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About This Guide

This manual introduces the KDE 4 desktop of openSUSE®. It helps you perform key tasks. It is intended mainly for end users who want to make efficient use of KDE in everyday life.

Many chapters in this manual contain links to additional documentation resources. This includes additional documentation that is available on the system as well as documentation available on the Internet.

For an overview of the documentation available for your product and the latest documentation updates, refer to http://www.novell.com/documentation/opensuse111 or to the following section.

1 Available Documentation

We provide HTML and PDF versions of our books in different languages. The following manuals for users and administrators are available on this product:

Start-Up (↑Start-Up)
Guides you through the installation and basic configuration of your system. For newcomers, the manual also introduces basic Linux concepts such as the file system, the user concept and access permissions and gives an overview of the features openSUSE offers to support mobile computing. Provides help and advice in troubleshooting.

KDE User Guide (page 1)
Introduces the KDE desktop of openSUSE. It guides you through using and configuring the desktop and helps you perform key tasks. It is intended mainly for users who want to make efficient use of KDE as their default desktop.

GNOME User Guide (↑GNOME User Guide)
Introduces the GNOME desktop of openSUSE. It guides you through using and configuring the desktop and helps you perform key tasks. It is intended mainly for end users who want to make efficient use of GNOME desktop as their default desktop.
Application Guide

Learn how to use and configure key desktop applications on openSUSE. This guide introduces browsers and e-mail clients as well as office applications and collaboration tools. It also covers graphics and multimedia applications.

Reference

Gives you a general understanding of openSUSE and covers advanced system administration tasks. It is intended mainly for system administrators and home users with basic system administration knowledge. It provides detailed information about advanced deployment scenarios, administration of your system, the interaction of key system components and the set-up of various network and file services openSUSE offers.

Security Guide

Introduces basic concepts of system security, covering both local and network security aspects. Shows how to make use of the product inherent security software like Novell AppArmor (which lets you specify per program which files the program may read, write, and execute) or the auditing system that reliably collects information about any security-relevant events.

Lessons For Lizards

A community book project for the openSUSE distribution. A snapshot of the manual written by the open source community is released on an equal footing with the Novell/SUSE manuals. The lessons are written in a cook book style and cover more specific or exotic topics than the traditional manuals. For more information, see [http://developer.novell.com/wiki/index.php/Lessons_for_Lizards](http://developer.novell.com/wiki/index.php/Lessons_for_Lizards).

In addition to the comprehensive manuals, several quick start guides are available:

KDE Quick Start

Gives a short introduction to the KDE desktop and some key applications running on it.

GNOME Quick Start

Gives a short introduction to the GNOME desktop and some key applications running on it.

Novell AppArmor Quick Start

Helps you understand the main concepts behind Novell® AppArmor.
Find HTML versions of most openSUSE manuals in your installed system under `/usr/share/doc/manual` or in the help centers of your desktop. Find the latest documentation updates at [http://www.novell.com/documentation](http://www.novell.com/documentation) where you can download PDF or HTML versions of the manuals for your product.

For information where to find the books on your installation media, refer to the Release Notes of this product. The Release Notes are available from your installed system under `/usr/share/doc/release-notes/` or in the help centers of your KDE or GNOME desktop.

## 2 Feedback

Several feedback channels are available:


- We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comments feature at the bottom of each page of the online documentation and enter your comments there.

## 3 Documentation Conventions

The following typographical conventions are used in this manual:

- `/etc/passwd`: directory names and filenames

- `placeholder`: replace `placeholder` with the actual value

- `PATH`: the environment variable PATH

- `ls, --help`: commands, options, and parameters
• **user:** users or groups

• **Alt, Alt + F1:** a key to press or a key combination; keys are shown in uppercase as on a keyboard

• **File, File > Save As:** menu items, buttons

• **Dancing Penguins** (Chapter Penguins, ↑Another Manual): This is a reference to a chapter in another manual.

## 4 About the Making of This Manual

This book is written in Novdoc, a subset of DocBook (see [http://www.docbook.org](http://www.docbook.org)). The XML source files were validated by `xmlint`, processed by `xsltproc`, and converted into XSL-FO using a customized version of Norman Walsh's stylesheets. The final PDF is formatted through XEP from RenderX.

## 5 Source Code

The source code of openSUSE is publicly available. To download the source code, proceed as outlined under [http://www.novell.com/products/suselinux/source_code.html](http://www.novell.com/products/suselinux/source_code.html). If requested we send you the source code on a DVD. We need to charge a $15 or €15 fee for creation, handling and postage. To request a DVD of the source code, send an e-mail to sourcedvd@suse.de [mailto:sourcedvd@suse.de](mailto:sourcedvd@suse.de) or mail the request to:

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## 6 Acknowledgments

With a lot of voluntary commitment, the developers of Linux cooperate on a global scale to promote the development of Linux. We thank them for their efforts—this distribution would not exist without them. Furthermore, we thank Frank Zappa and Pawar. Special thanks, of course, goes to Linus Torvalds.
Have a lot of fun!

Your SUSE Team
Part I. Introduction
Getting Started with the KDE Desktop

This chapter assists you in becoming familiar with the KDE desktop of your openSUSE®. If you have not yet installed your system, refer to Chapter 1, Installation with YaST (↑Start-Up).

KDE stands for K Desktop Environment and is an easy-to-use graphical user interface that communicates with the underlying Linux system to access and manage files, folders, and programs. It has many applications designed to help you in your daily work. KDE also offers many choices to modify your desktop according to your needs and wishes. Read more about configuring your desktop in Chapter 3, Customizing Your Settings (page 37).

The following description is based on the default configuration of the KDE 4 desktop shipped with your product. If you or your system administrator has modified the defaults, some aspects may be different, such as appearance or keyboard shortcuts.

1.1 Logging In

If more than one user account is configured on your computer, usually all users must authenticate—unless Auto Login is configured for a certain user. Auto login logs the user in to the desktop environment automatically on boot. This feature can be enabled or disabled during installation or at any time using the YaST user management module. For more information, see Chapter 5, Managing Users with YaST (↑Start-Up). If your computer is run in a network environment and you are not the only person using the machine, you are usually prompted to enter your username and password when you
start your system. If you did not set up your system and your user account yourself, check with your system administrator for your username and password.

The appearance of the login screen depends on the product you use and on the desktop environment installed on your system. The login process is managed by an application. For KDE, it is KDM. If the GNOME desktop is additionally installed on your system, it may be GDM.

To start a normal login, enter your username and password. If desktops other than KDE are installed, you can select which desktop environment to start by clicking the Session Typing menu item at the bottom of the login screen. Press Enter to proceed. For information on how to log out or switch to another desktop, see Section 1.3, “Leaving Your System” (page 11) and Section 1.4, “Switching Desktops” (page 13).

![Figure 1.1 A KDM Login Screen](image)

If your system administrator has created an encrypted home directory for you (which is useful as a protection against theft or unauthorized removal of the hard disk), your home directory is mounted on login. After login, you can directly access the data as usual—without entering another password.

---

**NOTE: Connecting to an Active Directory Server**

To access shared network resources, you can also authenticate a KDE client machine against an Active Directory server. For further details, refer to Chap-
ter 5, Accessing Network Resources (page 63). If your machine is configured for this kind of authentication, the login screen also provides an additional field. In this case, proceed as follows during login:

1. Select the domain from the list.
2. Enter your Windows* username.
3. Enter your Windows password and press Enter.

1.2 Exploring the Desktop Components

After logging in to KDE for the first time, you see the KDE desktop. It consists of the following basic elements:

**Figure 1.2  Example KDE Desktop**

**Desktop Icons and Desktop Folder**  Desktop icons represent files, directories, applications, functions, and removable media, like CDs or DVDs. Click an icon on the desktop to access its associated program or application. By default, your desktop icons are shown in a Desktop Folder, a transparent region of the screen showing the contents of the Desktop folder in your home directory. If you drag an icon from the Desktop
Folder and drop it on another part of the desktop, it appear as widget that you can tilt, enlarge or minimize. Widgets are small applications that can be integrated into your desktop. Right-click to open a context menu to access the icon properties, or to remove the icon. For more information, see Configuring Widgets (page 42).

Desktop Context Menu: Right-click an empty area on the desktop to access the context menu for configuring the appearance of the desktop, adding panels or widgets to the desktop, locking the widgets in their current position, or for leaving the current session or locking the screen.

KDE Panel: The panel (in KDE also called “Kicker”) is a bar, typically located at the top or the bottom of the screen. By default, the panel of your KDE desktop consists of the following areas (from left to right): quick launcher with the main menu icon on the left and further program icons, pager (desktop previewer), taskbar, and system tray. You can add or remove icons in the panel and customize the appearance of the panel as well as its location on the desktop. If you hold your mouse pointer over an icon in the panel, a short description is displayed.

Quick Launcher: The quick launcher contains the main menu button and some larger icons that are shortcuts to frequently used programs, folders, and functions.

Main Menu Button: Use the icon at the far left of the panel to open a menu holding a search function at the top and several tabs at the bottom. The Applications tab shows all installed programs in a function-oriented menu structure which makes it easy to find the right application for your purpose even if you do not know the application names yet. For more information, refer to Section 2.1.1, “Using the Main Menu” (page 15).

Pager (Desktop Previewer): Between the quick launcher and the taskbar, find a miniature preview that shows your virtual desktops (if not configured otherwise, they are numbered). openSUSE allows you to organize your programs and tasks on several desktops, which minimizes the number of windows to arrange on the screen. To switch between the virtual desktops, click one of the symbols in the pager. For more information, refer to Section 2.6, “Using Virtual Desktops” (page 28).

Taskbar: By default, all started applications and open windows are displayed in the taskbar, which allows you to access any application regardless of the currently active desktop. Click to open the application. Right-click to see options for moving, restoring, or minimizing the window.

System Tray: This rightmost part of the panel usually holds some smaller icons, including the system clock displaying time and date, the volume control, and several
other helper applications such as the device notifier, informing you about recently plugged or inserted devices such as USB sticks, external hard disks, cameras, CDs, or DVDs. For more information, refer to Section 2.5, “Accessing Removable Media and External Devices” (page 27).

The integration and handling of desktop objects has changed from KDE 3.x to KDE 4, which now uses a new desktop and panel interface tool called Plasma. Plasma supports desktop widgets (also called “plasmoids”), similar to Apple’s dashboard widgets. Learn more about the key desktop objects in the following sections.

1.2.1 Locking and Unlocking Desktop Objects

With KDE 4, desktop elements can be locked in their current position to prevent them from being moved around on the desktop. As long as the desktop elements are locked, you cannot add, move, or remove any objects to and from your desktop.

To lock or unlock the desktop elements, right-click an empty space on the desktop and select Lock Widgets or Unlock Widgets.

