Fedora 13

User Guide

Using Fedora 13 for common desktop computing tasks

Fedora Documentation Project

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Using Fedora 13 for common desktop computing tasks
Edition 1.0

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The Fedora User Guide is focused on the end-user looking to accomplish standard desktop computer user tasks, such as browsing the web, reading and sending email, and doing office productivity work.

Preface

1. Document Conventions

This manual uses several conventions to highlight certain words and phrases and draw attention to specific pieces of information.

In PDF and paper editions, this manual uses typefaces drawn from the *Liberation Fonts*[1] set. The Liberation Fonts set is also used in HTML editions if the set is installed on your system. If not, alternative but equivalent typefaces are displayed. Note: Red Hat Enterprise Linux 5 and later includes the Liberation Fonts set by default.

1.1. Typographic Conventions

Four typographic conventions are used to call attention to specific words and phrases. These conventions, and the circumstances they apply to, are as follows.

`Mono-spaced Bold`

Used to highlight system input, including shell commands, file names and paths. Also used to highlight keycaps and key combinations. For example:

> To see the contents of the file **`my_next_bestselling_novel`** in your current working directory, enter the **`cat my_next_bestselling_novel`** command at the shell prompt and press **`Enter`** to execute the command.

The above includes a file name, a shell command and a keycap, all presented in mono-spaced bold and all distinguishable thanks to context.

Key combinations can be distinguished from keycaps by the hyphen connecting each part of a key combination. For example:

> Press **`Enter`** to execute the command.
>
> Press **`Ctrl`**+**`Alt`**+**`F1`** to switch to the first virtual terminal. Press **`Ctrl`**+**`Alt`**+**`F7`** to return to your X-Windows session.

The first paragraph highlights the particular keycap to press. The second highlights two key combinations (each a set of three keycaps with each set pressed simultaneously).

If source code is discussed, class names, methods, functions, variable names and returned values mentioned within a paragraph will be presented as above, in **`mono-spaced bold`**. For example:

> File-related classes include **`filesystem`** for file systems, **`file`** for files, and **`dir`** for directories. Each class has its own associated set of permissions.

Proportional Bold

This denotes words or phrases encountered on a system, including application names; dialog box text; labeled buttons; check-box and radio button labels; menu titles and sub-menu titles. For example:

[1] https://fedorahosted.org/liberation-fonts/

Choose **System** → **Preferences** → **Mouse** from the main menu bar to launch **Mouse Preferences**. In the **Buttons** tab, click the **Left-handed mouse** check box and click **Close** to switch the primary mouse button from the left to the right (making the mouse suitable for use in the left hand).

To insert a special character into a **gedit** file, choose **Applications** → **Accessories** → **Character Map** from the main menu bar. Next, choose **Search** → **Find…** from the **Character Map** menu bar, type the name of the character in the **Search** field and click **Next**. The character you sought will be highlighted in the **Character Table**. Double-click this highlighted character to place it in the **Text to copy** field and then click the **Copy** button. Now switch back to your document and choose **Edit** → **Paste** from the **gedit** menu bar.

The above text includes application names; system-wide menu names and items; application-specific menu names; and buttons and text found within a GUI interface, all presented in proportional bold and all distinguishable by context.

Mono-spaced Bold Italic or ***Proportional Bold Italic***

Whether mono-spaced bold or proportional bold, the addition of italics indicates replaceable or variable text. Italics denotes text you do not input literally or displayed text that changes depending on circumstance. For example:

To connect to a remote machine using ssh, type **ssh *username*@*domain.name*** at a shell prompt. If the remote machine is **example.com** and your username on that machine is john, type **ssh john@example.com**.

The **mount -o remount *file-system*** command remounts the named file system. For example, to remount the **/home** file system, the command is **mount -o remount /home**.

To see the version of a currently installed package, use the **rpm -q *package*** command. It will return a result as follows: ***package-version-release***.

Note the words in bold italics above — username, domain.name, file-system, package, version and release. Each word is a placeholder, either for text you enter when issuing a command or for text displayed by the system.

Aside from standard usage for presenting the title of a work, italics denotes the first use of a new and important term. For example:

Publican is a *DocBook* publishing system.

1.2. Pull-quote Conventions

Terminal output and source code listings are set off visually from the surrounding text.

