of the files **kde-(component).(architecture).rpm**. You need at least `kdesupport`, `kdelibs` and `kdebase`. After getting the base distribution, feel free to download any other rpms that you think may come in handy.

Next, start installing with the base package. If you are installing KDE for the first time, use

```
rpm -i kdesupport.arch.rpm
rpm -i kdelibs.arch.rpm
rpm -i kdebase.arch.rpm
```

NOTE: It is important that these components are installed in the order listed, and that they are installed before any other KDE component.

If you are upgrading from a previous release, try

```
rpm -Uvh kde-component.arch.rpm
```

Once again, the order given above should be preserved, and the given components should be installed before any other KDE components.

This will unpack the base distribution and install it in `/opt/kde`. If the installation of the base packages has been successful, you can install the remaining packages (use **-Uvh** instead of **-i** once again to update an existing version) the same way.

3.3 Linux: Installing on Top of a Debian/GNU Linux Distribution

An important note before you start: Due to various problems arising from the Linux filesystem standard, building `.deb` packages is very complex. Therefore, you will probably not find the most current version. If you want to see the newest in KDE development, we have to recommend you to get the source distribution (see [Using TGZ to install on top of other systems](#) for details).

Retrieve the following files in order to get KDE installed on your Debian/ GNU Linux system. You can find them in `/pub/kde/unstable/distribution/dpkg`.

- `libgif2_2.3-1_i386.deb`
- `libkde0_0.10.01-1_i386.deb`
- `kdeapps_0.10.01-2_i386.deb`

In addition, KDE requires components from the following packages. Make sure they are installed before beginning the KDE installation:

- `qt1.31`
- `libjpeg6`
- `libg++27`
- We highly recommend that you install the `debian menu` package before installing KDE (it makes `kpanel` much nicer).

To install kde use dselect or do it manually using the following:

```
dpkg -i libgif2_2.3-1_i386.deb
dpkg -i libkde0_0.10.01-1_i386.deb
dpkg -i kdeapps_0.10.01-2_i386.deb
```

If dpkg gives dependency errors, you'll have to find the packages, listed above, upon which KDE depends, install them, then rerun the dpkg commands.

3.4 Using TGZ to Install on Top of Other Systems

If your Linux distribution did not come with an RPM or DEB archive format, or you are not using Linux at all, you must compile KDE on your own. In the future, we are planning to provide a binary distribution which includes its own installation program.

In order to compile and install KDE properly, you need to have the following items installed on your hard disk:

- An ANSI-C compiler, e.g. the GNU C compiler.
- An ANSI-C++ compiler, e.g. GNU C++.
- The make utility.
- Qt development version 1.41 or higher.
- X11 development version (include files are often missing)

Once you have all the needed helper applications, go to your favorite KDE mirror and retrieve the following files from the directory /pub/kde/stable/(newest version):

- kdesupport-(version).tar.gz
- kdelibs-(version).tar.gz
- kdebase-(version).tar.gz
- any other packages you wish to install. We advise you to get at least kdeutils.

where (version) stands for the current version number. Once you have downloaded all you need, extract these files to /usr/src. This process should yield the following directory structure:

- /usr/src/kdesupport
- /usr/src/kdelibs
- /usr/src/kdebase
- /usr/src/... (any other packages)

Make sure you have write permissions to /opt/kde. Next you must compile and install the packages using the following:

- cd into the directory of the package, you want to install (see above)
- ./configure (with the options you want to apply)
- make
- make install

Apply the above steps to every package you want to install. (Note: These instructions can be used for almost every source package available.)

Every configure script has several options available. Some are common between the packages while others are specific to an individual package. The following is the result of configure --help in kdebase:

--enable-debug	creates debugging code [default=no]
--disable-nls	do not use Native Language Support
--with-qt-dir	where the root of qt is installed
--with-qt-includes	where the qt includes are.
--with-qt-libraries	where the qt library is installed.
--with-extra-includes	adds non standard include paths
--with-extra-libs	adds non standard library paths
--disable-path-check	don't try to find out where to install
--with-install-root	the root, where to install to [default=/]
--disable-rpath	do not use the rpath feature of ld
--with-xdmdir	if the xdm config dir can't be found automatically
--without-pam	disable Pluggable Authentication Modules
--with-shadow	if you want shadow password support
--without-gl	disable 3D GL modes
--without-xpm	disable color pixmap XPM tests

Several options are not required and are only useful as work arounds for known problems (e.g. *--disable-path-check*). Since some are important options, for instance *--with-shadow*, you should always check the available options.

An important option is *--prefix*. This option specifies the path where configure should install (for kdesupport and kdelibs) or where to look for libraries (for the other packages). By default, configure will look in `/usr/local/kde`. If you want to install KDE into `/opt/kde`, you have to use `configure --prefix /opt/kde`.

If you have installed the Qt libraries in an uncommon place, for instance in `$HOME/src/qt`, you must use `configure --with-qt-dir=$HOME/src/qt`. By default configure looks in the most common places for QT before it gives up.

If you have problems that you are not able to solve, send a copy of the file *config.log* to the address in the *README* file in the offending package.

You must install KDE in the following order: kdesupport, kdelibs, then the application packages (for example kdatabase). All the application packages should only depend on kdelibs, so you can compile them at the same time (if you have a powerful machine).

If you want to take advantage of multiprocessor systems, try `make -j<Number of processors>` instead of `make`.

If you are able to install KDE on a UNIX flavor for which KDE has not yet been successfully installed, please [send me an email describing what you did](#). It will then be included in this document.

Platform Specific Building Notes

Linux

For Linux, most of the utilities needed to build KDE can be found either at <ftp://sunsite.unc.edu/pub/Linux/GCC> or <ftp://sunsite.unc.edu/pub/GNU>. The Qt libraries can be found at <ftp://ftp.troll.no/pub/qt/linux>, available in source or RPM format for Linux. Both contain detailed instruction on how to install them. Include files for X11 programs should be available at <ftp://ftp.xfree86.org> in the xlevel section.

If you want to start your system in runlevel 3 using kdm, you need to replace the xdm call in `/etc/rc.d/xdm` with `/opt/kde/bin/kdm`. In any case, here is a version that should work:

```

#!/bin/sh
# Copyright (c) 1996 S.u.S.E. GmbH Fuerth, Germany.  All rights reserved.
#
# Author: Florian La Roche <florian@suse.de>, 1996
#        Werner Fink <werner@suse.de>, 1996
#
# Modified on October, 13th by
#        Andreas Buschka <andi@bonn-online.com>, 1997
# for the KDE documentation project.
#
# /sbin/init.d/xdm
#

. /etc/rc.config

case "$1" in
    start)
        echo "Starting kdm."
        /opt/kde/bin/kdm
        ;;
    stop)
        echo -n "Shutting down kdm:"
        killproc -TERM /opt/kde/bin/kdm
        echo
        ;;
    *)
        echo "Usage: $0 {start|stop}"
        exit 1
esac

exit 0

```

You also need to change the default runlevel in `/etc/inittab` to 3 in order to start kdm when the system comes up.