Figure 1.3  Unlocking Desktop Objects

Find how to add, remove and configure widgets and change numerous desktop elements in Chapter 3, Customizing Your Settings (page 37).
1.2.2 Desktop Icons

By default, the Desktop Folder showing the contents of the ~/Desktop folder, displays the following icons by default:

**Figure 1.4  KDE Desktop Folder**

---

**My Computer**

The My Computer icon is very useful for viewing the most important information about your hardware, network status, disks (hard disks, removable media, and external devices), operating system, and some common folders at one glance. For example, find processor type and speed listed there, information about your RAM and the current swap status, or your graphics card. OS Information lists the most important information about your operating system such as the Kernel version included, the current user, version number and type of the operating system, and the KDE version number. openSUSE ships with a number of further tools (either graphical or command line tools) that you can use to get more detailed information about your system. If you need detailed hardware information about your system, use the YaST hardware probing, described in Section “Probing Your Hardware” (Chapter 2, Setting Up Hardware Components with YaST, Start-Up).

**Firefox**

Opens the Firefox Web browser. For more information, refer to Chapter 17, Browsing with Firefox (Application Guide).
Office
Opens a new OpenOffice.org document. For an introduction to the office suite, refer to Chapter 1, The OpenOffice.org Office Suite (↑Application Guide).

openSUSE
Opens the SUSEgreeter which holds introductory information and links to various information sources about openSUSE.

Help
Starts Konqueror Web browser and takes you to the help page of the openSUSE community [http://help.opensuse.org] from where you can access various documentation resources, mailing lists, Web forums or chats with members of the openSUSE community. Find more information about accessing and using help resources (integrated with your system or on the Web) in Chapter 12, Help and Documentation (↑Start-Up).

1.2.3 Panel Icons

The quick launch area of your panel as shipped with openSUSE includes the following icons by default:

Figure 1.5  Panel: Quick Launch Area

Main Menu Icon
Opens the main menu, similar to the Microsoft* Windows start menu.

Device Notifier Icon
Informs you about recently plugged or inserted devices such as USB sticks, external hard disks, cameras, CDs, or DVDs. For more information, refer to Section 2.5, “Accessing Removable Media and External Devices” (page 27).

Dolphin Icon
Opens Dolphin, the default file manager.

Apart from the larger icons in the quick launcher, the panel also holds a number of smaller icons in the system tray area on the right:
**Figure 1.6  Panel: System Tray**

![Image of system tray with icons]

**Klipper**
KDE's clipboard tool that “remembers” the last entries you have moved to the clipboard. To view the clipboard contents, click the Klipper icon or press Ctrl + Alt + V. The most recent entry is listed on top and is marked as active with a black check mark. To insert the active clipboard entry again, move the mouse pointer to the target application, then middle-click. For more information, see Section 2.3, “Moving Text between Applications” (page 24).

**KMix**
Your desktop's default mixer, KMix helps you to control sound on your desktop after your sound card has been detected and configured with YaST, the central tool for installation and configuration of your system. By default, clicking the KMix icon in the system tray shows the master controller with which to increase or decrease the overall volume. For more information, refer to Section “Mixers” (Chapter 22, Playing Music and Movies: amaroK, Kaffeine and More, ↑Application Guide).

**openSUSE Updater**
Helps you keeping your system up to date. When you connect to the Internet, the openSUSE Updater automatically checks whether software updates for your system are available. The applet icon changes color and appearance depending on the availability of updates for your system. For detailed information about how to install software updates with openSUSE Updater and how to configure openSUSE Updater, refer to Chapter 5, YaST Online Update (↑Reference).

**KNetworkManager**
If you manage your network connection with NetworkManager and have enabled the use of NetworkManager in YaST, the KNetworkManager icon also appears in your system tray be default. Use it to change and configure network connections. For detailed information, refer to Chapter 10, Using NetworkManager (↑Start-Up).

**Clock**
For information about the current date and time, click the clock in the system tray or hove your mouse pointer over the clock. You can change the clock settings (such as appearance or additional data to be displayed) from the context menu available
upon right-click. If you need to update the system time, start YaST and select System > Date and Time. Refer to Section “Clock and Time Zone” (Chapter 1, Installation with YaST, ↑Start-Up) for more information.

**Lock Screen**
Locks your screen and starts the screen saver. Access to the session can only be regained with a password.

**Log Out**
Logs you out and ends your current KDE session. If not configured otherwise in the KDE 4 Personal Settings, (see Adjusting the Session Handling (page 55), the session manager will restore the currently open windows by default next time you log in to KDE.

**Cashew Icon**
Give access to panel configuration options. For more information, see Customizing the Panel (page 46).

Of course, you can also change the way your KDE desktop looks and behaves to suit your own personal tastes and needs. To learn how to configure individual desktop elements or how change the overall appearance and behavior of your desktop, refer to Section 3.1, “The Personal Settings” (page 37).

If you would like to start working with your desktop now, continue reading at Chapter 2, Working with Your Desktop (page 15). Otherwise you can leave your system with one of the possibilities described below.

### 1.3 Leaving Your System

When you have finished using the computer, there are several options how to leave your system: some of them will leave the system running, others will shutdown the computer. If your system provides power management, you can also choose to suspend your computer—in this state, it will consume considerably less power that usual but it will start much faster than after a complete shutdown and boot process. For more information, refer to Chapter 9, Controlling Your Desktop’s Power Management (page 87).

You can access all the options to leave your session or your system from the main menu. Click the main menu icon on the left and switch to the Leave tab. Select one of the following options:
Logout
Ends your current session and leaves your system running. If not configured otherwise in the KDE 4 Personal Settings (see Adjusting the Session Handling (page 55), the session manager will restore the currently open windows by default next time you log in to KDE. Find more information about the session manager and configuration options at Adjusting the Session Handling (page 55).

Lock
Prevents unauthorized access by others by locking your screen and starting a screen saver. Access to the session can only be regained with a password. To unlock, enter your normal login password. For information about configuring your screen saver, see Configuring the Screen Saver (page 44).

Switch User
Starts a second session with a graphical user interface on your machine. Your current session remains active while you are taken to the login screen where you can log in as a different user. You can access the first session again by pressing Ctrl + Alt + F7. To access a new session, press F8 instead of F7. Additional sessions can be accessed by pressing Ctrl + Alt + F9 to F12.

If more than one desktop environment is installed on your system, you can also choose to switch to another desktop for the new session as described in Section 1.4, “Switching Desktops” (page 13).

Hibernate
This menu item is only available if your computer provides power management functionality. Pauses your computer without logging you out. All your data and the session data is saved to disk before the system is laid to rest. It is thus protected against data loss should you loose power in the meantime. Waking the system up again is much faster than booting it from scratch.

Sleep
This menu item is only available if your computer provides power management functionality. Pauses your computer without logging you out. All your data and the session data is saved to RAM. Bringing the system up again is faster than restoring a session from disk.

Shutdown Computer
Logs you out and turns your computer off.
Restart Computer

Initiates the shutdown process and reboots your computer. Instead of selecting the desired boot option in the boot manager, you can also select the desired option directly—just click one of the option below Restart Computer.

To access most of the options for leaving, you can also use the keyboard shortcut defined in the Personal Settings. Usually, this is Ctrl + Alt + L.

TIP: Looking Up KDE Keyboard Shortcuts

If you are interested in other KDE keyboard shortcuts, look them up in the KDE 4 Personal Settings, described in Chapter 3, Customizing Your Settings (page 37). For a description of how to change KDE keyboard shortcuts, refer to Modifying KDE Keyboard Shortcuts (page 48).

If you have already logged out, you can still access shutdown and restart option from the login screen by clicking System and selecting the respective menu items.

1.4 Switching Desktops

If more than one desktop environment is installed on your system (for example, KDE and GNOME, or KDE 3.5.x and KDE 4), you can choose to switch to another desktop when logging in again (or when logging in as a different user). To do so, proceed as follows:

1. On the login screen, click Session Type and select the desktop environment to start.

2. Enter a valid username and password. A new session on the selected desktop environment starts.

3. To switch back again, log out from the current desktop and select a different Session Type on the login screen. If you do not select a new session type, your next session will be of the same type as the session before.
Working with Your Desktop

After having being introduced to the desktop, you can now start to work with your desktop.

2.1 Starting Programs

You can start programs either from the main menu or from the command line, using the Run Command dialog or a shell. Additionally, you can start programs from the desktop or the panel by left-clicking the respective program icon once.

TIP: Selecting and Starting Objects

Clicking an object once in openSUSE usually starts an action directly: a program starts, a preview of the file is displayed, or the folder is opened. To former users of Windows, this behavior may be rather unusual. If you just want to select one or several objects without any other action, press Ctrl then click the object. Alternatively, alter your mouse settings in the KDE Personal Settings as described in Adjusting the Mouse Settings (page 47).

2.1.1 Using the Main Menu

To open the main menu, click the main menu icon in the panel or press Alt + F1. The main menu consists of the following elements: a search function at the top and several tabs at the bottom, providing quick access to the key functions of the menu.
The following tabs are available:

**Favorites**
Shows a default selection of key programs for quick access.

**Applications**
Shows all applications installed on your system. The function-oriented menu structure makes it easy to find the right application for your purpose even if you do not know the application names yet. To navigate through the structure, click an entry and use the arrow icons at the right or the left to switch back and forth. To switch back to the top-level hierarchy from anywhere in the structure, just click the tab's name or icon.

**Computer**
Gives quick access to some places often needed, such as important system folders (home directory, network folders) and media devices. Also allows you to quickly access system information and to change your system configuration with YaST, if necessary.
Recently Used
Lists the most recently opened programs and files. To reopen a program or file, just click the entry. To remove all recently used programs or files from the list, right-click below the respective heading and select *Clear Recently Used Applications* or *Clear Recently Used Documents*.

Leave
Shows several options for leaving the session such as logging out, locking the screen (access can only be regained with a password), shutting down or restarting the computer. For more information, see Section 1.3, “Leaving Your System” (page 11).

Additionally the menu displays your login name and the hostname of your computer. This information is useful when you are logged in as a different user or on a remote computer—it always shows you which system you are currently working on.

### 2.1.2 Using the Run Command Dialog

KRunner is a helper application with lets you quickly start programs. Apart from that, it offers a search function for finding applications or locations. Refer to Section 2.1.3, “Searching for Programs” (page 18) for more information.

Press Alt + F2 to open the *Run Command* dialog. Type a command, for example, *dolphin*, and press Enter or click *Launch* to start the application. The command to start the application is often (but not always) the application name written in lowercase.

![Dolphin: File Manager](image)
If you want to start an application as a different user (for example, as root), click the wrench icon in the Run Command dialog. Activate Run as Different User, enter the user's password and press Enter.

The Run Command dialog also allows you to use the so-called Web shortcuts defined in Konqueror. With these, you can send search requests directly to a search engine like Google*, without opening the browser and visiting the Web sites before. For more information, refer to Section “Using Web Shortcuts” (Chapter 16, Browsing with Konqueror, ↑Application Guide).