Output sent to a terminal is set in **mono-spaced roman** and presented thus:

```
books        Desktop   documentation  drafts  mss    photos   stuff  svn
books_tests  Desktop1  downloads      images  notes  scripts  svgs
```

Source-code listings are also set in **mono-spaced roman** but add syntax highlighting as follows:

```
package org.jboss.book.jca.ex1;

import javax.naming.InitialContext;

public class ExClient
{
   public static void main(String args[])
       throws Exception
   {
      InitialContext iniCtx = new InitialContext();
      Object         ref    = iniCtx.lookup("EchoBean");
      EchoHome       home   = (EchoHome) ref;
      Echo           echo   = home.create();

      System.out.println("Created Echo");

      System.out.println("Echo.echo('Hello') = " + echo.echo("Hello"));
   }
}
```

1.3. Notes and Warnings

Finally, we use three visual styles to draw attention to information that might otherwise be overlooked.

Note

Notes are tips, shortcuts or alternative approaches to the task at hand. Ignoring a note should have no negative consequences, but you might miss out on a trick that makes your life easier.

Important

Important boxes detail things that are easily missed: configuration changes that only apply to the current session, or services that need restarting before an update will apply. Ignoring a box labeled 'Important' won't cause data loss but may cause irritation and frustration.

Warning

Warnings should not be ignored. Ignoring warnings will most likely cause data loss.

2. We Need Feedback!

If you find a typographical error in this manual, or if you have thought of a way to make this manual better, we would love to hear from you! Please submit a report in Bugzilla: *http://bugzilla.redhat.com/bugzilla/* against the product **Fedora Documentation.**

When submitting a bug report, be sure to mention the manual's identifier: *user-guide*

If you have a suggestion for improving the documentation, try to be as specific as possible when describing it. If you have found an error, please include the section number and some of the surrounding text so we can find it easily.

Introduction

1. Purpose and Audience

Welcome to the Fedora 13 User Guide! This guide is intended for users who have a working Fedora 13 system and are able to use a mouse and keyboard.

The purpose of this guide is twofold. First, it aims to orient new users with Linux or Fedora specific conventions and methods that they may not already be familiar with, even if they are comfortable using computers. Simultaneously, this document guides the user through carrying out common desktop tasks including (but not limited to) setting up email, using an office suite, and managing software.

Underneath all of this, the User Guide also diverges into basic command-line alternatives for many of the presented methods (like installing software) to help the newer user become familiar with using a terminal, and it points to more advanced guides for tasks that the ambitious user may be interested in but which are not immediately within the scope of this guide.

2. About this document

Volunteer contributors from the Fedora Documentation Project create this guide for each release of Fedora. If you have questions or suggestions about Fedora's documentation, or if you would like to help document Fedora, please visit the *Fedora Documentation Project web site*[1].

For assistance installing Fedora 13, please read the *Fedora 13 Installation Guide*, available from *http://docs.fedoraproject.org/install-guide/f13/*[2].

Thank you for choosing Fedora.

[1] https://fedoraproject.org/wiki/DocsProject
[2] http://docs.fedoraproject.org/install-guide/f/

The Fedora desktops

In contrast to most proprietary operating systems, Fedora 13 has several *desktop environments* or *desktops* that can display and launch available applications and manage the overall appearance of the screen. The desktop environment is sometimes referred to as the *Graphical User Interface* (GUI).

Three widely-used desktops included with Fedora 13 are:

- **GNOME**, which focuses on simplicity
- **KDE**, which includes a large collection of applications and customization features
- **Xfce**, a desktop with low hardware requirements, suitable for older computers

More Desktop Environments Exist!

Fedora's extensive repository of software offers other desktops as well, such as **Fluxbox**[1] (minimalist desktop), **Sugar**[2] (the desktop environment for the OLPC XO), and **LXDE**[3]. To learn how to browse and install software from the repository, refer to *Chapter 17, Managing software*

With few exceptions, applications included with a particular desktop environment run in other environments too. For instance, the **OpenOffice.org** office suite runs on all three major desktop environments.

Some applications are created specifically for a particular desktop environment. For example, each major desktop has a preferred text editor. GNOME uses **Gedit** and KDE supplies **Kwrite**, but you can install and use these in either environment.