Do not forget to re-login in order to let the system read your new configuration settings!

3.5 Required Changes To Your Configuration Files

After you have placed the KDE binaries into their destination directory, there are a few adjustments you must make to your startup scripts.

The following procedure was tested on SuSE Linux 5.0, and should be compatible with the other popular UNIX's as well. **Always make backups of configuration files before changing them!** Add the following to the end of your `/etc/profile`:

```

export PATH=$PATH:/opt/kde/bin
export KDEDIR=/opt/kde

```

Next, edit the `.xinitrc` file in your home directory. Look for the line that calls your window manager and replace it with `startkde`.

Now that everything needed to run KDE has been installed, you can go on to chapter 4 where you will start KDE for the first time. If something goes wrong, you may need to compile KDE on your own. Read [Using TGZ to install on top of other systems](#) for more information.

We have made the installation as bulletproof as possible, so you should not encounter any serious problems unless your configuration is exotic. If you do experience difficulties feel free to use [the KDE mailing lists](#)

4. First Impressions

"You see to sea to see that all you can see is sea"
(Unknown origin)

First impressions are so important -- this is not only true for Agatha Christie's famous thriller "The Mousetrap" -- but also for KDE. As we mentioned before, KDE is supposed to be the most intuitive, easy to learn user interface available. In fact, we will have reached our goal when users no longer need this book in order to work with KDE, causing the authors to lose their (unpaid and voluntary) jobs as documentors.

4.1 Starting KDE

When you boot a UNIX system, one of two things should happen (that is, if the system works correctly; everything else is an undocumented third case). Either you stay in text mode and get a login prompt or you are presented with a graphical login window. In the former case, you must log into your system and type:

```
startx
```

If the installation was successful, the KDE desktop should appear after a few seconds of initialization.

If a graphical login window is presented, then all that should be required is your login name and password. Assuming the KDE installation was successful, KDE should start without further intervention.

If you have not done so already, we recommend changing your X display manager from xdm to kdm, which includes the same functionality, but with the advanced features of the K Desktop Environment.

4.2 Desktop Components

After everything has come up, take some time to explore the new environment. If you have already worked with *Windows 95* or *OS/2 Warp 4*, many things should look familiar to you. The three main parts of a KDE desktop are the desktop itself, the panel, and the task list.

Panel

When you start KDE for the first time, the panel is situated at the bottom of the screen. From here, you will start your programs and switch between the virtual screens.

K button

Clicking on this button removes the panel from the screen and replaces it with a mini panel. The K button stays on the screen so you can bring the main panel back. This feature only applies to the current desktop; the other desktops will keep the mini or main panel. **Hint:** When the panel is minimized, the application menu and the task list are available on top of the taskbar with the same functionality, but they use less space there.

Application starter

The button next to the K button is one of the most important places on your KDE desktop. From here, you can start all KDE applications installed. Later, when you learn how to use [the K Menu Editor](#), you can also add other programs here as well. To start a program, just click on the button. You will see a list of different categories, plus some special entries. Whenever you move your mouse over an entry that has an arrow to the right, a new menu will appear. When you find the program you want to start, just click on it with the left mouse button.

Task list

The button located to the right of the application menu (the one with the monitor on it) is a menu containing all the windows active on your desktops, sorted by desktop name. This feature makes it easy to quickly find a particular window and reduces overall desktop clutter when many windows are open.

Logout button

Located to the right of the list of active windows, there are two more buttons. The top button, which looks like a big 'X', is used when you want to quit the current KDE session. If any other applications are still open, three things may happen: Applications which are written for KDE will prompt you to save your work. When you start KDE again, all the KDE windows will be opened again and you can start at the same point where you left your workstation the day before. Applications which were not written explicitly for KDE, but comply with the X Window System standard will also prompt you to save your work. Applications which do not fully correspond to this standard (like Netscape Navigator 4.03) cannot ask you whether you want to save your work. KDE will warn you about these programs and provide you with the option to stop the logout process. Remember, there are not many things to save when you are using a web browser, but, for example, a CAD-program with a valuable drawing loaded should be quit using its own menus before logging out.

Lock screen button

If you happen to live in a house with others who cannot stop spying on your work, this button could be handy. One click and it will lock your screen, preventing unwanted persons from reading your private mail or playing around with your work.

WARNING: The X Window System can still be terminated with Ctrl-Alt-Backspace, but this will destroy all your work on the KDE desktops. If you do not disable the use of Ctrl-Alt-Enter, Ctrl-Alt-Backspace and the switching keys to your text consoles, this protection is not secure!

Desktop buttons

When you start KDE for the first time, note the four buttons labeled, appropriately enough, "One", "Two", "Three" and "Four". These represent your four **desktops**. Just click one of them. Don't worry; though they have "disappeared", any open windows are still active (just take a look at the task list!). Using multiple desktops is one of the most powerful features of KDE and the X Window System. Instead of placing one window over another, as you would when using *Windows* or *OS/2*, you can say "Well, on the first desktop, I will write the KDE User Guide. On the second desktop I'll run the sgml2latex compiler and see my results while compiling my linux kernel on the third desktop, and reading my e-mail on the fourth."

Icon bar

Some people are so lazy that they consider even the two or three motions through the applications menu to be too much (me included). For them, additional buttons can be placed next to the desktop buttons; for example, shortcuts to your home directory, to your trashcan, to the kvt terminal emulator and to the documents you use often. For information on how to add icons to the taskbar, read [Adding icons to your taskbar](#).

Time and date

At the far right end of the KDE panel, you can always see the time and date.

The task list

Move your mouse to the upper left corner of the screen. There, you will find a button for each open window. Just click on the button corresponding to the windows you want to open. This is an alternative to using the task list on the KDE panel.

Using Windows

When KDE comes up, the first opened window contains your home directory. We'll cover the contents of this window later. Right now, let's investigate the actual window widget.

Window menu

On the top left corner of each window, you can see a window manipulation icon. When you click on it, a context menu containing commands to manipulate the window is presented. **Maximize** will expand the window to the largest size possible. Note that KDE will take the size of your *virtual desktop*, which means that the window could be bigger than your screen. **Iconify** will make the window invisible. Take a look at the *Taskbar*. You will notice that the window title is now shown in (parentheses). To bring the window to the desktop again, click on the window title. **Move** will let you move the window with your mouse. Click on the left mouse button when you have the window where you want it to be. **Resize** enables you to make the window smaller or larger. Move your mouse around and click when you are satisfied with the new size. **Sticky** will stick the window to your desktop. Whenever you change the desktop, the "sticky" window will move with you. To stop this effect, select **UnSticky**. This is useful, for example, when you are debugging programs or network problems and you always want to see the tail -f window of the logfiles. **To desktop...** enables you to send a window to another desktop. Choose the

desktop where you want the window to be. The window will disappear at once. To see your window again, select its name in the **Taskbar** or click on the appropriate **Desktop Button** on the KDE **Panel**. **Close** will close the window. Sometimes the application will allow you to save your work, but in some cases (e.g., old X11 applications) this does not work. It is best to close an application with its own commands, using this menu item only as a last resort.