Click the wrench symbol to explore the full range of KRunner's abilities: For example, if the Contacts plug-in is activated, just enter the name of one of your contacts and then press Enter to open KMail and to start typing your mail.

If the respective plug-in is activated, you can also use KRunner as calculator or to convert units.

2.1.3 Searching for Programs

Both the main menu and the Run Command dialog offer a search function that lets you quickly start programs even if you do not know the exact application name or command yet. To search for an application, start typing a command or part of the application name in the main menu Search field of the menu or the input field in the Run Command dialog. Each character you enter narrows down the search.
2.2 Using Dolphin File Manager

With KDE 4, Dolphin has replaced Konqueror as the default file manager, while Konqueror remains the default Web browser. For more information about Konqueror as Web browser, see Chapter 16, *Browsing with Konqueror* (↑Application Guide). To start Dolphin, click the card box icon in the panel or press **Alt + F2** and enter `dolphin`.

2.2.1 Dolphin Main Window

The Dolphin main window consists of the following elements:

**Menu Bar:** The menu bar holds menu items for actions like copying, moving, or deleting files, changing views, starting additional tools, defining your settings, and getting help.
**Toolbar:** The toolbar provides quick access to frequently used functions that can also be accessed via the menu. If you hover the mouse pointer over an icon, a short description is displayed.

**Location Bar:** The location bar displays the path to the current directory. It is available in two versions: one shows the path to the current directory with icons for every superordinate folder in a “bread crumb” view. Click any icon in the bread crumb view to change to that directory. The second version of the location bar shows the path to the current directory as a string of text you can edit.

**Panels:** By default, Dolphin shows only the *Places* panel on the left. It allows quick access to some often used places like your home directory, the `/root` directory of the file system, the trash bin, or removable media. There are several other panels you can add to the main window.

**Display Field (Working Space):** The display field shows the contents of the selected directory or file. By default, Dolphin displays the contents of your home directory on start-up. Clicking a folder or file in Dolphin directly starts an action: Dolphin loads the file into an application for further processing or opens the folder.

**Status Bar:** Shows the file type and size of the currently selected object and the available disk space.

### 2.2.2 Managing Files and Folders

To perform actions like copying, moving, creating or deleting files, you need appropriate permissions to the folders and files involved in your action.

**Procedure 2.1 Copying, Moving, or Delete Files or Folders**

1. In order to select one or multiple files and folders in Dolphin, move your mouse pointer over the file or folder but do not click. A green cross appears on the upper-left edge. To select the file or folder now, click the green cross icon. Alternatively, press Ctrl and click the file or files. To deselect again, click the red minus icon that appears if the object is currently selected.

2. Right-click and select *Copy* or *Cut* from the context menu.

3. Navigate to the destination folder in which to insert the object.
4 To create a new folder at the current location, select File > Create New > Folder or press F10. Enter a folder name in the new window and press Enter.

5 To insert the object you copied or cut in Step 2 (page 20), right-click the destination folder in the main display field and select Paste. The object is copied or moved there.

6 To delete a file or folder, right-click the object in the main display field and select Move to Trash from the context menu. The object is moved to the trash bin. From there, you can restore it if necessary or delete the object irretrievably.

To quickly filter for certain filenames in the current directory, press Ctrl + l or select Tools > Show Filter Bar to add the Filter input field to the bottom of the Dolphin main window. Type any part of the filename you are searching for to see all files in the current directory containing the search string. For more detailed and advanced searches, press Ctrl + F to use KFind. For more information, refer to Section 2.4, “Finding Data on your Computer or in the File System” (page 25).

2.2.3 Configuring Dolphin

Dolphin offers many options to adjust the view and the overall settings according to your needs and wishes.

Procedure 2.2 Changing the View

1 To toggle between the bread crumb view and the editable version of the location bar, press Ctrl + l or click at the far right end of the location bar. Enter a path to a directory by typing it in. After typing an address, press Enter.

To delete the contents of the location bar click the black X symbol on the left. To switch back to the bread crumb view, press Ctrl + l.

2 To change the view of the currently displayed folder, either click Icons, Details, or Columns in the toolbar. Dolphin remembers the selected view for each folder. Alternatively, press Ctrl + 1, Ctrl + 2, or Ctrl + 3 to switch between the view...
modes. Click Split or press F3 to view the contents of the current folder in two separate columns. Now you can navigate to a different directory in each column and easily drag or drop objects or compare the contents of directories.

3 To make Dolphin also show hidden files, select View > Show Hidden Files or press Alt + ++.

4 To view more details about the files (like access permissions or ownership), select View > Additional Information and enable the respective options.
5 To add further directories to the Places panel, drag a folder from the working space to the Places panel and drop it there. Right-click and use the context menu to hide, edit or remove entries from Places.

6 If you want to add more panels to the main window, select View > Panels and select additional panels such as Information, Folders, or Terminal.

- The Information panel shows the properties and a preview of the currently selected file. It also lets you add comments to the file.

- The Folder panel shows a tree view of the whole file system and lets you navigate through all subdirectories of /root.

- The Terminal panel attaches a command line to the bottom of the main Dolphin window. Whenever you click a directory in the display field, the Terminal panel also changes to the according directory, so you can easily switch to the command line for certain tasks you prefer to execute in a shell.

You can even detach the panels from the main Dolphin window by clicking the left icon at the top of each panel. Click the panel's title bar and drag it to another place on the desktop. To reintegrate the panel into the Dolphin window again, click the left symbol at the top of the panel again.
Procedure 2.3  Changing Dolphin's Overall Behavior

If you want to change Dolphin's overall behavior or view, select Settings > Configure Dolphin and explore the options offered in the Dolphin configuration dialog.

1 To use the same view mode for all folders, click View Modes in the left sidebar. Activate Use Common View Properties for All Folders on the General tab. Adjust the options for the individual view modes on the other tabs according to your wishes and click Apply to save the changes.

2 If you want Dolphin to show a different default directory on start-up, or if you want to permanently use the editable location bar instead of the bread crumb view, change the according options on the General tab.

3 Click OK to save the changes and to close the Dolphin configuration dialog.

2.3 Moving Text between Applications

To copy text to the clipboard and insert it again, former MS Windows users automatically try the keyboard shortcut Ctrl + C and Ctrl + V, which often works in Linux as well. Copying and inserting texts is even easier in Linux: to copy a text to the clipboard, just select the text with the mouse then move the mouse cursor to the position to which to insert the text. Click the middle button on the mouse to insert the text (on a two-button mouse, press both mouse buttons simultaneously).

With some applications, if a text is already selected in the application where you want to insert the text, this method does not work because the text in the clipboard is overwritten by the other selected text. For such cases, the KDE application Klipper is very useful. Klipper “remembers” the last entries you have moved to the clipboard. By default, Klipper is started when KDE is loaded and appears as a clipboard icon in the panel. To view the clipboard contents, click the Klipper icon or press Ctrl + Alt + V. The most recent entry is listed on top and is marked as active with a black check mark. If an extensive text was copied to Klipper, only the first line of the text is displayed.

To copy an older text fragment from Klipper to an application, select it by clicking it, move the mouse pointer to the target application, then middle-click. For further information about Klipper, see the Klipper online help.
2.4 Finding Data on your Computer or in the File System

KDE provides more than one application for finding data on your computer or in the file system. With Kerry, you can very easily search your personal information space (usually your home folder) to find documents, e-mails, Web history, IM/ITC conversations, source code, images, music files, applications, and much more. For more information, refer to Chapter 6, *Searching with Kerry* (page 73).

With KFind, you can locate files on your computer or in the file system using a variety of search criteria, such as file content, dates, owner, or file size. Start it from the main menu with Applications > Find Files/Folders. Alternatively, press Alt + F2 and enter kfind.

**Figure 2.1 Finding Files with KFind**

2.4.1 Finding Files

To perform a search for certain filenames, proceed as follows:

1. Start KFind from the main menu or command line.
2. Click the Name/Location tab to perform a basic search.
Specify the name of the file to find in Named. You can use the following wild cards:

**Asterisk**

The asterisk (*) stands for any number of missing characters (even zero). For example, searching for marc* can find the files marc, marc.png, and marc_must_not_read_this.kwd. Searching for mar*.kwd can find marketplace.kwd and marc_must_not_read_this.kwd.

**Question Mark**

The question mark (?) stands for exactly one character. For example, searching for mar? can find marc, but marc? cannot find anything if your files are named marc and marc.png. You can put as many question marks in the search term as you want. It finds exactly that number of characters.

You can combine those two wild card symbols in any search term.

Specify the folder to search in Look In or click Browse to find the folder you want. Select Include Subfolders to also search all subfolders starting from your specified folder.

Press Enter or click Find.

### 2.4.2 Performing an Advanced File Search

For a more detailed search, you can also specify further options, such as a text the file to find must contain:

1. Start KFind from the main menu or the command line.
2. Click the Name/Location tab.
3. Specify the name of the file to find in Named.
4. Specify the folder in which to search in Look In or click Browse to find the folder.
5. Click the Contents tab.
6 In *File Type*, specify the type of file to find.

7 In *Containing Text*, enter the word or phrase the file you are searching for must contain.

8 If you want to specify further options, click the *Properties* tab and choose the options you want.

9 Click *Find* to perform the search.

For detailed information about the search options available, refer to the KFind online help.

### 2.5 Accessing Removable Media and External Devices

If you insert removable media (such as CDs or DVDs) in your computer's drive, or connect external devices such as USB sticks, external hard disks, media players or digital cameras, these are usually automatically detected. In KDE 4, a panel widget informs you about recently plugged or inserted devices.

*Figure 2.2  Device Notifier*

Click on the entry to show the device's contents with Dolphin.
If the device is not automatically displayed in the device notifier, try to access it manually with Dolphin.

Start Dolphin file manager and switch to the editable version of the location bar as described in Changing the View (page 21). Enter /media to access any type of drive mounted there. If the medium has been detected, it is also listed in the Places panel. Click the respective entry to show the contents. Digital cameras can also be accessed by entering the URL camera:/ into Dolphin's location bar. In case your camera is not automatically detected, configure it first with the KDE 4 Personal Settings or with digiKam as described in Section “Configuring Your Camera” (Chapter 20, Managing Your Digital Image Collection with DigiKam, ↑Application Guide). Navigate through the camera's directory structure until the files are shown. Use the usual Dolphin file management features to copy the files as desired.

Another way to access detected media is to click the My Computer icon on your desktop. The detected devices are listed in the Disk Information section.