Fedora provides a wide choice of applications to browse the World Wide Web, create documents, and display and edit photos. This guide describes the most commonly installed applications on the most common desktop environments, as well as the useful alternatives.

Logging into the desktop

This section of the Fedora User Guide explains how to identify yourself (or *log in*) to your system. During the post-installation process, you created an identity with a user name and a password, called an *account*. If you have forgotten any of your user account details, refer to *Section 2.3, " I Cannot Login: help! "*. For additional information about the login process, refer to the section *Section 2.2, " Logging in: a technical explanation "*.

2.1. Logging in

When you restart or turn on your computer, it goes through a process called *booting*. During the boot process, your computer hardware powers on, performs a series of self-tests, and loads the operating system. Immediately after the computer has finished booting, the login screen appears. The login screen displays one or more user names, depending on the number of user accounts present.

To log in to your account

1. Enter your username, using one of the following methods:
   - Type your username and then press the **Enter** key. The username is *case sensitive* (capitalization matters; **A** is not the same as **a**).
   - Click on your username in the list of choices.
2. Custimize your desktop environment

This step is optional

You do not normally need to choose a desktop, lauguage, or keyboard. If you skip this step, Fedora will load the default environments for your computer.

Use the pull down menues at the bottom of the screen to change you desktop language or keyboard layout. To use a *desktop environment* other than the default choice, use the **Sessions** combo box on the bottom of the screen to select the desktop you wish to load *before* you enter your password. The default is usually GNOME; refer to *Chapter 1, The Fedora desktops* for other choices. *Note:* The **Sessions** combo box will be shown only if more than one desktop environment is installed.

3. Enter your password in the text box and press the **Enter** key. Like your username, your password is case sensitive.

Keep your password secret!

To keep your password secret, the password field displays a dot for every character entered. As with any password, keep your account password private. Do not share it with anyone or write it down in plain view.

4. The desktop environment now loads. In some desktop environments, a small box containing a logo and some icons called a *splash screen* may temporarily appear. When your splash screen (if you have one) disappears, your desktop is ready for use. You can now launch applications to

access the Internet, manage files, and play media. These tasks are described in the following chapters.

2.2. Logging in: a technical explanation

Fedora is a multi-user operating system. Multiple users, each with different access privileges, can be logged into the computer at the same time.

During installation, you provided a password for the system administrator account, sometimes called the *superuser*. The user name for this account is **root**.

After installation, Fedora asked you to set up a normal user account. Use that account, or any other such normal account, for daily use of the system, and the root account for administrative and maintenance tasks.

This design has many benefits:

- Limited privileges reduce the possibility of doing significant damage to the entire system.
- Each user account has individual settings.
- Each user account maintains its data separate and private from others.
- A problem in one user account does not put the entire system at risk.

Do not log in as root!

Do not use the root account for routine purposes. A normal user account can run all the desktop applications, and greatly increases your security and safety. Applications that require root privileges prompt you for the root password when they need it. There is no need to log in as root to use them.

2.3. I Cannot Login: help!

A common mistake during login is accidentally having the **Caps Lock** key turned on. This situation can cause the login process to fail because usernames and passwords are case sensitive. If problems persist, re-enter your username and password a few times to ensure that you have typed them correctly.

Recovering the password for a user account is not a difficult process, but it is beyond the scope of this guide. You may wish to ask for help on user forums or chat rooms for further assistance.

Tour of the GNOME desktop

This chapter introduces the GNOME desktop in Fedora. The desktop becomes easier to use after you know some of the common terminology used, beginning with the GNOME desktop.

If you installed Fedora 13 from the Fedora 13 Live image, whether for Intel or compatible (i686) or 64-bit (x86_64), GNOME is the installed desktop. You can find details of two alternative desktops in *Chapter 4, Tour of the KDE desktop* and *Chapter 5, Tour of the Xfce desktop*.