Sticky button

This button looks like a thumbtack. It performs the same operation as the sticky command in the **Window Menu**, but requires fewer steps to invoke.

Title bar

The title bar containing the name of the window can be double-clicked in order to maximize it. Use the right mouse button: The **Window menu** will reappear, allowing you to (un)maximize, iconify, move, resize, (un)sticky the window, to move it to another desktop (this works faster than the method with the sticky button). When a program does not react anymore, you can close (which will sometimes give you the opportunity to save your work) it.

Iconify, maximize and close Buttons

To the right of the title bar, there are three buttons that can also be used to iconify, maximize and close the window (this is faster than using the window manipulation menu). Iconified windows can be brought back with a click on the taskbar.

To move a window, place the cursor on the title bar and hold down the left mouse button. Without releasing the mouse button, move the window to the location of your choice, then release the mouse button. If you want to resize a window, move the mouse cursor to the window border you wish to change. Once you have reached the correct spot, the cursor will change from an arrow to a bracket and an arrow. Hold down the left mouse button and drag the side in question to the location you wish, then release the button. Note that you may drag sides or corners (which will adjust the size in two dimensions at once.)

Using the menu bar of each KDE window is easy. Just click on what you want to do, and it will be done. But the menu bar can do even more for you. Notice the sparkled stripe on the left of the menu and icon bars? Depress your right mouse button and a context menu will appear, allowing you to put the menu bar on the top or bottom of the window. You can even take the menu bar out of the window and have it "floating" around.

Below the menu bar, there is a set of tool symbols you can use to execute commands. Whenever you move over them, an active picture will be marked. You can also put the toolbar wherever you want: left, right, top, bottom; of course it can be floating, too.

Getting Help

Help is available basically everywhere: On the desktop, just use the right mouse button and choose **Help On Desktop**. On the KDE panel, open the application menu and choose **Help**. Every KDE program has a help menu. Every help is HTML-based, so using the help system is

as easy as using your favorite web browser!

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5. Getting Started

"Using only what you see, can you get from A to B?"
(Help for one of the toughest riddles in "the 7th Guest")

Thus far, KDE may appear to be little more than another window manager with some handy desktop features. But hold onto your seat; in the next few sections, we'll introduce you to features that'll assure you will never again try to operate your system Unix without KDE!

5.1 Editing Files

Since you do not only have KDE applications installed on your system, you probably know the mess of editing ASCII style configuration files. But in fact, there are a lot of other file types that need to be edited this way. For example, the raw SGML source for this guide was written ASCII style, as was the source code for the KDE programs themselves. We will now show you how you can use the KEdit facility in KDE to edit ASCII files of your own.

Opening a Window Containing Your Home Directory

Click on the **application starter** and choose **Home directory**. A window showing the contents of your home directory will pop up. To see a more detailed listing of files in your home directory, do the following:

- Select **Show Dot Files** from the View menu
- Select **Show Tree** from the View menu

On the left hand of the screen, a tree view of your file system structure should appear, including any "hidden files" -- files or directories beginning with a period.

The File Manager Screen

We tried to make the File Manager as easy as possible to use, and if you know other window managers (including those built into other Operating Systems) with integrated file management, many of the following concepts should be familiar to you.

On the top, there is a **File** menu which contains functions to open and close file manager windows. You can also print the current contents.

Want to visit the Internet? Just choose File > Open Location (or press Alt-L) and enter an URL. For example, if you want to visit the KDE homepage, enter <http://www.kde.org>. You can also quickly FTP files using this method. KDE is "Internet ready", which means that you can load and save files not only on your local hard disk, but also on remote FTP and HTTP servers.

While other operating systems and desktops make a distinction between local and remote file systems, KDE does not.

The **Edit** menu offers functions to select, copy and move files. We will use them later. Already having used the View menu, you have probably seen that you can view the content in many different ways. Just play around a bit and see what happens.

You will undoubtedly find the **Bookmarks** to be extremely useful: Now you can remember virtually any link, be it on the local machine or somewhere on the Internet.

The **Tools** menu helps you find the notorious files-that-I-put-somewhere-I-do-not-remember-anymore.

Navigating Through Directories

We will now pick one of your configuration files and edit it. First, we must change the directory in the File Manager. Scroll down the tree view on the left side of the screen until you find the directory `/etc`. Double-click on `etc`. You will see a list of files in the right window.

Editing a File

Scroll down until you find the file `motd` and click on it with the right mouse button. In the **context menu**, select **Open With**. A new window will pop up. Enter

```
kedit
```

and click on Ok or press Enter. Viola!

The Editor Screen

The more you work with KDE, the more you will notice that most screens and applications look and feel the same. The KEdit **File** menu is a great example of this: Almost every other KDE program has the same menu, allowing you to create new files, open existing files from your local file system or (coming soon) even the web, save them (soon even on the web, too!), print it or mail it to somebody else. The **Edit** menu can also be found in most KDE applications, allowing you to cut and paste information between programs. You can also search and replace text. Using the **Options** Menu, you can customize the editor in many different ways. For example, you can increase the font size to suit your monitor resolution -- and your eyes. Of course, as in any other KDE application, you find a **Help** Menu, offering you on-line help whenever you need it.

Using the Editor

Most `motd` files contain useless stuff like "Do not forget to back up your data" or "Do not annoy the system manager". Boring. Let's change the text so that users logging in get the really important information. You can navigate through the text using the arrow keys, and mark sections of text with Shift-Arrows or by using the mouse with the left button pressed. Use the

Edit Menu to cut and paste text. Enter whatever you want, or use the following (great) example:

```
Welcome!
```

```
This machine now has KDE installed, providing you with a great,  
easy-to-use interface and a consistent Look-and-Feel for all your  
applications. For more information on how to get KDE running on your  
account, please e-mail the administrator.
```

Saving Your Work

Now that you have changed the `motd` file, it is time to save the file, putting the changes into effect. To do this, you can use either the **File** Menu, or you can use the Save Icon on the toolbar. Finally, finish your work by closing the editor and file manager window. You can do this by clicking the "X" button on the top-right of the window, by using the window menu of the title bar, or by choosing File > Quit. Simple and elegant, isn't it?

5.2 Moving Files With Drag and Drop

As you have seen in the previous section, working with files is as easy as 1-2-3. However, when you want to copy and move files, the whole copy-and-paste business can get annoying. Don't worry -- a procedure called "drag and drop" allows you to copy and move files more quickly and easily.

Opening Two File Manager Windows

Before you can start, you will need open two file manager windows. The simplest way to open a new window is to press the white wheel button on the right of the icon bar. If you do not see the tree view in the new window, activate it (View > Tree View).

Dragging a File From One Window To Another

In the first window, open the `/etc` folder and scroll until you see the `motd` file we modified in the previous section. In the second window, open your home directory. Click on the `motd` file. Hold your left mouse button and drag your file into your home directory. Release the left mouse button (this is called *dropping* the file). You will be presented three options: *copy*, *move* and *link*. *Link* will create a symbolic link to the file, while *copy* and *move* do exactly what they say. Select *copy*. You should now have a copy of the `motd` file in your home directory.