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**NOTE: Removing Media Safely**

If you want to remove or disconnect a medium from your computer, make sure that the data on the medium is currently not accessed by any application or user. Otherwise, you risk a loss of data. To safely remove the medium, proceed as follows:

1. Open a view that displays the removable medium (for example, with Dolphin or My Computer).

2. Right-click the medium in the Places panel (or below Disk Information) and select Safely Remove or Eject. Safely Remove unmounts the medium after which you can disconnect the medium from your computer. Eject automatically opens the CD or DVD drive of your computer.

---

**2.6 Using Virtual Desktops**

The desktop environment allows you to organize your programs and tasks on several virtual desktops between which you can switch the pager in the panel (see Section 1.2, “Exploring the Desktop Components” (page 5)). If you often run a lot of programs
simultaneously, this minimizes the number of windows to arrange on your screen. You might, for example, use one desktop for e-mailing and calendaring and another for word processing or graphics applications.

**Procedure 2.4 Moving an Application to Another Virtual Desktop**

You can display a running application on one or all virtual desktops or move it to other desktops.

1. Open the application.
2. Right-click the title bar of the application.
3. Click *To Desktop*.
4. Select the desktop on which to place the application.
5. To switch between desktops, click the desired desktop in the pager in the panel.

Some users might need more desktops than provided by default. Learn how to add additional desktops in Adding Additional Virtual Desktops (page 45).

### 2.7 Managing Internet Connections

To surf the Internet or send and receive e-mail messages or use Instant Messengers, you must have configured an Internet connection with YaST or NetworkManager. For more details, see Section “Configuring a Network Connection with YaST” (Chapter 19, *Basic Networking*, ↑Reference) and Chapter 10, *Using NetworkManager* (↑Start-Up).

### 2.8 Exploring the Internet

When an Internet connection is established, either use Konqueror or Firefox for browsing. Konqueror is KDE's default Web browser but openSUSE also includes Firefox. To start Konqueror or Firefox, press Alt + F2 and enter `konqueror` or `firefox`. 
With features like tabbed browsing, pop-up window blocking, and download and image management, both browsers combine the latest Web technologies. Their easy access to different search engines helps you to find the information you need.


### 2.9 E-Mail and Scheduling

For reading and managing your mails and appointments, you can use Kontact as your personal information management tool (PIM). Kontact combines KDE applications like KMail, KOrganizer, and KAddressBook into a single interface. This gives you easy access to your e-mail, calendar, address book, and other PIM functionality. KMail can also manage multiple e-mail accounts, such as your private e-mail and your business ones. To start Kontact, press Alt + F2 and enter `kontact`.

Before you can send or receive mails, you must configure an e-mail account. When starting KMail for the first time, a configuration wizard appears that assists you in setting up your account. For detailed information about configuring and using Kontact, see Chapter 5, *Kontact: E-Mailing and Calendaring* (↑Application Guide).

### 2.10 Instant Messaging

Kopete is an online messenger application that allows multiple partners connected to the Internet to chat with each other. Kopete currently supports a number of common messenger protocols. To be able to use instant messaging (IM), you must register with a provider offering IM services and configure a Kopete account.

2.11 Managing Passwords

When you enter a password in a KDE application for the first time (in KMail or Konqueror, for example), you are asked if you want to store the password in an encrypted wallet. If you click Yes, KWallet wizard starts by default. KWallet is a password management tool that can collect all passwords and store them in an encrypted file. For more information on how to configure and use KWallet, refer to Chapter 8, Managing Passwords with KWallet Manager (page 81).

Whereas KWallet is designed to centrally manage passwords for several KDE applications, Firefox also offers the ability to store data when you enter a username and a password on a Web site. If you accept by clicking Remember, the password will be stored on your hard disk in an encrypted format. Next time you access this site, Firefox will automatically fill in the login data.

To review or manage your passwords in Firefox, click Edit > Preferences > Security > Saved Passwords....

2.12 Opening or Creating Documents with OpenOffice.org

The office suite OpenOffice.org offers a complete set of office tools including a word processor, spreadsheet, presentation, vector drawing, and database components. Because OpenOffice.org is available for a number of operating systems, you can use the same data across different computing platforms. You can also open and edit files in Microsoft Office formats then save them back to this format, if needed.

Start OpenOffice.org from the main menu or click the Office icon on the desktop. You can also start individual components, like the word processor, by pressing Alt + F2 and entering oowriter.

For an introduction to OpenOffice.org, see Chapter 1, The OpenOffice.org Office Suite (↑Application Guide) or view the help in an OpenOffice.org program.
## 2.13 Viewing PDF Files and Other Documents

Documents that need to be shared or printed across platforms can be saved as PDF (Portable Document Format) files, for example, in the OpenOffice.org suite. View them with Okular, the default KDE document viewer.

Start Okular from the main menu or press Alt + F2 and enter `okular`.

To open a document, select `File > Open` and choose the desired file from the file system. Navigate through the documents by using the navigation icons at the top or bottom of the window. If your PDF document provides bookmarks, you can access them in the left panel of the viewer.

Okular also allows you to review a document by highlighting certain text parts or adding annotations. For more information about working with Okular, see Chapter 4, *Viewing PDF Files and Other Documents with Okular* (page 59).

Alternatively, you can also view PDF files with Adobe Acrobat Reader. If Acrobat Reader is not installed by default, install the `acroread` package with YaST. To start Acrobat reader, press Alt + F2 and enter `acroread` or start the program from the main menu. Click `File > Open`, locate the desired PDF file and click `Open` to view the file.

## 2.14 Taking Screen Shots

With KSnapshot, you can create snapshots of your screen or individual application windows. Start the program from the main menu or by pressing Alt + F2 and entering `ksnapshot`. On start-up, KSnapshot already takes a snapshot of the screen and displays it as preview. You can choose to save the current snapshot, to open it with an graphics application or to copy it to the clipboard. Before creating a new snapshot, check if the options in the lower part of the window match your needs. For example, to automatically capture a dialog window or a certain region (instead of the full screen), adjust the `Capture Mode`. If you need to take some other actions first (like selecting a certain object in the window), adjust the `Snapshot Delay` and choose if to include the window decorations or not. Then click `New Snapshot` to take a new snapshot which you then can save or edit further.
2.15 Displaying, Decompressing, and Creating Archives

To save space on the hard disk, use a packer that compresses files and directories to a fraction of their original size. The application Ark can be used to manage such archives. It supports common formats, such as zip, tar.gz, tar.bz2, lha, and rar.

Start Ark from the main menu or from the command line with ark.

Once you have opened an archive, perform various actions. Action offers options such as Add File, Add Folder, Delete, Extract, View, Edit With, and Open With.
**Procedure 2.5  Creating an Archive**

1. To create a new archive, select *File > New*.

2. Enter the name of the new archive in the dialog that opens and specify the format using *Filter*.

   After confirming with *Save* or by pressing *Enter*, the Ark window shows an empty archive.

3. To fill the archive, drag and drop files and directories from the file manager into this window or click *Add File* or *Add Folder* to add the objects you want to add to the archive.

4. To remove a file from the archive, select the file and click *Delete*.

5. If all files to be archived are displayed in the window, just close Ark. Ark automatically compresses everything into the previously selected archive format and saves the archive.

**Procedure 2.6  Viewing and Extracting Archives**

1. To view the contents of an archive, start Ark and select *File > Open* to open the file. Alternatively, just drag the archive from an open file manager window to the Ark window.

2. To see a preview of individual files, select a file and click *Preview*.

3. To extract all files from the archive, click *Extract*.

   If you want to extract individual files from the archive only, select one or more files (by keeping the Ctrl key pressed) and click *Extract*. In the following dialog, you can still decide to save *All Files* or the *Selected Files Only*.

4. Enter the path to the *Destination Folder*, select if to *Open Destination Folder After Extraction* and click *OK* to extract the files.
2.16 Creating CDs or DVDs

If you possess a CD or DVD writer, you can burn files to a CD or DVD with K3b. To start K3b, press Alt + F2 and enter k3b. Learn more about K3b in Chapter 25, *Burning CDs and DVDs With K3b* (↑Application Guide).

2.17 Viewing and Managing Digital Images

You can view digital images in the file manager or with Gwenview. Start Gwenview by pressing Alt + F2 and entering gwenview. Gwenview can load and save all image formats supported by KDE. It shows them either as thumbnails, in full screen view, or in slide show mode. When browsing JPEG images with EXIF information, Gwenview automatically rotates them according to the EXIF Orientation tag.

For managing and editing your digital images, digiKam is the right choice: download your images from the camera, edit and improve them, organize them in albums (or flag them with tags for easy retrieval, independent of folders or albums), and archive them on CD or export them to a Web image gallery.


2.18 Managing Your Music Collection

KDE's amaroK music player allows you to play various audio formats, create playlists, import music from an iPod* (or upload files to your iPod), and listen to streaming audio broadcasts of radio stations on the Internet. The file types supported depend on the engine used for amaroK. To start amaroK, press Alt + F2 and enter amarok. On first start, amaroK launches a *First-Run Wizard* with which to define the folders where amaroK should look for your music files. For more information about amaroK, refer to Chapter 22, *Playing Music and Movies: amaroK, Kaffeine and More* (↑Application Guide).
2.19 For More Information

As well as the applications described here for getting started, KDE can run a lot of other applications. Find detailed information about many important applications in the other parts of this manual.

- To learn more about KDE and KDE applications, also refer to http://www.kde.org/ and http://www.kde-apps.org/.

- Communicate and discuss topics with other KDE users and get help at http://forum.kde.org/index.php.

- To learn more about the helper applications included in the KDE, see also http://utils.kde.org/.

- To report bugs or add feature requests, go to http://bugs.kde.org/.
Customizing Your Settings

You can change the way your KDE desktop looks and behaves to suit your own personal tastes and needs. There are several ways to influence the look and feel of the KDE desktop depending on the scope of changes to make. For users, the following options are available:

- To change the appearance or behavior of individual desktop objects only, you can usually access a configuration dialog by right-clicking the object.

- To change the overall appearance and behavior of your KDE desktop, use the Personal Settings that in KDE 4 replace the former KDE Control Center. The Personal Settings offer access to numerous configuration modules and dialogs, some of which can also be accessed via the context menu of individual desktop objects.

3.1 The Personal Settings

The Personal Settings are the central place for users to change the overall appearance and behavior of many components of the KDE desktop. Start the Personal Settings from the main menu by selecting Favorites > Configure Desktop.
**Figure 3.1  Personal Settings**

![Personal Settings window](image)

**TIP: Starting Individual Modules**

You can also start individual modules of the Personal Settings from the shell or by adding a special applet to your panel.

To start modules from a shell, enter `kcmshell4 --list` to get a list of all modules available. Then enter `kcmshell4 module name` to start the desired module.

Alternatively, add the *Settings* applet to your panel according to the description in Section 3.3, “Configuring the Panel” (page 46).