3.1. The GNOME Desktop

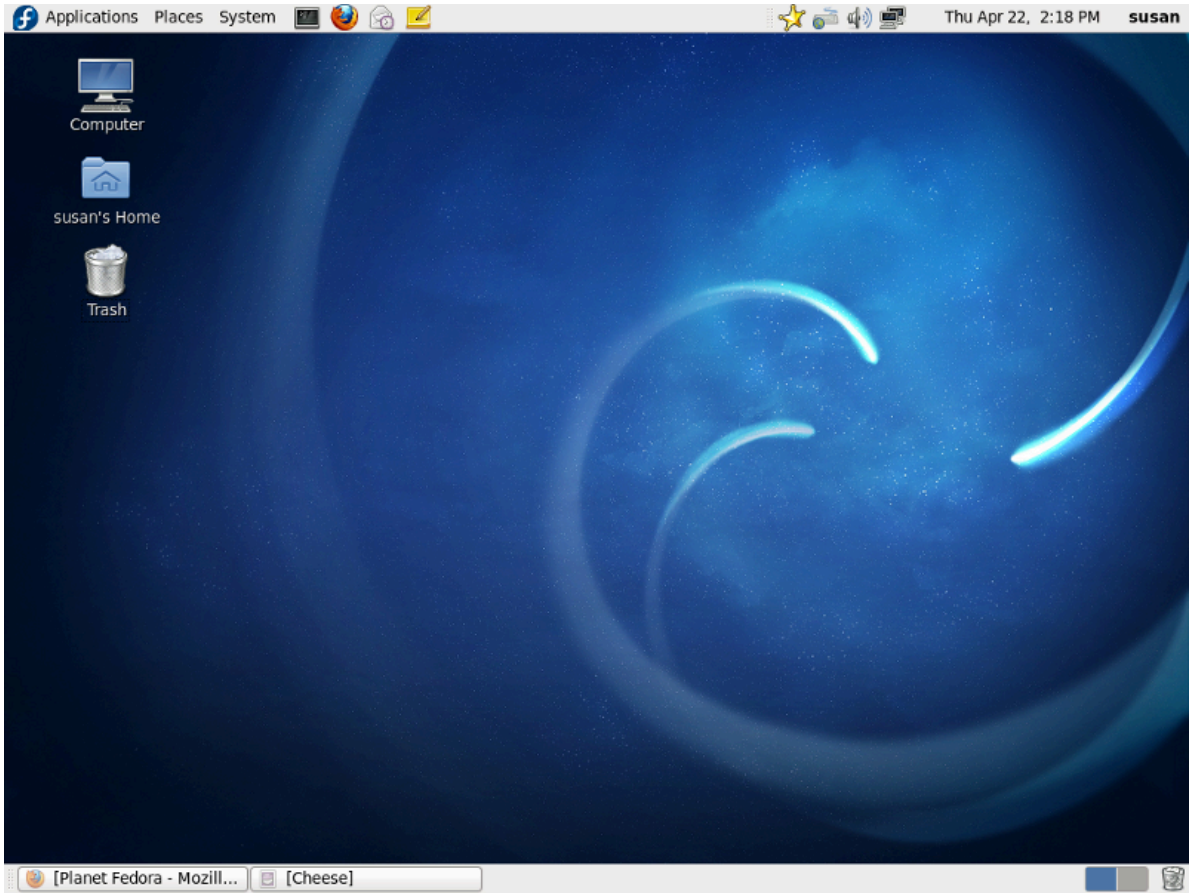

Figure 3.1. The GNOME Desktop

The GNOME Desktop has three distinct areas. From top to bottom, they are:

- the *Top Menu Panel* (the gray bar at the top).
- the *Desktop Area* (the workspace area in the center that fills most of the screen).
- the *Window List Panel* (the gray bar at the bottom).

3.1.1. The Top Menu Panel

This panel stretches across the top of the screen. The left side contains:

- the *Applications Menu*.
- the *Places Menu*.

- the *System Menu*.
- Program Icons for the default email program, web browser, and reminder notes. Users may add additional program icons.

The right side of the Panel is home to:

- the *Notification area*.
- a Volume Control and Sound Preferences applet.
- the *Network Manager* applet.
- the *User Switch area*.
- a Clock and Calendar applet.

Function description

If you hold the mouse pointer over the menu text or an icon, a brief description of its function appears. If you click one of these icons, that application starts.