5.3 Using Command Line And Terminals

So far, you have only worked with the tools and programs KDE provides. Undoubtedly, you will want to use other UNIX programs as well. There are two ways of running them: The quick command line and the terminal.

Quick Command Line

Pressing Alt-F2 pops up a small window where you can enter a command to run. Please note that you will not see any text output generated from a program started in this manner! This method is only recommended for starting X Window System programs or for running tools where you do not need to see or type anything. For other programs, you will still need to use the terminal.

The UNIX Terminal Emulator

From the application menu, choose Utilities > Terminal. A terminal window will open. Here you can use regular UNIX shell commands: ls, cat, less, and so forth. Using the options menu, you can customize the terminal emulator to suit your needs.

5.4 Finding Your Lost Files

Everyone has undoubtedly encountered the following problem: You start ftp, log into a great site like ftp.kde.org and start downloading files. It is late in the evening and you shut down your machine after completing the transfer. The next morning, you are at the keyboard again, and you start wondering into which directory you placed the recently transferred files. Using KDE's *KFind* utility makes finding those lost files a snap.

Starting KFind

Starting KFind is simple: Choose **Find Files** in the **Application Starter**. KFind uses an interface part you probably do not know yet: register tabs. When *KFind* starts, you see that **Name & Location** is selected. When you click on **Date Modified**, the register content changes. Since you have never run a search before, most of the icons on the toolbar and most of the menu entries are disabled. We will change this now.

Finding a File by Knowing Parts of Its Name

As long as you know a bit of the file name, searching is easy. Select the **Name & Location** tab, and enter the file name. Wildcards may be used as needed. As a test, type *.tar.gz. By default, the search begins in your home directory, but you can select any starting directory you wish by clicking on the **Look in** or **Browse...** To start searching, click the icon (which looks like a magnifying glass over a sheet of paper) on the left of the toolbar. After a moment, a list of files will appear in the search results window. If they do not appear, you started the search in the wrong directory, made a spelling mistake in the name field, or no files ending with a *.tar.gz* extension are located on your machine.

Finding a File by More Complex Criteria

There are many categories you can use to make your search more precise. **The more you know about the file, the better are your chances of finding it.**

Date modified

Here, you can specify that you only want to see files which were last touched in a given period of time. You can also specify that you only want to see files that were touched

since a specified number of months or days ago.

File type

If you know that the file was of a special type (e.g., a tar/gzip archive or a jpeg picture), you can tell *KFind* to find only this type of file.

Text string

You can specify text that the file must contain.

Size

If you know the file size, you can limit your search in this regard, as well.

5.5 Using Multiple Desktops

Using multiple desktops helps you organize your work. You can place your programs on different desktops, and name the desktops so you know what you do there. This increases and optimizes your workspace. It also helps you when you are surfing the net instead of doing your work and your boss comes in. But, of course, this is rare -- at least in the office where I work ;).

You can switch between desktops by clicking the desktop buttons on the KDE panel. If you want to rename them, you can do so by double-clicking on them.

You can use windows on multiple desktops. If you want to have a window present everywhere, just click the sticky button on the top-left of the window. To send a window to another desktop, click on the title bar with the right mouse button, choose **To Desktop**, and select the desktop where you would like the window moved.

5.6 Quitting KDE

To quit working with KDE, you can use the **Logout** entry in the **application starter** menu or the corresponding button on the **panel**. You will be asked if you really want to quit KDE. Quitting will close all windows and return you to your console or display manager. For information on how programs can save your work during logout, please read [the notes for logging out](#).

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6. All About Your Desktop

"Grandma, what big eyes you have"
(Little Red Hood)

"The better to see you"
(The wolf)

The more you see, the more efficiently you can use your desktop. KDE gives you the opportunity to make the desktop look and work the way you prefer, enabling you to work faster and more productively. It even gives you the opportunity to be warned if a wolf is trying to eat you, or (if you happen to be a granny) alert you when Little Red Hood is on her way to bring you the goodies. Now that's service.

6.1 The Autostart Folder

Before I discovered the Autostart folder, my daily startup routine with KDE consisted of the following: Start *KDE*, start *KEdit*, start *kvt*, start *Netscape*, and start *kscd*. This took time I could have spent better. As of the first Beta release, native KDE programs left open at the end of a session will save their state and reappear when you login again, but there are some programs (like Netscape) that will not. You can use the Autostart folder for these programs.

To launch programs when KDE is started, do the following:

1. **Open the Autostart folder.** You can find it on the upper left corner of your desktop.
2. **Open a filemanager window** containing the program you want to add. If you do not know how to do this, see the section [describing kfm](#), the K Filemanager.
3. **Drag and Drop the desired program** from its source folder into the Autostart folder. When asked, choose **Link** to create a symbolic link instead of a full copy. This saves a great deal of disk space.
4. **Repeat** this step for every program you want started when KDE is launched. Of course, you may select applications not native to KDE, including Netscape, tin, pine and many others.
5. **Restart KDE.**

Your programs should now launch automatically when KDE restarted. If you want to add something special (e.g., you want to see a certain web site when your system goes up), read [Using templates](#). The procedures described there work for any folder, so you can also apply them to the Autostart folder, as well.

6.2 Adding Programs and Shortcut Icons to Your Panel

The KDE panel is not limited to the setup you find right after installing KDE. The KDE panel is designed to be extended, and there are two ways of doing that: Adding new programs, and adding shortcut icons.

Programs

To add your favorite programs to the KDE panel, you must use the KDE Menu Editor. To start it, use the **application starter** and choose **Utilities > Menu Editor**. A window containing an empty button will appear. To change it, click on it using the right mouse button and choose **Change**. Next, you should see another window with various options you can set. The **Type** dropdown box contains some types of links you can create. Choose **Application**. Now choose the **Name** field and enter the description that will appear in the Application starter. For example, you can type *Netscape Communicator*. Next, click on the large and the small picture using the left mouse button and **select an icon for the application**. In the **Comment** field you can optionally enter a remark about the application. Be sure to choose a helpful comment, because it will appear as tool-tip in the Application starter. For Netscape, you might enter WWW-Browser with Mail and News software.

If not already selected, choose the **Execute** tab and enter the **Execute field**. Here, you must type the complete path to your application, for example `/usr/local/netscape/netscape`. Set the **Working Directory** to a value that makes sense, such as `/usr/local/netscape`. If your application runs in a terminal, you must select **Run In Terminal** and specify the **Terminal Options**. The terminal options are the command-line switches of *kvt*; you can see them by using

```
kvt --help
```

in a terminal window. After you have made all the adjustments needed, choose the **Ok** button and select **File > Save** from the main menu. Next, restart your panel by choosing **Panel > Restart** from the **application starter**. You should now find a new entry **Personal** with the new menu entries.