The *General* and *Advanced* tabs provide different categories of settings. To get an impression of the numerous possibilities, just click a category icon and explore the possibilities provided there. Performing tasks in some areas of the personal settings requires system administrator (*root*) permissions.
Change the settings as desired. No changes take effect until you click Apply. To discard changes in the recent view that you have not yet applied, click Reset. To reset all items in the recent view to the default values, click Defaults.

To get back to the start-up view showing all categories again, click Overview. You can also enter a search string at the top of the window (for example, Screen Saver) to find the category which holds options related to the search string. Each character you enter in the Search field narrows down the search.

The following list introduces the major categories and highlights the most important settings you can change there. Detailed information about the settings of each category is provided by the Help button on each page of the settings or in the help center.

The General tab holds the following categories:

**Look & Feel**

Holds settings for the appearance of your KDE 4 desktop, such as themes, window decorations, and styles of desktop elements. Allows you to configure 3D desktops effects, increase or decrease the number of virtual (multiple) desktops, or to configure screen saver options. Cursor behavior, window behavior and the splash screen that appears on KDE start-up can also be influenced here.

**Personal**

Holds settings for changing the default paths to some important directories for your data: Desktop, Autostart, and Documents. Allows you to change the default applications like e-mail client, text editor, messenger, and Web browser that are called whenever a KDE application needs to start an application of these types. Define country and language-specific options here, such as default spell checking options, currency, number and date format, and keyboard layouts for different languages between which you can switch. This category also offers accessibility options for handicapped users, such as sound and keyboard options and mouse gestures.

**Network & Connectivity**

Allows you to set options for local network browsing and proxy servers.
**Computer Administration**

Allows you to configure date and time settings for your KDE desktop, to change size and orientation of your display, and to specify power management options for saving energy. Also holds settings for joysticks, keyboard and mouse. For example, you can view and modify the predefined KDE shortcuts (for example, Alt + Ctrl + L to lock the screen). You can also install personal or systemwide fonts here and configure your sound system.

On the *Advanced* tab, find the following categories:

**Advanced User Settings**

Use this category to configure options like encoding or which database to connect for track listings of audio CDs, to configure your digital camera, or to change the settings for KWallet (the KDE password management tool). If needed, change the default file associations to identify a file type and start an appropriate application. Define how KDE handles sessions on login or shutdown and define which applications should be started automatically.

**System**

Hold option for the login manager, power management and Samba.

In the following sections, find examples of how to configure some aspects of your KDE desktop that you might want to customize.

### 3.2 Configuring Desktop Objects

Your KDE desktop comes with a predefined set of desktop icons. By adding various objects such as folders, files, or widgets, you can create additional icons on your desktop and arrange them as you like.

**Procedure 3.1 Adding Program Icons to the Desktop**

To create a link to an application and place it on the desktop or the panel, proceed as follows:

1. Click the main menu button and browse to the desired application.

2. Right-click and select *Add to Desktop* or *Add to Panel* from the context menu that appears. If these menu items are not available, your desktop elements are
probably locked. Unlock them first as described in Section 1.2.1, “Locking and Unlocking Desktop Objects” (page 7).

If your desktop objects are not locked, you can also just drag items from the main menu onto the desktop and drop them there to create a link to this application or folder.

3 To change the icon position on the desktop, left-click the icon and drag it to the desired place.

To delete an icon from your desktop, right-click the icon and select *Remove this Icon*.

**Procedure 3.2 Adding Widgets to the Desktop**

Widgets are small applications that can be integrated into your desktop or your panel.

1 To add widgets to your desktop, right-click an empty patch on your desktop and select *Add Widgets*.

   If these menu items are not available, your desktop elements are probably locked. Unlock them first as described in Section 1.2.1, “Locking and Unlocking Desktop Objects” (page 7).

2 In the dialog box that appears, you can limit the selection of widgets that is shown with the drop-down list at the top.
3 Select a widget and click *Add Widget*. The widget appears on your desktop or in your panel.

4 To position the widget on your desktop, left-click the widget and drag it to the desired place. To align all widgets to a grid, right-click an empty patch on the desktop and select *Align Horizontally* or *Align Vertically*.

To remove a widget from your desktop, right-click the widget and select the *Remove...* entry. Alternatively, hover your mouse pointer over the widget and click the $\times$ symbol in the frame.

**Procedure 3.3 Configuring Widgets**

In order to configure widgets, the desktop elements need to be unlocked as described in Section 1.2.1, “Locking and Unlocking Desktop Objects” (page 7).

1 To configure a widget, hover your mouse pointer over the widget until a translucent frame appears around the widget, showing a number of symbols.

2 To change the widget size, left-click the resize symbol in the frame and keep the mouse button pressed while moving your cursor across the desktop to scale the widget size.

3 To rotate the widget in any direction, left-click the arrow symbol in the frame and keep the mouse button pressed while moving your cursor in a circle across the desktop.
the desktop. There is a sticky boundary in the horizontal and vertical positions where you can “clamp” the widget, if you like. Of course, you can also arrange it in any tilted position.

4 To change the contents, settings, or properties of a widget, left-click the wrench symbol in the frame. In the configuration dialog box that appears, set the options according to your wishes.

Use the x symbol in the frame if you want to close the widget.

Procedure 3.4  Changing the Desktop Background

You can change the background colors of your desktop or select a picture to use as the background.

1 Right-click an empty patch of the desktop and select Desktop Settings. A configuration dialog appears.

2 In the Wallpaper section, choose from the Type drop-down list if you want to use an Image, a Slide Show or a Color as background.
• For an image wallpaper, choose a wallpaper from the Picture list. Click Get New Wallpapers to download and install new wallpapers. To use a custom picture, click the folder button beneath the list and select an image file from the file system. Define the Positioning of the image.

• To have multiple images appear in a Slide Show mode, define the directory from which to select the pictures and set the interval after which to change the images.

3 Set the other options in the configuration dialog according to your wishes and click OK to save your changes and leave the configuration dialog.

Procedure 3.5 Configuring the Screen Saver

openSUSE® comes with predefined screen saver settings that you can adjust.

1 Start the Personal Settings from the main menu by selecting Favorites > Configure Desktop.

2 On the General tab, select Desktop.

3 In the dialog that opens, click Screen Saver.

4 In the list of screen savers, click a screen saver to see a preview in the right side of the dialog.
5 Click *Setup* to adjust options like speed or shapes.

6 You can also choose to view a blank screen instead or to let KDE start a random screen saver. Find these options at the end of the screen saver list.

7 Under *Settings*, determine after how long a time of inactivity the screen saver should start and whether a password is required to unlock the screen after the screen saver has started.

8 Click *OK* to apply the changes and close the configuration dialog.

**Procedure 3.6  Adding Additional Virtual Desktops**

Some users might need more desktops than provided by default.

1 Right-click the desktop previewer in the panel and select *Configure Desktops*. A configuration dialog appears where you can increase or reduce the number of virtual desktops. You can also change the default names of the desktop.

2 Click *OK* to apply the changes and close the configuration dialog.
3 For the names of the desktops to appear in the desktop previewer rather than the number, right-click the desktop previewer and select Pager Options > Desktop Name.

### 3.3 Configuring the Panel

You can customize the KDE panel according to your preferences: Applications and widgets can be added to the quick launch area or the system tray in the main panel or to additional panels. Panel elements and additional panels can be moved to different places or be completely removed at any time.

**Procedure 3.7  Customizing the Panel**

1. Right-click an empty patch in the panel and select Panel Settings to access any panel configuration options. If the menu item is not available, your desktop objects are probably locked. To unlock, right-click and select Unlock Widgets.

2. To move panel objects to a different place within the panel, hover the mouse cursor over the respective panel object (for example, program icon, pager, task manager, system tray). The mouse cursor turns into a crosslines-like form. Move the cursor to the desired position in the panel, then click again to fix the object in the new position.

3. To change the panel width, click and drag the small arrow icons at the far left and right end of the settings panel.

4. To change the panel height, click the Height button and move the mouse cursor to the desired end location.

5. To place the panel at different sides of the screen use the Screen Edge button. Drag and drop the panel to the preferred location.

6. If you need additional widgets on your panel, add them with the Add Widgets... button as described in Step 2 (page 41).
To remove program icons or widgets from the panel, right-click the respective object and select the menu item to remove the icon or widget.

The icons in the system tray usually belong to applications running in the background. Therefore you can only remove those icons if you close the respective application (right-click the icon and select Quit).

To prevent the panel and widgets from being moved accidentally, use Lock Widgets.

For additional configurations options like alignment and functions like auto hide, click More Settings....

If all panel changes are according to your wishes, close the settings panel with the red close button on the right side.

3.4 Configuring KDE Behavior

Procedure 3.8 Adjusting the Mouse Settings

1 Open the Personal Settings and select Keyboard & Mouse.
To switch to double-clicks to open files and folders, select the corresponding option in the *Icons* group.

To change the mouse pointer appearance, switch to the *Cursor Theme* tab and select a different cursor theme.

To change the default values of double-click intervals or the distance that the pointer moves over the screen on movement of the mouse, adjust the settings on the *Advanced* tab.

Click *Apply* to apply the changes and close the configuration dialog.

**Procedure 3.9  Modifying KDE Keyboard Shortcuts**

KDE comes with a set of predefined keyboard shortcuts. You can easily create more keyboard shortcuts or change existing shortcuts, especially if they should conflict with other application-specific shortcuts.

1. Open the Personal Settings and select *Keyboard & Mouse*.
2. Click *Keyboard Shortcuts*. 
3 Select the *KDE Component* for which to view or change the shortcuts. For example, to change the shortcuts for switching between the virtual desktops, select the *KWin* entry from the drop-down list. To change the shortcuts for locking the screen or logging out, select the *Run Command Interface* entry.

4 Browse through the list of shortcuts for the selected entry. To filter for certain keywords, enter a search string in the search field above.

5 To change or add a shortcut, select the respective list entry and in the dialog that opens, select *Custom*.

6 Click the wrench icon to switch to the input mode.

7 Press the desired key or key combination. If this shortcut cannot be accepted or in case of conflict with another existing shortcut, a notification shows. If your input was successful, the new or modified shortcut appears in the list.

8 If you want to switch back to the default keyboard shortcut for the selected action, just click the entry again and select *Default*.

9 To save the altered settings, click *Apply*. To reset all shortcuts to the default values, click *Defaults* then *Apply*.

**Procedure 3.10 Changing Default Applications**

There are certain default applications defined in KDE: For example, when you click a link to a Web page, KDE opens the Konqueror Web browser, when you click an e-mail address, KMime starts.

1 To change this behavior and set your preferred Web browser or e-mail client as default, open the Personal Settings and click *Default Applications*.

2 To change the Web browser:

   2a In the list of components, select *Web browser*.

   2b Select *Open http and https URLs in the following browser* and click the browse button beneath.
2c A dialog opens, showing the main menu structure. Select the Web browser to set as default and click **OK**. The component chooser now shows the selected application in the display field.