3.1.1.1. The Applications menu

This menu contains a categorized list of installed applications, which are updated as necessary when software is installed or removed. When you click on **Applications** a drop-down list appears. The default list installed is:

- **Accessories**
- **Games**
- **Graphics**
- **Internet**
- **Office**
- **Sound & Video**
- **System Tools**

Other common menu items added with additional software include:

- **Education**
- **Other**
- **Programming**

3.1.1.2. The Places menu

This menu is divided into four subsections.

- The first subsection allows quick access to commonly accessed folders, and makes it easy to keep your file system organized. clicking on these links will open **Nautilus**, the default graphical file manager of GNOME. These links are:
  - **Home Folder** where your personal files are kept by default.

- **Desktop**, a folder within your **Home Folder** where the files and folders that appear on your desktop are stored.
- **Documents**, a folder within your **Home Folder** intended as a place for you to store documents, such as those that you might have created with a word processor or spreadsheet program.
- **Music**, a folder within your **Home Folder** intended as a place for you to store music files.
- **Pictures**, a folder within your **Home Folder** intended as a place for you to store photographs and other pictures.
- **Videos**, a folder within your **Home Folder** intended as a place for you to store videos.
- **Download**, a folder within your **Home Folder** intended as a place for you to store miscellaneous files that you have downloaded from the Internet.
- **Bookmark**, a list of folders that you have bookmarked in **Nautilus**.

- The second subsection allows quick access to:
  - the **Computer** window, which allows you to browse the computer's files and all data storage attached to the computer.
- The third section provides links to tools that help you browse and manage network locations.
  - **Network** allows you to view the networks that your computer is attached to, and to access files and other resources available through those networks.
  - **Connect to Server** allows you to create connections to public or local networks.
- The fourth section helps you quickly access any file on the system.
  - **Search for files** allows you to search for files stored on your computer.
  - **Recent Documents** lists the documents and folders recently accessed.

3.1.1.3. The System menu

This menu is divided into three subsections.

- The first provides access to configuration tools.
  - The **Preferences** menu contains tools that affect only your account, and only require normal user access. These links include:
    - **About Me** stores details about yourself that you can share with other people as an electronic business card.
    - **Appearance** customizes the appearance of your desktop, including the background picture.
    - **Assistive Technologies** lets you choose software to magnify portions of the screen or to read the contents of screens to you.
    - **Bluetooth** configures Bluetooth devices to work with your computer
    - **Color Profiles** to manage, install and generate color profiles.
    - **Desktop Effects** enables or disables special visual effects for the desktop.
    - **File Management** controls how files and folders are presented to you.

- **Input Method** allows you to choose methods to input languages whose writing systems do not use an alphabet, such as some Indic and East Asian languages.
- **Keyboard** specifies the type of keyboard that you use with this computer.
- **Keyboard Shortcuts** sets key combinations to perform certain tasks within certain programs, or within the desktop environment more generally.
- **Messaging and VoIP Accounts** Configure accounts for Empathy instant messaging client and VoIP application
- **Monitors** sets the resolution and other details of your display.
- **Mouse** configures the buttons and other controls on your mouse.
- **Network Authentication** configure Kerberos Network Authentication preferences.
- **Network Connections** displays your computer's network connections and allows you to configure them.
- **Network Proxy** allows you to specify a *proxy server* for your computer.
- **Personal File Sharing** lets you share your documents and other files with other users of this computer or with users of other computers over a network.
- **Power Management** configures your computer to perform differently under different power settings.
- **Preferred Applications** lets you choose which applications you prefer to use for particular tasks.
- **Remote Desktop** permits you or other people to access your computer's desktop from a remote location over a network connection.
- **Screensaver** sets your screensaver.
- **Seahorse-Preferences** allows you to set the cipher-key's properties.
- **Software Updates** specifies how you would like your computer to handle software updates when they become available.
- **Sound** lets you choose sounds to accompany actions or events on your computer.
- **Startup Applications** chooses applications to start automatically when you log in.

- The **Administration** menu contains tools that affect the whole system and require root access. These tools prompt for the root password when launched.
  - **Add/Remove Software** lets you change the software installed on the system.
  - **Authentication** allows you to control how the system verifies users who attempt to log in.
  - **Bootloader** lets you choose your default boot entry and the time the boot message is displayed.
  - **Date and Time** permits the system date and time to be changed.