Shortcut Icons

Although KDE is much more comfortable than the average Unix window manager, everyone wants a solution for a one-click way to start a program. Later, you will learn how to create links and files on your desktop, but this also has some disadvantages: sometimes all your desktops are filled up with windows, and you cannot reach your icons without minimizing all the windows that cover them. For commonly used programs, you can minimize this problem and speed access by creating shortcut icons on the KDE panel.

To create a shortcut on the KDE panel, do the following:

1. Click on the **application starter** and choose **Panel > Add application**.
2. You will see the top level of the application starter again. Go through the menus to find the program for which you want to create the shortcut, such as "Home directory" or "kvt". Click on the program you want.

A new icon will appear on the KDE panel. Click on it, and the program will start . If you want to move the icon, click on it using the right mouse button and choose **Move**. Move the icon to the position you want and press the left mouse button. If you wish to remove the icon, click on it using the right mouse button and choose **Remove**.

6.3 Creating New Files On Your Desktop

Your desktop can be an efficient place to work. Every time you start KDE, you can see the complete files, folders and URLs which you often use.

There are two ways to create and edit files on your desktop. In any application, you can say that you want to save your work in the Desktop subfolder of your home directory. For example, my home directory is /home/stupiddog, so my Desktop directory is /home/stupiddog/Desktop. Everything you save there will be put on your desktop.

If you want to move existing files to your Desktop, the best way to achieve this is to use the K file manager (*kfm*). Open a file manager window and drag the files you need to your desktop. You can choose to copy them if you want to keep all your common stuff on the desktop now, or you can create symbolic links to the real files. Everything you change in the link files will be automatically updated in the originals. *For more information on how to use drag & drop and the file manager, see the chapter [Moving files with drag & drop](#).*

6.4 Placing Links on Your Desktop

Placing files on your desktop may shorten the paths you need to enter. However, sometimes it would be nice if you could start *KEdit* with a commonly edited file already opened in it. And how often do you find yourself frustrated after browsing through endless lists of bookmarks to find a site you visit often? Wouldn't it be nice if everything necessary to deliver you to that site was done automatically after clicking a single icon?

Using Templates

Templates provide a convenient mechanism for performing tasks such as those outlined above. Templates can also be used to associate particular file extensions with a specific application. When a file ending in a known extension is double-clicked, the application associated with that extension is automatically started. In short, **templates** help you get the most out of KDE.

Example: You want to put an icon for visiting the KDE web site on your desktop.

1. Open the Template folder on your desktop. Here, you can see all the templates you can use for creating new links and resources. **Ftpurl** is a template you can use for creating a link to an FTP site and even to a particular directory. For example, you could create a link straight to ftp://ftp.kde.org/pub/kde/stable to be informed when a new release is available. **MimeType** is a very powerful tool. Because of its complexity I have decided to explain it in [Using MIME types](#). **Program** is a general template you can use to start a particular program with an argument. For example, you could use this to start /usr/src/linux/make xconfig to configure the kernel. **URL** is also something general: It is a link to a URL which

does not start with `http://` or `ftp://`. Make sure that your link makes sense; *kfm* cannot handle Quake servers (yet). **WWWUrl** is the template we will be using now. It creates a link to a specific web site.

2. **WARNING:** If you started KDE as the system administrator (root), make sure you do not change the templates unless you know exactly what you are doing! If you destroy a template, only a new installation of KDE can recreate it!
3. Drag the **WWWUrl** to your desktop (if you do not know about how to use Drag and Drop, see [Drap & Drop](#) for more information.) When asked, choose **Copy** to create your own copy of the template you can manipulate.
4. Click on the template copy using the right mouse button and choose **Properties**.
5. In the dialog box that appears, you will see three tabs: **Program**, **Permission** and **URL**. Change the filename and permissions as needed, then click on the **URL** tab.
6. In the **URL field**, you must enter the URL you want to be shown when you click on the icon. For our example, type `http://www.kde.org`.
7. You can click on the **Icon** to change the icon for this new shortcut.
8. If you are satisfied, click **Ok** to save your changes.

This will update the icon. When you click on it, you will be transferred to the KDE homepage. I suggest that you play around with templates a bit. They are extremely powerful and can be customized for almost any need.

Using MIME Types

MIME Types are very powerful. Employing them, you can easily customize your system such that clicking on a file of a specific type starts the application with which that file type has been associated. For example, all `.mod` files could be set to start *kmodplayer*, `.html` files could open a *kfm* window showing the file, and a core file can be viewed with the Hex Editor by simply clicking on the core file. **Warning:** Although MIME types are very powerful, they are not without dangers. Playing around with MIME types as the system administrator (root) can damage a KDE system so severely that cannot be restarted! In this example, you will create your *personal* MIME style, which is only relevant for you. It will only affect other users if you copy or move it to `/opt/share/mimeInk`.

To link a certain file type with a particular application:

1. Make sure that the application which you want to link to the file type has an entry in the KDE panel. If it is missing, see [Adding Programs to your KDE panel](#) for instructions on how to create an entry.
2. Choose **Edit > MIME types** in the *kfm* file manager window.
3. Think about the type of file for which you want to create an entry. By default, there are five top level types: **Application** is for files that are usually created or edited with one specific application, for example, tar, gzip, and pdfs. **Audio** is for everything that generates any kind of tones: waves, midis, mods, etc. **Image** is for any graphics files like gif, jpeg or tiff. **Text** is for everything that is text, for example, plain text, html, C and Pascal source code, tex documents and tcl scripts. Finally **Video** is for any type of video

streaming like mpeg. Decide to which category your type belongs and change to the matching directory.

4. Open the Template folder, which is accessible as an icon on your desktop.
5. Drag & Drop the Mimetype icon into the other window and copy it.
6. Right click the copied icon and select **Properties**. Edit the properties of your type.
7. Click on **Binding**. You will now see a mask which requires five entries.
8. The first field must be filled with the file suffix. For example, if you want to create a new type for SGML documents, you should type **.sgml*; **.SGML*; here. Any file ending with *.sgml* or *.SGML* will now be handled with the new type.
9. Enter a description for the type in the **Comment** field. For the SGML example, it could be "SGML document"
10. Enter the MIME type. It is built with the directory (*text/* for the SGML example) and a name you choose. For the SGML example, you would enter *text/sgml* as the Mime-Type. KDE will inform you if there already is a convention on which prefix to use for your type. The *kfm* web browser will also depend on this setting when you download a document of this type from the web!
11. Choose an application that is used to edit this file from the dropdown box. For the SGML example, we simply use the Editor.
12. Click on the icon to choose an icon. Every file matching the suffix you entered will appear with this icon when shown in the file manager window.
13. Click **Ok** to save the new type.

Try your new association by opening a directory containing a file of the type you just selected. Click on the file, and the program needed to edit it should start. If something goes wrong or your system cannot even start anymore, use a text console (or *kdm*'s emergency shell function) to delete the link. That should make everything fine.