3 To change the e-mail client:

3a In the list of components, select *Email Client*.

3b Select *Use a different email client* and click the browse button.

3c A dialog showing the main menu structure opens. Select the e-mail client to set as default and click **OK**. The component chooser now shows the selected application in the display field.

4 If desired, change other default applications for KDE, like the application for the terminal window or the instant messenger client.

5 When all options are set according to your wishes, click **Apply**.

Similar to setting the default Web browser or e-mail application, you can change file associations in KDE. File associations determine which application should be used to open a file, for example, if you want to start a file from Konqueror.

1 Open the Personal Settings, click the **Advanced** tab and select *File Associations*. 
2 To search for an extension, enter the extension in *Find File Type or File Name Pattern*. Only file types with a matching file pattern appear in the list. For example, to modify the application for *.png files, enter png in *Find File Type or File Name Pattern*.

3 In the *Known Types* list, click the file type to open the setting dialog for this file type. You can change the icon, the filename patterns, description, and the order of the applications.

4 When all options are set according to your wishes, click *Apply*.
3.5 Configuring System and Security Aspects

To adjust settings such as time and date format, number format, or currency, select the desired country as the default country in KDE. If more than one system language is installed on your computer, you can also select different languages in which KDE should show the graphical user interface and application interfaces.

Procedure 3.11 Adjusting Regional Settings

To adjust settings such as time and date format, number format, or currency, select the desired country as the default country in KDE. If more than one system language is installed on your computer, you can also select different languages in which KDE should show the graphical user interface and application interfaces.

1. To set your default country options, open the Personal Settings and select Regional & Accessibility.

2. On the Locale tab, click Change next to the Country or Region entry. In the dialog that opens, select the region and country you want to set as default in KDE and click OK.

Number, date and time format are automatically adjusted to the new country's default values that are shown in the display field at the bottom of the Locale tab.
3 If you need to make further adjustments for those, click the respective tabs and set the options according to your wishes.

4 If more than one language is installed on your system (as secondary languages with YaST) and you want to change the graphical interface of KDE to a different language, click Add Language on the Locale tab. This opens a list of languages currently installed on your system.

5 Select the language for the graphical user interface. The new language is now shown at the top position in the Language list.

6 To confirm the changes, click Apply. All newly started applications or desktop objects now appear in the new language.

7 To switch to another language, re-sort the languages in the Languages list until the desired language is at the top position and apply your changes.

Procedure 3.12  Adding Keyboard Layouts

If you often need to enter texts in various languages, you may want to add different language layouts for your keyboard. You can then easily switch layouts when needed.

1 To add additional keyboard layouts, open the Personal Settings and select Regional & Accessibility > Keyboard Layout.

2 Activate Enable keyboard layouts at the top.

3 In the list of Available layouts, select a layout. Click the right arrow button to transfer it to the list of Active layouts.
4 If you added several layouts, you can change the sorting order with the help of the up and down arrow buttons.

5 Use the *Switching Options* tab to adjust the options for switching between the keyboard layouts. For example, you can define keyboard shortcuts for switching. After having confirmed your changes with *Apply*, you can change between different keyboard layouts by clicking the country flag in the panel or by using the respective keyboard shortcut.

KDE runs a session manager that starts after your username and password are authenticated by the login process. It lets you save the status of a certain session and return to that status the next time you log in. For example, it can automatically start the applications that you were running in the most recent session or when you manually saved a session. It can save and restore the following settings:

- Appearance and behavior settings, such as fonts, colors, and mouse settings.
- Applications that you were running, such as a file manager or OpenOffice.org.

**NOTE: Saving and Restoring Applications**

You cannot save and restore applications that Session Manager does not manage. For example, if you start the vi editor from the command line in a terminal window, Session Manager cannot restore your editing session.
Procedure 3.13  Adjusting the Session Handling

1 To change the session handling options, open the Personal Settings and on the Advanced tab, click Session Manager.

   By default, Session Manager restores the applications that were running when you logged out from the previous session, enabling an automatic start of these applications.

2 To be able to save a certain session manually and restore this session each time you log in to KDE, select *Restore manually saved sessions*. This adds a new menu item, *Save Session*, to your main menu. After a session is saved, KDE automatically restores the saved session on each login.

3 To start with a “fresh” session each time you log in, select *Start with an empty session*.

4 To change the default options that appear when logging out, adjust the respective options in the General and Default Shutdown Options group.

5 Click *Apply* to confirm your changes.

Procedure 3.14  Starting Programs Automatically

Apart from the applications from the last session that are restored by the Session Manager, you can configure which applications should be always be started after login.

1 Open the Personal Settings and on the Advanced tab, click *Autostart*.

2 To add an application, click *Add Program* and from the menu structure, select the program you want to start automatically.

   To add a shell script, click *Add Script* and click the *Open File Dialog* icon in the next window to select the script from the file system. The program or script is added to the list and you can view and change the *Status*.
3 Click *Apply* to confirm your changes. When logging in the next time, the applications and scripts should start automatically.
Part II. Managing Files and Resources
Viewing PDF Files and Other Documents with Okular

Apart from PDF files, Okular allows you to view a great number of file formats, such as PostScript, several image formats, OpenDocument format (ODF), OpenDocument text (ODT), some eBook formats (ePub), and even Microsoft* Compiled HTML Help (CHM). Okular also provides support for bookmarks, annotations, form fields and multimedia contents, and rotation of pages.

4.1 Viewing PDF Files

Documents that need to be shared or printed across platforms can be saved as PDF (Portable Document Format) files, for example, in the OpenOffice.org suite. View them with Okular, the default KDE document viewer.

Start Okular from the main menu or press Alt + F2 and enter okular. To open a document, select File > Open and choose the desired file from the file system. Navigate through the document by using the navigation icons at the top or bottom of the window. Depending on which icon you click on the navigation panel on the left, the sidebar either shows a table of Contents, a Thumbnail view of each page, the Reviews for this file, or your Bookmarks for this file. To filter for any text listed in the sidebar or the overall document, enter a string into the input field at the top of the sidebar. If you want to select and copy text or images from the file in Okular, click the Selection icon in the toolbar and select one of the options from the context menu. Click the Browse icon to switch back to browsing the document. Working with Bookmarks and Annotations With Okular, you can review a document by highlighting certain text parts or adding annotations or bookmarks that Okular then attaches to the file in form of metadata. Note that
the annotations and markers you add are not stored within the document, so you cannot print them or pass them on to other users.

**Figure 4.1  Okular Viewing a PDF File**

![Okular Viewing a PDF File](image)

## 4.2 Annotating a PDF File

With Okular, you can review a document by highlighting certain text parts or adding annotations or bookmarks that Okular then attaches to the file in form of metadata. Note that the annotations and markers you add are not stored within the document, so you cannot print them or pass them on to other users.

To create an annotation for a page, press F6 and select one of the annotation tools from the toolbar that appears. The annotation is added to the list of Reviews and is flagged with the login name of the user who created it. Use the icons at the bottom of the sidebar to group the annotations by page, by author or to show the annotations for the current page only.
4.3 For More Information

Accessing Network Resources

From your desktop, you can access files and directories or certain services on remote hosts or make your own files and directories available to other users in your network. openSUSE® offers various different ways of accessing and creating network shared resources:

Network Browsing
Your file managers, Dolphin or Konqueror, let you browse your network for shared resources and services. Learn more about this in Section 5.2, “Accessing Network Shares” (page 64).

Sharing Folders in Mixed Environments
Using Dolphin or Konqueror, configure your files and folders to share with other members of your network. Make your data readable or writable for users from any Windows or Linux workstation. Learn more about this in Section 5.3, “Sharing Folders in Mixed Environments” (page 65).

Managing Windows Files
openSUSE can be configured to integrate into an existing Windows network. Your Linux machine then behaves like a Windows client. It takes all account information from the Active Directory domain controller, just as the Windows clients do. Learn more about this in Section 5.4, “Managing Windows Files” (page 68).

NOTE: Network Share Support in Dolphin

Dolphin is KDE 4's default file manager and most of the network functions described in this chapter are already integrated. However not all of them might work flawlessly—if in doubt, try using Konqueror instead.
5.1 General Notes on File Sharing and Network Browsing

Whether and to which extent you can use file sharing and network browsing on your machine and in your network highly depends on the network structure and on the configuration of your machine. Before setting up either of them, contact your system administrator to make sure that your network structure supports this feature and to check whether your company's security policies permit it.

Network browsing, be it SMB browsing for Windows shares or SLP browsing for remote services, relies heavily on the machine's ability to send broadcast messages to all clients in the network. These messages and the clients' replies to them enable your machine to detect any available shares or services. For broadcasts to work effectively, your machine must be part of the same subnet as all other machines it is querying. If network browsing does not work on your machine or the detected shares and services do not match with what you expected, contact your system administrator to make sure that you are connected to the appropriate subnet.

To allow network browsing, your machine needs to keep several network ports open to send and receive network messages that provide details on the network and the availability of shares and services. The standard openSUSE is configured for tight security and has a firewall up and running that protects your machine against the Internet. To adjust the firewall configuration, you would either need to ask your system administrator to open a certain set of ports to the network or to tear down the firewall entirely according to your company's security policy. If you try to browse a network with a restrictive firewall running on your machine, Dolphin warns you about your security restrictions not allowing it to query the network.

5.2 Accessing Network Shares

Networking workstations can be set up to share folders. Typically, files and folders are marked to let remote users access them. These are called network shares. If your system is configured to access network shares, you can use your file manager to access these shares and browse them just as easily as if they were located on your local machine. Whether you have only read access or also write access to the shared folders depends on the permissions granted to you by the owner of the shares.
To access network shares, or open Dolphin and enter `remote:/` in the location bar. Dolphin then opens a virtual folder that displays the network share types that you can access. Click a network resource type then click the network share to access. You might be required to authenticate to the resource by providing a username and password.

**Figure 5.1  Network Browsing**

5.3 Sharing Folders in Mixed Environments

Sharing and exchanging documents is a must-have in corporate environments. Dolphin offers you file sharing with Samba, which makes your files and folders available to both Linux and Windows users. For information on how to install and configure Samba, refer to Chapter 25, *Samba* (↑Reference). After Samba is installed, configure Samba file sharing with Dolphin as follows:

1. Open Dolphin.
2. Select *Home Folder*, right-click the window background and then select *Properties* from the context menu.
3 In the Properties dialog, click the Share tab. When file sharing is not yet generally enabled, you are informed about this on the tab. To enable file sharing or select the files to share, click Configure File Sharing and enter the root password.

4 To enable or disable file sharing, select or deselect Enable Local Network File Sharing.

**Figure 5.2  Enabling File Sharing**

5 Select the appropriate sharing option: Simple sharing or Advanced sharing.

6 To limit the number of users allowed to share folders to certain groups, click Allowed Users, select Only users of a certain group are allowed to share folders, click Choose Group, and select the appropriate group from the list in the window that opens. Click OK to close that window.