- **Firewall** link lets you setup and configure a firewall for your computer.
- **Language** allows you to change the default language.
- **Logical Volume Management** lets you configure the LVM in a graphical setting.
- **Network** permits configuration of your network connections and devices.
- **Network Device Control** lets you monitor and control your network devices.
- **Printing** allows you to configure your printers.
- **SELinux Management** allows you to change security settings that protect your computer.
- **Services** lets you decide which services will run when the system starts.
- **Update System** looks for software updates at your selected software sources.
- **Users and Groups** allows you to add or remove users and groups.

- The second section provides access to the help documentation, along with information about the Fedora project, the GNOME project and information about your computer and its operating system.
  - **Help** is the guide for questions about GNOME.
  - **About This Computer** provides basic information about your computer and links to the process and resource monitor.
- The third section contains entries to
  - **Lock Screen** starts the screen saver or blanks the screen. It will ask for your password to restore your session to the screen.
  - **Log Out** of the current session.
  - **Shut Down** gives you options to **Hibernate**, **Restart**, or **Shut Down** your computer.

Root password

When your computer asks for your root password it means you are entering an area that changes your system's operation or performance. Beware of the messages the program generates and be sure you really want to make the changes.

3.1.1.4. Application launchers

The series of icons next to the menus provide quick access to commonly used applications. These icons are called *launchers*.

The icon for **Mozilla Firefox**, a web browser.

The icon for **Evolution**, a mail client and personal information manager.

The icon for **Gnote**, note-taking software.

To add more launchers to a panel, right-click on the panel and select **Add to Panel**. You can also add launchers that are in the **Applications** menu. Right click on the application you want to add and select **Add this launcher to panel**.

3.1.1.5. The Notification area

The Notification area displays icons that alert you to new events taking place on your computer. For example, your email program might display an icon here to indicate the arrival of new email, or your printer software might display an icon here to indicate that a document is now printing.

3.1.1.6. Volume control

The volume control allows you to quickly change the overall volume of sound on your computer. Click the icon to show a slider, and then use the mouse to drag the slider to the desired volume. If you double-click the icon, a volume control window appears in which you can separately change the volume of different sound sources.

3.1.1.7. Network Manager applet

The Network Manager applet allows you to quickly connect and disconnect from available networks, both wired and wireless. Left click on the applet to see what connections are enabled or available. If you choose to connect to a connection, say a wireless connection in a coffee shop, you also have the option to save those settings and automatically connect when you return. Right click on the applet to enable and disable network devices or to edit or remove saved connections. See *Chapter 7, Connecting to the Internet* for more information.

3.1.1.8. The user switch area

If you click the current username located next to the clock, a list of available users appears. To switch to a different user account, select the username.

3.1.1.9. Clock and calendar

To access the calendar, click the clock on the right hand side of the panel. When you double-click a date, the **Evolution** personal information manager opens. There is also a weather feature. Click the **edit** button to modify or add locations to be displayed.

3.1.2. The desktop area

The default desktop area, or *workspace*, contains three icons:

- the **Computer** icon. If you double-click this icon, a window appears that contains available storage devices on the computer. These are also listed in the **Places** → **Computer** menu.
- the **Home** icon, which represents the location where all of the logged in user's files, such as music, movies, and documents, are stored by default. There is a different home directory for each user, and users cannot access each other's home directories by default.
- the **Trash** icon. Normally, when you choose to delete a file, it is not permanently removed from your system. Instead, it is sent to the trash folder, which you can access from this icon. To permanently remove a file from your system, you must *empty* the trash. To empty the trash, right-click the icon and select **Empty Trash**.

Permanently deleting files

To bypass the trash and permanently delete a file, hold down the **`Shift`** key when deleting the file.

The Fedora Live CD desktop also includes an icon for installing Fedora to your hard disk. Additional icons may appear depending on your system. For example, inserting a USB stick will cause an icon to appear for accessing the stick.

3.1.2.1. Using the desktop

Right-click on the desktop area for a menu of actions related to the desktop area. For example, the **Change Desktop Background** action lets you choose a different image or photograph to display on the desktop. Add program icons to your desktop by a left click on the program's icon and select **Add this launcher to desktop**.