Defining Your Own Templates

By default, KDE provides you with five default templates which can build new links on your desktop. However, sometimes you will want to create a new template. Doing this is simple:

1. Login with root privileges.
2. Create the file as usual.
3. Move or copy it into the Template folder.
4. Whenever you want to reuse your new template, copy it from the template folder onto your desktop or into a directory, rename it, and use it. Since the Template folder is only writable by you, nobody can accidentally destroy the template (that is, if he or she is not you. It might be a good idea to prevent even you from being able to write to this file, to avoid accidentally damaging it).

6.5 Using the Font Manager

The KDE font manager takes care that you only work with the fonts you really need. You can decide whether or not to use the set of fonts in your X11 font directory. You can start the font manager using the **Application Starter**. The font manager can be found in the **System folder**. When you start it, you will see the list of X11 fonts available in the left window and the fonts used by kde in the right window. If you wish to add or remove the ability to use these fonts in KDE, click on any of them and decide to add or to remove it.

The **Font test** tab can be used to preview how a font will look. Choose the font family, subtype, size and attributes and you will get a preview.

Understanding the Raw X11 Font List

There are many entries when you click on the Tab raw X11 fonts. The KDE font manager already shows you the combinations which make sense, and lets you see which entries were useless to it. There is nothing you can do with this list except view it.

6.6 Using the Trashcan

Under normal circumstances, deleting a file under UNIX is something which cannot be undone. However, with the KDE file manager, you can choose **Move to Trashcan** instead of *Delete*. This will move the file into the **Trash Folder**, which, by default, is accessible as an icon on your desktop. In the **Trash Folder**, you can always recover deleted files. Remember to empty the trashcan regularly by clicking on it using the right mouse button, then choosing **Empty trashcan**, otherwise you might run out of disk space because the files still need space. Note, however, that once you empty the **Trash Folder**, the files contained therein are lost forever.

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7. Customizing KDE: The K Control Center

"Actually, we are talking about peanuts."

(The president of a well-known German bank after the financial scandal surrounding Dr. Juergen Schneider)

The K Control Center gives you full control over your desktop, giving it its individual touch by changing the setting of all those little peanuts. To start it, choose **KDE Control Panel** from the **Application Starter**. The K Control Center comes up and gives you some basic information about your system.

7.1 Desktop

When you start KDE for the first time, you can see a white background and buttons for your desktops. You might agree with me that this does not look very exciting, so we need something to change it. Click on the **Desktop** in the selection list.

Background

Maybe the first feature that everyone wants to customize, the background tab gives you full control about the background you are working with. There are two types of background: Colors (and color gradients) and "real" background images. You can change the settings for every desktop individually by choosing it with the left and right arrows.

Notice the color window first. You can see the currently selected color (some type of gray or white if you have not customized KDE yet) and the options **Flat** and **Gradient**. If you choose Flat, then your background will only consist of one single, unmodified color you can select. Try selecting Gradient. You will see another color selector and two more options appear. Click on the color selector and pick a color of your choice. When you get back, you already have a preview of how the screen will look. If you choose **Portrait**, the color gradient will be vertically (from the top to the bottom of the screen), otherwise it will be painted horizontally (from the left to the right).

If you prefer to have a "real" background image instead of a color gradient, take a look at the right end of the window. **Be sure to disable the color gradient, otherwise the background picture will NOT appear!** There is a dropdown control from where you can select a background picture. KDE provides you with three samples, but you can use the **Browse...** button to take any one you have available. Next, you should choose what to do with pictures that do not fit the screen exactly (this happens almost every time). If your picture is too small, **Tiled** is a good solution. Your picture will be copied as often as needed to fill the screen. This is the default. **Centered** will place your picture in the middle of the screen. The rest will be painted

with the color you selected earlier (be sure to have its state set to **Flat**). The last option, **Scaled**, will stretch the picture until it matches the desktop in size.

Colors

If the backgrounds did not provide you with the level of individuality you need, these options surely will. Click on the **Color Schemes** tab. Here, you can set the colors for all the screen elements individually. Click on the **Widget** box on the left and select an element whose color you want to change. If you do not know what everything is, you can also click on the sample. Next, click on the **Color Selector** below the widget box and choose a color you like. Play around a little bit and see what you like best. If you do not get the results you want, you can also try one of the predefined schemes in the list box on the right. Once you get it the way you want it, be sure to save it using the **Save** button. You can also set the level of contrast for your color scheme; this is especially handy if you are working with a portable computer and light makes it difficult to decipher the display.

Screensaver

Many older monitors have a really bad habit if you forget to turn them off while going out of your room; when they display a picture too long, they tend to like it so much that they want to display it as a shadow forever. Unfortunately, there is no way of stopping this unholy friendship between your monitor and the picture, but there are ways of preventing it: Screen Savers.

Click on the **Screensavers** register tab. Here you can set the screensaver delay. You can also password protect the screensaver so that it will be necessary to enter your password to continue. If you decide to set this, make sure to set the wait period not too short! It is annoying to type in the password every minute because the screen saver was activated while you were thinking about some project. The priority slider enables you to control how much CPU time the screen saver is allowed to take. If you compile big programs in the background or you are using your UNIX box as a server, you better set this to **Low**.

Next, click around the screen saver list and pick a saver that you like. You can test it using the **Test** button, located to the right of the screen saver list. Many screen savers have additional options you can set by using the **Setup** button.

Style

You can change the general appearance of the KDE controls ("*widgets*") if you prefer a desktop that looks more like Windows 95. You can also set the default font. For example, if your display is small and the resolution high, you might find this handy.

Titlebar

After the installation, KDE applications always have the full KDE title bar, containing the window menu, sticky button, title bar itself, minimize, maximize and close buttons. If you do not want to have all of these buttons or want to change their positions, you can change the title bar settings in the register **Buttons**.. Choose whether you want to have a button or menu on the left or the

right side. Off means that it will not be displayed at all. **Be careful:** If you do not know alternative methods for the window actions (like the [keyboard shortcut table](#)), you can get into serious problems using your desktop. Beware!

The **Appearance** register contains two settings: At first, you can decide if the window title bar should be drawn using a color gradient or just (this is faster) with a plain color. If a window title is wider than the title bar, the text will be scrolled from left to right and backwards. With the Title Animation setting, you can decide how fast this happens.

Windows

This will change the behavior of the windows themselves:

Window Movement

You can tell KDE to move the windows with their entire content (this may be slow on your machine) or only to move the opaque, which is slightly faster.

Resize Animation

This will animate the window while you resize it. Turn this off if KDE gets too slow.

Focus Policy

It often can be helpful to switch to a window without having to press a button. If you want to be able to do this, choose **Focus follows mouse** and set the number of seconds to wait before rising the window under the mouse cursor.

Maximize Style

For some reason, you may want your windows only to be maximized vertically. See the [Shortcut Table](#) for information on how to achieve the same with mouse and keyboard.

7.2 Sound System

Using the sound system panel, you can easily adjust settings to the sound output KDE and its applications produce.

Bell

KDE generates various warning signals, called beeps, when you make a mistake (e.g. copying a file into a folder you do not have access to). You can adjust the settings for these beeps here:

Volume

Sets the volume of the beep. You can set it from 0% (no beep) to 100% (you should think carefully before making a mistake after setting this...)