7 In the file sharing dialog, add the folder to share to the list of shared items by clicking Add at the bottom of the dialog and specifying the folder's exact path.
**Figure 5.3  Detailed Sharing Options**

8 Activate *Share with Samba* to enable Samba file sharing. If needed, apply some fine-tuning to the Samba options:

- **Name**
  Specify a name other than the preset default.

- **Public/Writable**
  Determine which kind of access to grant others to your share. You can grant users full read and write access or limit their access to just reading your shares.

9 Apply your settings and leave the file sharing dialog with *OK*.

The folder now appears in Dolphin with a globe icon.
To revoke the share, enter the file sharing dialog again and remove the folder from the list of shared items. The folder then appears without a globe icon.

Other members of your network can reach your share by entering `smb: /` in the location bar of Dolphin and clicking the appropriate workgroup icon and hostname.

**IMPORTANT: Samba Domain Browsing**

Samba domain browsing only works if your system's firewall is configured accordingly. Either disable the firewall entirely or assign the browsing interface to the internal firewall zone. Ask your system administrator about how to proceed.

### 5.4 Managing Windows Files

With your openSUSE machine being an Active Directory client as described in Chapter 5, *Active Directory Support* (↑Security Guide), you can browse, view, and manipulate data located on Windows servers. The following examples are just the most prominent ones:

**Browsing Windows Files with Dolphin**

Use Dolphin's `smb: /` browsing option to browse your Windows data.
Viewing Windows Data with Dolphin
Use Dolphin to display the contents of your Windows user folder just as you would for displaying a Linux directory. Create new files and folders on the Windows server.

Manipulating Windows Data with KDE Applications
KDE applications, such as the Kate text editor, allow you to open files on the Windows server, manipulate them, and save them to the Windows server.

Single-Sign-On
KDE applications, including Dolphin, support Single-Sign-On, which means that to access other Windows resources, such as Web servers, proxy servers, or groupware servers like MS Exchange, you do not need to reauthenticate. Authentication against all these is handled silently in the background once you provided your username and password on login.

To access your Windows data using Dolphin, proceed as follows:

1. Press Alt + F2 and enter smb:///

   This opens a Dolphin window displaying all Samba workgroups and domains that could be found in your network.

2. Click the icon of the workgroup or domain of your AD server.

**Figure 5.5** Browsing Data on the AD Server
3 Click the *Users* folder and select your personal user folder icon. The contents of your *My Documents* folder are displayed.

To create folders in your Windows user folder using Dolphin, proceed as you would when creating a Linux folder:

1. Right-click the background of the Dolphin folder view to open the menu.
2. Select *Create New > Folder*.
3. Enter the new folder's name when prompted to do so.

To create a file on the AD server, proceed as described in the following example for the Kate text editor.

1. Press Alt + F2 and enter `kate`.
2. Enter your text.

**Figure 5.6  Editing a Text File with Kate**

3. To save the newly created text, select *Save as*.
4. Click the *Network Folders* icon to the left and select *SMB Shares*.
5 Navigate to your Windows folder.

6 Enter the filename and click Save.

The file is saved on the Windows server.

Make use of Dolphin's Single-Sign-On support, as in the following example—Web access to your MS Exchange mailbox:

1 Make sure that you have a valid MS Exchange account under your current Windows user identity.

2 Request the Exchange server's address from your system administrator.

3 Press Alt + F2 and enter `dolphinhttp://address_exchange_server`.

You are logged in to your Exchange account without having to reauthenticate.
Figure 5.8  Accessing MS Exchange through Dolphin

4 Write or read your e-mails and log out as usual.
Searching with Kerry

Kerry is a KDE front-end for the Beagle search tool, which indexes your personal information space to help you find whatever you need. You can use Kerry to find documents, e-mails, Web history, IM/ITC conversations, source code, images, music files, applications, and much more.

Because Kerry is a front-end to Beagle, it needs the beagle daemon to be functional. Kerry and Beagle can now index many KDE-specific sources of information, such as Kopete conversations, Konqueror history, or KMail messages. The result is a smooth integration into the KDE environment through the Kerry interface. Find more about Beagle in Chapter 6, Searching with Beagle (↑GNOME User Guide).

6.1 Searching Using Kerry

To find data using the Kerry tool, follow these steps:

1. Press Alt + F2 and enter `kerry` to start Kerry and to open the Kerry Beagle Search window. Alternatively, open the search window by left-clicking on the Kerry applet icon (a dog's head) in the system tray.

2. Enter the term to find in Search. To quickly clear the previously entered text, press the black arrow on the left.

The search is case insensitive. It does not matter whether you use uppercase or lowercase characters. To search for optional terms, use the OR keyword (in uppercase). For example, `Mars OR Venus` finds all data containing any occurrence
of Mars, Venus, or both. To exclude search terms, use a minus symbol (–) in front of them. For example, Mars –Venus finds all data containing any occurrence of Mars but without any occurrence of Venus. To search for an exact phrase, enclose the phrase in quotes. If you want to include only certain file type in results, specify the filename extension with ext:. For example, Mars ext:xml finds xml files containing Mars.

3 Select the scope of the search in the Show section of the right panel. To search all the indexed content, choose Everything. However, you can limit the search only to indexed Applications, Contacts, Office documents, instant messenger Conversations, Images, Media files, Web pages, or File/Path names by clicking the appropriate item in the panel. You can change the scope before or after the search is performed.

   Change the sort order of results in the Sort By section of the right panel. To sort results by type, click Type. Sorting by Date, Name, and Relevance is also possible. You can change the sort order before or after the search is completed.

   You can limit the results by date of last modification. To show all results regardless of the date of the last modification, click Any Date in the right panel. You can show items modified today, since yesterday, this week, month, or year by clicking the appropriate item in the right panel. You can change this before or after the search is performed.

4 Press Enter or click the icon to the right of the search field to start the search. Results are displayed in the main area of the window.

Results are displayed in a window, sorted according to your settings. Click any item to activate it. To open a folder containing a found file instead of the file itself, click the name of the folder to the right of the filename. To display more information about an item, click the icon with the i on the left.

You can change the scope of the search, sort order, or limitation by date at any time by clicking appropriate item in the panel on the right.

Use Previous results and Next results to move between pages of the result list. The number of items found is shown in the bottom part of the window.
6.2 Configuring Kerry

You can configure Kerry by right-clicking its icon in the tray and choosing Configure Kerry or by clicking Configure in Kerry's main window. The configuration dialog has four tabs.

On the Search tab, you can change the Default result sort order, Maximum number of results displayed on one page, or shortcuts for activating Kerry Beagle Search.

On the Indexing tab, set whether the Beagle indexing service should be started automatically and whether data should be indexed while the computer is operating on battery power. You can also determine which folders should be indexed by Kerry Beagle Search and which folders should not be indexed at all. See Section 6.2.1, “Indexing More Directories” (page 75) and Section 6.2.2, “Preventing Files and Directories from Being Indexed” (page 76) for detailed instructions.

On the Backends tab, choose which of the available Beagle back-ends should be enabled. To disable a back-end, uncheck it. For example, if you do not want your Kopete conversations be indexed by Kerry Beagle, uncheck the Kopete back-end.

On the Daemon Status tab, check the status of Beagle daemon. You can stop or start the daemon manually here. To use Kerry Beagle Search functionality, the daemon must be running.

6.2.1 Indexing More Directories

By default, Kerry indexes your home folder only. If you do not want your home folder to be indexed, uncheck the Index my home folder option on the Indexing tab of the Kerry configuration. To index more folders, follow these steps:

1. If the Kerry Beagle configuration dialog is not open yet, right-click the Kerry icon in the tray and choose Configure Kerry.

2. Click the Indexing tab.

3. Click the Add button in the middle part (Index) of the tab.

4. In the dialog that opens, choose the folder to index and click OK.
5 Press \textit{OK}.

\textbf{6.2.2 Preventing Files and Directories from Being Indexed}

To exclude some folders or files from being indexed by Kerry, follow these steps:

1. If the Kerry Beagle configuration dialog is not open yet, right-click the Kerry icon in the tray and choose \textit{Configure Kerry}.

2. Click the \textit{Indexing} tab.

3. Click \textit{Add} in the bottom part (\textit{Privacy}) of the tab.

4. In the dialog that opens, choose a folder not to index by selecting the \textit{Folder} option. Specify the path to the folder in the text field or press the folder button and choose the folder in a file dialog.

   You can also specify files not to index by selecting \textit{File name pattern} and specifying the file pattern.

5. Press \textit{OK}.
Managing Print Jobs

Printers can either be connected to your system locally or accessed over a network. There are several ways to set up a printer in openSUSE: with YaST, or on the command line. There are also desktop tools in KDE or GNOME for setting up printers but we recommend to use YaST for this task.

Refer to Section “Setting Up a Printer” (Chapter 2, Setting Up Hardware Components with YaST, Start-Up) for detailed information how to configure printers with YaST.

NOTE: Troubleshooting

If you have problems configuring your printer, ask your system administrator. An in-depth coverage of printer configuration for administrators can be found in Chapter 9, Printer Operation (Reference).

This chapter describes how to set up printers with the KDE Printing Manager. After configuring the printer correctly, you can address it from any application.

7.1 Starting Print Jobs in KDE

In KDE, you usually start print jobs with KPrinter. This application is started automatically each time you print from a KDE application. In the KPrinter dialog, choose a printer and edit the Properties of your print job, such as page orientation, pages per sheet, and duplex printing.
TIP: Sending Files to a Printer without Opening the Application

You can also start KPrinter manually by pressing Alt + F2 and entering kprinter. This is useful if you want to print one or several files without starting the application to view or edit the file. The KPrinter dialog then additionally includes the Files tab, where you can determine the files to print. Either drag them from the desktop and drop them into the list or use the file dialog to locate them.

To specify the number of copies and various other options, click Expand at the bottom left. The window then expands and shows three tabs: Copies, Advanced Options, and Additional Tags. See Figure 7.1, “Starting a Print Job with KPrinter” (page 78).

Figure 7.1  Starting a Print Job with KPrinter

The Copies tab determines the page selection (all pages of the selected document, the currently selected one, or a range) and the number of copies. You may also choose to print only the even or only the odd numbered pages of the selected document. Use Advanced Options to specify any additional information for the print job. Enter any Billing information if needed or set a custom page label at the top and bottom of the page. The Job Priority can also be set here. The last tab, Additional Tags is rarely needed. Once your print job has been filed, you can watch its progress using KJobViewer.
7.2 Monitoring Print Jobs in KDE

Start KJobViewer from the main menu or with kjobviewer from the command line. A window like that in Figure 7.2, “Monitoring Print Jobs with KJobViewer” (page 79) opens, listing all the print jobs queued on your printer. As long as your print job is not active, you can edit it. Do this using the entries of the Jobs menu.