3.1.3. The window list panel

This panel has three components:

- Any open applications appear as button icons in the middle part of the window list panel. It shows all application windows in use on the desktop workspace, whether they are visible or hidden. A hidden window button appears with a white background. The currently selected application window button has a gray background, and is said to have *focus*. Usually, this is the application whose window is on top of all the others on the screen. To switch from one running application to another using the mouse, click on the desired application's button in the panel.

Use the key combination `Alt+Tab` to switch between open windows

Holding down the **`Alt`** key and pressing the **`Tab`** key will open a small window containing icons of all of your open windows. Repeatedly pressing the **`Tab`** key cycles through the icons. Release both keys on your selection to pull it to the front

- The *Workspace Switcher* is the group of squares situated on the far right. They allow you to move between *workspaces*. Workspaces have long been a feature of UNIX and Linux desktop environments. Each workspace provides a separate desktop where applications can be organized, and a corresponding window list panel. By default there are four workspaces available. To change this number, right-click on the workspace switcher and choose **preferences**.

Switching between workspaces

Use the key combination **Ctrl+Alt+Left Arrow** or **Ctrl+Alt+Right Arrow** to switch between workspaces.

Hold down the **Ctrl** and **Alt** keys and press either the **Left Arrow** key or **Right Arrow** key to cycle through the available workspaces on your system.

- The **Trash** icon on the right end of the window list panel works the same way as the **Trash** icon in the desktop area. If you delete a file, it is moved to this location. A right click on the **Trash** icon brings up the options to **Open** the folder, **Empty Trash**, **Remove from Panel**, and **Lock to Panel**.

Tour of the KDE desktop

This chapter introduces the KDE desktop in Fedora 13. It is easier to explain how to use the desktop throughout this guide after explaining some of the common terminology used with the KDE desktop.

4.1. The KDE desktop

If you installed Fedora 13 from the Fedora 13 KDE Live CD, KDE is the default desktop on your computer. If you installed Fedora 13 from the Fedora DVD, your the default desktop is GNOME, and KDE is available as an option at the login screen. *Chapter 3, Tour of the GNOME desktop* describes the GNOME desktop.