Pitch

Adjusts the frequency of the tone. Ranges go from 0 (no beep) up to 2000 (you should not set this unless you have no pets like dogs or bats.)

Duration

Tells KDE how long the tone is played.

7.3 Input Devices

You can use several input devices with the X Window System (and thus with KDE). You can change their settings here:

Keyboard

Here, you can set whether a character is repeated when you keep pressing its key. If you have a bad keyboard and need the clicking after you hit a key, you can also turn on the key click volume.

Mouse

The Mouse is the most frequently used pointing device around, and for the majority of computer owners, the most intuitive method of navigating through KDE. (For some owners with bad mice, it is also a reason for visiting the doctor very often, see [Drag & Drop](#) for information.)

Acceleration

Sets the speed of the mouse. The higher the setting, the faster your mouse will move around the screen.

Threshold

Threshold is the distance the pointer must move (in a small amount of time) before accelerated movement occurs. 0 disables it.

Try to experiment with these settings; the right combination will allow you to point exactly on short distances and to move fast over long ones.

7.4 Panel Settings

You can also access the Panel Settings by selecting the **Application Starter** and choosing **Panel > Configure**. A new window containing three register tabs will pop up.

Panel and Taskbar

On the first tab, you can tell KDE where you want the **panel** and the **taskbar** to be displayed. You can also use the dropdown field to set the **size of the panel bar** if your display is always too full.

Options

On this tab you can enable or disable tool tips. If you enable tool tips you should set the duration between the mouse over a menu and when the tool tip for that menu pops up. Next you can set if you want the **Panel Bar** and/or the **Taskbar** to auto hide when the mouse is not over them. The final option lets you set the clock to 24 hour or AM/PM format.

Note: The previous information relates to the KPanel Configuration window. The K Control Center part will be updated.

Desktops

As discussed earlier, desktops give you more space and help you organize your work. By clicking on the **Desktops** register tab, you can customize them. Notice the two sliders at the bottom of the window. The **Visible** sliders lets you set the number of desktops you can access, **Width** sets the size of their icons on the panel bar. Activate as many desktops as you need. You can now edit their names in the upper part of the windows.

7.5 System Information

There are no settings to be changed here. Instead, you will be given information about the available **memory** and information about your **processor(s)**.

7.6 Network

KDE offers you complete network management via the KDE Control Centre (kcc) (when it will be finished). This makes your life as a potential UNIX system administrator very easy: From now on, setting up servers will be faster and easier. Because configuration is easier, there will be fewer mistakes and the security problems caused by them.

Samba Network Status

This point gives you information about the users that are connected to your UNIX box via the SMB (Session Message Block) Protocol. SMB is the protocol used mainly by Windows 95 and WindowsNT machines to share files and folders.

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8. Tips & Tricks for Your Daily Work

"Everyone can make an omelet with eggs. The trick is to make one with none."
(Fortune Cookies)

Nearly everyone can use KDE; this is why the developers made it. There are no cryptic switches with which to cope, and few configuration files you need edit in ASCII style. However, there are some ways you can do your work more elegantly, saving you time for the truly important things, like tetris.

8.1 Shortcut Table

Alt-Esc or Control-Esc

Shows the KDE session manager, from which you can switch to a specific application or log out of KDE.

Alt-Tab or Alt-Shift-Tab

Cycle through the windows

Ctrl-Tab or Ctrl-Shift-Tab

Cycle through your desktops

Alt-F2

Command line

Alt-F3

Window Menu

Alt-F4

Close the current window

Ctrl-F[1..8]

Switch to a specific desktop

Ctrl-Alt-Esc

Window destroyer (every window you click on will be destroyed)

Ctrl-Alt-Backspace

This exits KDE (without saving!) Use this as a last resort

Ctrl-Alt-Numpad +

Cycles to the next screen resolution

Ctrl-Alt-Numpad -

Cycles to the previous screen resolution

8.2 Mouse Techniques

Clicking on the border or the titlebar

Left: Activates and raises the window, *Middle:* Activates and lowers the window, *Right:* Shows window menu if the window is active, activates it otherwise.

Doubleclick on the window title

Maximizes the window

Drag on the titlebar

Moves the window around

Drag on corners or edges

Resizes the window

Alt-Left Button

Moves the window around

Alt-Middle Button

Raises the window

Alt-Right Button

Resizes the window

Click on the icon on the top left

Window Menu

Click on the Sticky Button

toggles sticky

Clicking on Maximize

Left: Maximizes the window, *Middle:* Maximizes only vertically, *Right:* Maximizes horizontally

Click on Close

Closes the window, program asks you whether to save your work or not.

8.3 Activating the Screen Saver by Moving Your Mouse to a Corner

Besides the Lock Screen Button on the K Panel, there is another way you can invoke the K screen savers: Go into the screen saver settings (**Application Starter > System > Screen Settings**) and click on one of the corners of the sample screen. Three options will be presented. **Ignore** will ignore any movement of the mouse into that corner. **Save** will invoke the screen saver after the mouse pointer resides in the corner for more than 5 seconds. **Lock** will do the same as **Save**, but it will ask for your login password.

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9. Entertainment Applications

You can get the following applications in the kdegames distributions.

Stable applications are relatively bug free and come in source and binary formats.

<ftp.kde.org/pub/kde/stable/latest/distribution/stable>

Unstable versions change daily and are only in source form, meaning you must compile them to get a working version. Remember these are unstable and might not even compile. If you have a problem with an unstable application report the problem and it will most likely be fixed in a future snapshot.

<ftp.kde.org/pub/kde/unstable/CVS/snapshots/current>

9.1 Kmines

9.2 Kpoker

9.3 Ktetris

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10. Graphical Applications

You can get the following Applications in the kdegraphics distributions.

Stable applications are relatively bug free and come in source and binary formats.

<ftp.kde.org/pub/kde/stable/latest/distribution/stable>

Unstable versions change daily and are only in source form, meaning you must compile them to get a working version. Remember these are unstable and might not even compile. If you have a problem with an unstable application report the problem and it will most likely be fixed in a future snapshot.

<ftp.kde.org/pub/kde/unstable/CVS/snapshots/current>

10.1 Kfract - Fractal Generator

10.2 Kview - Image Viewer

Kview is an image viewer that displays the following formats: *JPEG, GIF, XPM, XBM PNM, BMP, PCX, ILBM, TGA and EPS*. KView supports drag and drop with other KDE applications.

Display Manager

The List Box

The list of all images you have loaded into Kview. You can select images to be displayed by using command line: `kview $KDEDIR/share/wallpapers/*` This opens Kview with all the installed wallpapers on your system.

Once Kview is running you can use drag and drop with the filemanager to deposit images into the list box. The other two methods of loading an image are the File Open button and the File -> Open menu option.

To display an image in the list box, double-click on it and an *Image Window* will open with the image.