**Figure 7.2** Monitoring Print Jobs with KJobViewer

If, for example, you want to check if you sent the correct document to the printer, you can stop the job and resume it if you decide to print it. Remove your own print jobs from the queue with Remove. To change the printer, select a different printer with Move to Printer.

With Restart, reprint a document. To do this, select Filter > Toggle Completed Jobs, select the desired document, and click Jobs > Restart. Clicking Jobs > Job IPP Report shows the technical details of a job. Use Jobs > Increase Priority and Jobs > Decrease Priority to set the priority, depending on how quickly you need the document.

Filter enables you to switch between various printers, toggle completed jobs, and limit the view to your own print jobs by selecting Show Only User Jobs. The current user is then displayed in the top right field.

Settings > Configure KJobViewer opens a configuration dialog. Here, determine the maximum number of print jobs to display. Enter a number in the field or use the slider to the right to determine a value. Press OK to save the setting or Cancel to exit the dialog without saving.
The icons in the toolbar correspond to the functions you can access by way of the menu. Display a help text explaining the function by holding the mouse pointer over one of the icons.

The job list consists of eight columns. The job ID is automatically assigned by the print system to identify the various jobs. The next column contains the login of the user who sent the job followed by the filename of the document. The status column indicates whether a job is still in the queue, currently being printed, or already completed. Next, the size of the document is displayed in kilobytes and number of pages. The default priority of 50 can be increased or reduced if necessary. Billing information can be cost centers or other company-specific information. If you right-click a job in the list, the Jobs menu opens under the mouse pointer, allowing you to select an action. Only a few functions are available for completed jobs. If you activate *Keep window permanent*, KJobViewer opens automatically the next time you log in.
Managing Passwords with KWallet Manager

Remembering all the passwords for protected resources to which you need to log in can be problematic. KWallet remembers them for you. KWallet is a password management tool that can collect all passwords and stores them in an encrypted file. With a single master password, open your wallet to view, search, delete, or create entries.

IMPORTANT: Protect Your KWallet Password

If you forget your KWallet password, it cannot be recovered. Furthermore, anyone who knows your password can obtain all information contained in the wallet.

8.1 Starting KWallet

When you enter a password in a KDE application for the first time (in KMail or Konqueror, for example), you are asked if you want to store the password in an encrypted wallet. If you click Yes, KWallet wizard starts by default. KWallet is a password management tool that can collect all passwords and store them in an encrypted file.
To activate KWallet, select *Basic Setup* and click *Next*. Select *Yes, I wish to use the KDE wallet to store my personal information* and enter a password. This is your master password to open KWallet. It cannot be recovered if you forget it. Click *Finish* to close the wizard. After this initial configuration, you can open your wallet at any time to view, search, delete, or create entries. Normally you do not need to insert an entry manually. KDE recognizes if a resource requires authentication and KWallet starts automatically, prompting you for the KWallet password. Of course, you can also use KWallet to store additional passwords by adding entries, as described in *Adding New Entries to Your Wallet* (page 83).

By default, all passwords are stored in one wallet, *kdewallet*, but you can also add new wallets. Once configured, KWallet appears in the panel. You can also start KWallet manually by pressing *Alt + F2* and entering *kwalletmanager*.

### 8.2 Managing Your Passwords

To store data in your wallet or view its contents, click the KWallet icon in the panel. A dialog box opens, showing the wallets that are accessible on your system. Click the wallet to open. A window prompts for your password.

After a successful login, the KWallet Manager window opens. In the tree view on the left, navigate to the entry for which you want to view or change the password. For safety reasons, the password value is hidden by default when you click the entry. For passwords, click *Show Contents*. For maps, containing key and value pairs (like a WLAN ESSID and your password), activate *Show Values* to view the contents.
**Figure 8.1** The KWallet Manager Window

![The KWallet Manager Window](image)

**Procedure 8.1** Adding New Entries to Your Wallet

1. To manually add new passwords (or maps) to KWallet, select the subfolder to which to add an entry in the tree folder at the left.

2. To add a new password, right-click a `Passwords` entry and select `New` from the context menu.

   To add a new key pair (map), right-click a `Map` entry and select `New` from the context menu.

3. Specify a name for the new entry then click `OK`. Your new entry is sorted under your folder entry.

4. Click the new entry to display it on the right side (the folder is initially empty).

5. Click `Show Contents` or `Show Values` to open an input field where you can enter your new password or values.

6. To add a key pair, right-click the empty input field and select `New Entry Type` in your password (or you key and respective value for that key) and click `Save`. KWallet saves your entry to the subfolder selected.
Procedure 8.2  Changing the Password for a Wallet

If needed, you can change your password for a wallet at any time.

1  Open KWallet Manager and right-click the wallet for which to change the password.

2  Select Change Password.

3  Enter your new password twice.

8.3 Adjusting KWallet Settings

By default, you define the settings for KWallet password manager with the help of a wizard when you use KWallet for the first time. You can adjust the initial settings at any time to increase security.

1  If KWallet is already started, click the KWallet symbol in the panel and select Configure Wallet. Otherwise, in the main menu, select Configure Desktop and on the Advanced tab, click KDE Wallet.

2  If KDE wallet subsystem is not yet enabled, activate the respective check box at the top.

3  By default, a wallet is closed when the last application stops using it. To increase security, you can set a more restrictive policy: to close a wallet automatically after a period of inactivity or after start-up of the screen saver, activate the respective check boxes.
By default, KWallet stores all passwords in one wallet named `kdewallet`. To store local and network-related passwords in different wallets, activate *Different wallet for local passwords*. Click *New* to create an additional wallet, if needed.

To remove the KWallet icon from the panel, deactivate *Show manager in system tray*. You can then only access KWallet from the main menu.

### 8.4 Copying Your Wallet to Another Computer

For the most part, KWallet resides silently in the panel and is automatically activated if needed. However, you can copy your wallet files to another computer (for example, your laptop). To simplify this task, wallets can be dragged from the manager window to a file browser window. This let you easily package a new wallet for transfer to another environment. For example, a new wallet could be created and copied onto a removable flash memory device. Important passwords could be transferred there, so you have them available in other locations.
Controlling Your Desktop’s Power Management

In KDE 4, you can control power management functions supported by your system with just a few clicks on the desktop. You can choose between various power management profiles to match the tasks your system is facing. The Personal Settings hold a Power Management category, allowing you to configure detailed settings as described in Section 9.3, “Configuring Power Management” (page 89).

Apart from power profiles that can be applied while you are interacting with your computer, there are also power saving functions (suspend modes) you can use instead of shutting down the computer completely during breaks.

9.1 Using the Battery Monitor Widget

If you are using mobile computers like a laptop, a widget in your panel displays the battery status and gives you access to power management functions. If the Battery Monitor widget is not displayed in your panel by default, add it manually. For more information, refer to Adding Widgets to the Desktop (page 41).

The widget allows you control the screen brightness when your system is running on battery power, to switch to a different power profile, or to trigger your system to enter a suspend mode. Click the panel icon to open the widget.
Which suspend modes and power profiles are available, depends on the power management abilities of your system and the profiles defined in the Personal Settings.

The following suspend modes are widely available:

**Sleep (Suspend to RAM)**

Pauses your computer without logging you out. All your data and the session data is saved to RAM. Bringing the system up again is faster than restoring a session from disk.

**Hibernate (Suspend to Disk)**

Pauses your computer without logging you out. All your data and the session data is saved to disk before the system is laid to rest. It is thus protected against data loss should you loose power in the meantime. Waking the system up again is much faster than booting it from scratch.

To manually suspend your computer, use the buttons in the widget or the suspend options on logging out (see Section 1.3, “Leaving Your System” (page 11)). If supported by the system and configured accordingly, pressing sleep buttons on your machine or keyboard will also suspend your machine.

You can configure your system to automatically switch into a suspend mode after certain events like closing the lid (if you are using a laptop) or after a period of that time that the system has been idle. Refer to Section 9.3, “Configuring Power Management” (page 89) for more information.
9.2 Saving Power by Using Profiles

Power management profiles let you adjust various power management parameters to the requirements of certain typical situations you are facing when using your machine. openSUSE® ships with a set of four preconfigured profiles which you can adjust to your needs. To switch profiles click the battery monitor panel icon and select a different Power Profile. The following profiles are available by default:

Performance
   Keep your machine running with full power and full speed to achieve maximum performance.

Presentation
   Disable any display power management and screen savers to make sure that your presentation is not interrupted by a blanked display or such like.

Powersave
   Apply power management methods to make sure that your machine runs as long as possible when put on battery power instead of AC power.

Aggressive Powersave
   Use stricter power management methods to be applied when the battery is at low level. This includes shorter idle intervals before triggering suspend events, reducing screen brightness, disabling 3D effects and using CPU scaling policies that preserve resources.

Xtreme Powersave
   Apply extreme power saving by reducing screen brightness even more and using stricter idle time and CPU scaling policies when the battery is already at warning level.

9.3 Configuring Power Management

KDE 4 lets you adjust a number of power management settings: for example, when to trigger notifications or warnings, which power profile to use when running on battery, what to do when closing the laptop lid or pressing the power or sleep button.
Access the configuration options from the main menu by selecting *Configure Desktop > Advanced > Power Management*. Alternatively, click the battery monitor icon in the panel and click select *Configure*.

**Figure 9.2  Power Management Settings**

To get an overview of your system's power management abilities like supported suspend methods or CPU policies, click *Capabilities*. Click the other categories to configure general settings and power management profiles.
Procedure 9.1  Configuring General Settings

1 In the General Settings category, decide if the screen should be locked after a suspend action, so that the user needs to type in his password when the machine resumes after a suspend.

2 Configure which notification or warnings you want to receive for certain events like low battery status, or if you want suspend actions to be executed at once or only after a certain time interval.

3 Decide which power profiles should be applied by default when the system is running on AC power, on battery, or when the battery is low or at warning level.

4 Click Advanced Battery Settings if you want to fine-tune the battery levels that are regarded as low or critical or to define which action should be taken at a critical battery level.

5 For detailed information about the available options, click Help.

6 If all options are set according to your wishes, click Apply.

Procedure 9.2  Configuring Power Management Profiles

Apart from the general settings, you can adjust the default power management profiles or add new profiles in the Edit Profiles category.

1 Click one of the available profiles in the list to view or change the specific settings for that profile: which Actions are taken when the lid of the laptop is closed or the Power or Sleep button is pressed, how much the Screen is dimmed and after how many minutes the display is turned off automatically. Click CPU and System to view or change which CPU to turn off (if supported by your machine) or to set the CPU frequency scaling policy for that profile.

2 Use the icons at the bottom of the list with profiles if you want to add, delete, import or export power management profiles.
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