Image Window(s)

Pressing the right mouse button on an image brings up a menu with the following options:

Zoom

If you want to display the image in greater detail or at a smaller size use one of the zoom factors: *-50%*, *-10%*, *+10%*, *+50%*.

Rotate

You can rotate or mirror the image with this option.

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11. Multimedia Applications

You can get the following applications in the kdemultimedia distributions.

Stable applications are relatively bug free and come in source and binary formats.

<ftp.kde.org/pub/kde/stable/latest/distribution/stable>

Unstable versions change daily and are only in source form, meaning you must compile them to get a working version. Remember these are unstable and might not even compile. If you have a problem with an unstable application report the problem and it will most likely be fixed in a future snapshot.

<ftp.kde.org/pub/kde/unstable/CVS/snapshots/current>

11.1 Kmix - Sound Mixer Panel

11.2 Kmedia - Media Player

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12. Network Applications

You can get the following applications in the kdenetwork distributions.

Stable applications are relatively bug free and come in source and binary formats.

<ftp.kde.org/pub/kde/stable/latest/distribution/stable>

Unstable versions change daily and are only in source form, meaning you must compile them to get a working version. Remember these are unstable and might not even compile. If you have a problem with an unstable application report the problem and it will most likely be fixed in a future snapshot.

<ftp.kde.org/pub/kde/unstable/CVS/snapshots/current>

12.1 Kmail - Mail Client

12.2 Knu - Network Utilities

12.3 Krn - News Client

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13. Utility Applications

You can get the following applications in the kdeutilities distributions.

Stable applications are relatively bug free and come in source and binary formats.

<ftp.kde.org/pub/kde/stable/latest/distribution/stable>

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<ftp.kde.org/pub/kde/unstable/CVS/snapshots/current>

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14. Frequently Asked Questions About KDE

"What are you?"

"I'm your worst nightmare..."

(Batman Animated Series)

There are some questions that are always raised on the KDE mailing lists. To keep the traffic as low as possible (making the lists more readable), we have included them in this section. So please be kind and do not ask them in the mailing lists anymore - think of the quote above!

14.1 What Does "KDE" Stand For?

KDE stands for the "*K Desktop Environment*", which itself is intended to be a collection of small tools, a window manager, a file manager and tools that bring all this together. It is created to make your life with UNIX easier.

14.2 I Cannot Compile Package xxx

Always be sure that you have the newest version of the KDE libraries installed. The software is in constant development, so the dependencies can change from one day to another. You may also find the [general compilation hints](#) helpful. Another problem could be that you are using a program written for a very old version of KDE, which depends on outdated include files. Please check the file dates. They should be more recent the dates of your current KDE version.

14.3 KDE is Not Stable

KDE is being developed in two forks, one for bleeding edge development, the other for normal use (where stability is considered to be important.) One can, in general, obtain KDE in many ways. Obtaining pre-compiled binaries in a package format (rpm,deb,tgz) labelled with a particular version (ie. 1.1) is the best way to encourage stability on your KDE desktop.

The price of stability is that one must wait for each release to get new features. If you want the latest and greatest versions of software, you may have to go with source code, perhaps even to the point of CVS snapshots. These are daily snapshots of whatever the developers are working on, and some things are guaranteed to be broken. **DO NOT RELY ON CVS SNAPSHOTS TO MAINTAIN OPERATIONAL DESKTOPS.** You will get burned eventually!

14.4 Other Sources for Help

Take a look at the [KDE Web-Site](#) for the most up-to-date information available about KDE on the web. You may also want to subscribe to our mailing lists.

Send mail to the specified address with *subscribe* **your email address** in the subject line in order to get subscribed:

KDE common mailing list, kde-request@kde.org

KDE developers' mailing list, kde-devel-request@kde.org

KDE look and feel discussions, kde-look-request@kde.org

KDE announcements, kde-announce-request@kde.org

KDE licensing questions, kde-licensing-request@kde.org

KDE users' list, kde-user-request@kde.org

KDE Documentators' list, kde-doc-request@kde.org

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15. Epilogue

"She had her moments, she had some style,
the best show in town was the crowd,
outside the Casa Rossada crying
'Eva Peron'; but that's all gone now..."
(the end of Evita)

We hope that you found this documentation useful, informative and perhaps even entertaining. If you would like to tell us your opinion or suggest improvements, see the section [Contacting the authors](#) for further information. The following things are not necessary to understand the KDE Desktop Environment, but you still may want to read it.

15.1 The K Documentation Staff

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The one responsible for the greatest part of this. Read about KDE in the German computer magazine c't and has been addicted to it ever since. Likes: Italian food, swimming, role playing games (GURPS, DSA), Sabrina Setlur's music and everything that has to do with romance. Hates: Mondays, seeing KDE not compiling, sunny weather, senseless lyrics, a famous software company from Redmond, USA.

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15.2 We still need people!

KDE is a huge project, and every KDE supporter has already realized that. All of us are trying very hard to create a user interface that is easy to use and maybe also has the potential to make UNIX ready for the desktop PC. You have the chance to participate in this project too, and we would be thankful if you did. Developers and interested users communicate via several mailing lists described in [mailing-lists](#) . If you would like to help, please do so! We are still looking for helpers in the following departments:

- Development (Libraries and Applications)
- Documentation

- Graphics
- Beta-Testing
- and everywhere else, too :-)

15.3 Legal notices

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15.4 Sources of information used during the creation of this book

During the creation of this documentation, the authors used the following sources for information:

- The KDE Mailing lists
- Various README and HTML help files that came with the KDE components
- ksgml2html for creating the web version of this document

15.5 Greetings

Andreas Buschka:

For keeping my working morale up:

Robert David Williams

For musical support during the work:

Madonna (and the Evita Soundtrack)

Enigma (and "MCMXC", "The Cross Of Changes" and "Le Roi Est Mort, Vive Le Roi!")

The Verve (and "Bittersweet Symphony")

Sabrina Setlur (and "Die neue S-Klasse")

No thanks to:

A famous software company, located in Redmond, USA

Severin "stop this boring stuff and get playing volley ball" L.

Stefan "you do not seriously believe they will take this s..." L.

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END OF TERMS AND CONDITIONS

Appendix: How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

```
<one line to give the program's name and a brief idea of what it does.>
Copyright (C) 19yy <name of author>
```

```
This program is free software; you can redistribute it and/or modify
it under the terms of the GNU General Public License as published by
the Free Software Foundation; either version 2 of the License, or
(at your option) any later version.
```

```
This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
GNU General Public License for more details.
```

```
You should have received a copy of the GNU General Public License
along with this program; if not, write to the Free Software
Foundation, Inc., 675 Mass Ave., Cambridge, MA 02139, USA.
```

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

```
Gnomovision version 69, Copyright (C) 19yy name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'.
This is free software, and you are welcome to redistribute it
under certain conditions; type `show c' for details.
```

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

```
Yoyodyne, Inc., hereby disclaims all copyright interest in the program
`Gnomovision' (which makes passes at compilers) written by James Hacker.
```

```
<signature of Ty Coon>, 1 April 1989
Ty Coon, President of Vice
```

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

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