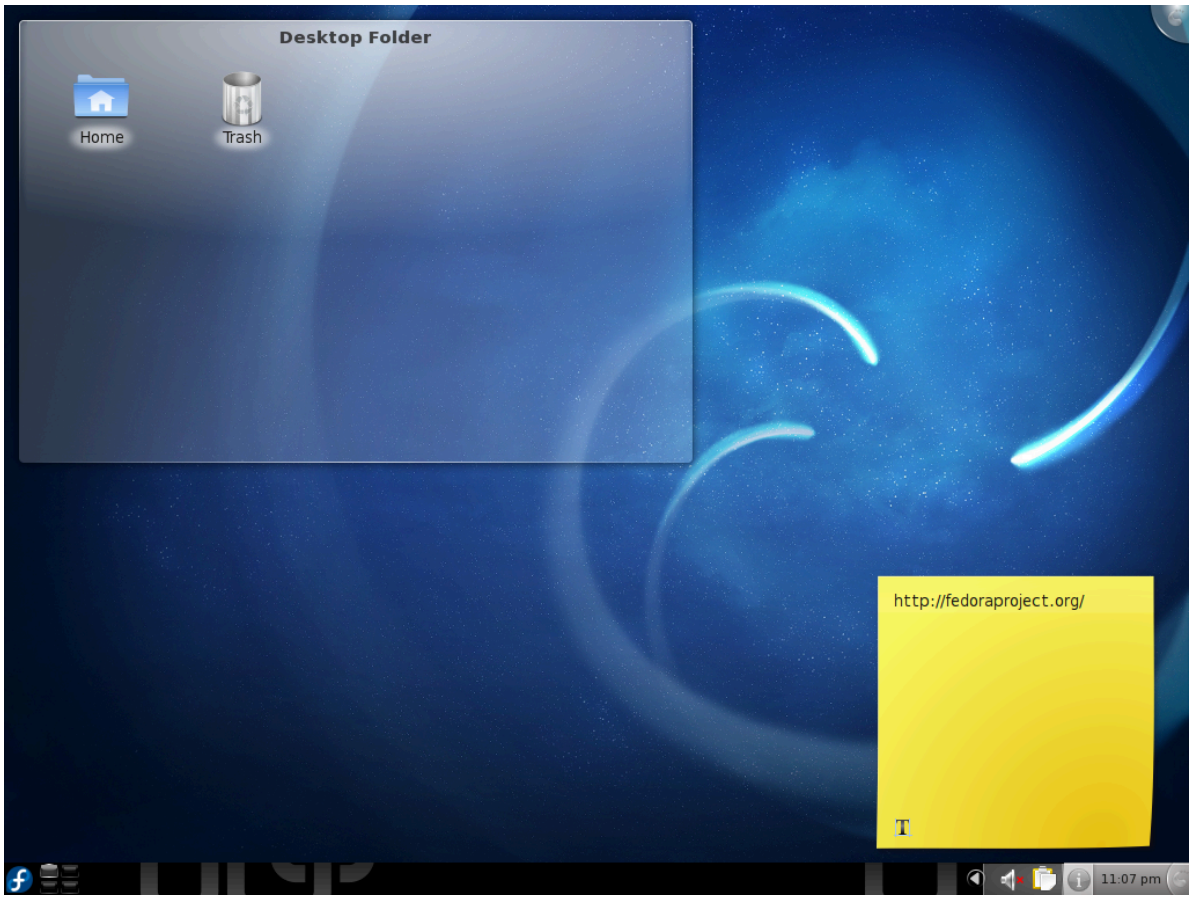

Figure 4.1. The KDE desktop

The KDE desktop has two main areas:

- The *desktop area*
- The *KDE panel*

The layout and location of these items can be customized, but the term used for each of them remains the same.

The desktop area is the large space where windows are displayed. Icons for the **Home** folder and **Trash** are located in the top left corner of this area, within a tinted area that represents the contents of a folder (in this case, the **Desktop** folder).

The KDE panel is located at the bottom, and spans the entire width of the screen. It features the **Kickoff Application Launcher**, **Device Notifier** and application launchers, displays the running applications as buttons, and gives access to the workplace switcher, calendar, and the clock.

The following sections describe the KDE desktop area and the KDE panel in further detail.

4.2. The KDE desktop area

Before any additional icons are added to it, the desktop area is fairly empty and contains only a translucent area that represents the contents of the **`Desktop Folder`** at the top left of the screen, and a single desktop *widget* (**Notes** — a place where you can type reminder notes to yourself) at the bottom right. The **`Desktop Folder`** area contains icons for **Home** folder and **Trash**. You can add icons to the desktop for applications or places by finding them in the **Kickoff Application Launcher** menu, right-clicking them and clicking **Add to Desktop**.

Right-clicking on the desktop presents a menu of actions related to the desktop area. For example, selecting **Appearance Settings** lets you change the desktop background and visual theme. You can also change the appearance of your desktop by clicking the *plasma toolbox* at the top right corner of the screen.

4.3. The KDE panel

By default, the KDE panel extends the full width of the bottom part of the screen and contains the following controls, called *widgets*:

- the **Kickoff Application Launcher**. In Fedora 13, this is represented by an icon of the Fedora "Infinity" logo. The **Kickoff Application Launcher** gives you access to software and storage locations on your computer, as well as allowing you to perform system-related tasks. It is described in more detail in *Section 4.3.1, “The Kickoff Application Launcher”*.

- the **Pager**, which allows you to switch between multiple *desktops* on your computer. Multiple desktops (or *workspaces*) have long been a feature of UNIX and Linux desktop environments. Each desktop provides a separate view with different applications running in it. Four desktops are configured by default. Clicking on one of the faded workspaces will change to that workspace, or you can switch between them by holding down the **`Alt`** key on your keyboard and pressing the **F1**, **F2**, **F3**, or **F4** key. To add more desktops, right-click on the **Pager**, then click **Pager Settings** → **Configure Desktops...**.

- the **Task Manager**, which displays buttons for any applications that are running. Clicking on one of these buttons brings that application to the foreground of your current view.

Use the key combination `Alt+Tab` to switch between open windows

Holding down the **`Alt`** key and pressing the **`Tab`** key will open a small window containing icons of all of your open windows. Repeatedly pressing the **`Tab`** key cycles through the icons. Release both keys on your selection to pull it to the front

- the **System Tray**, which shows **Klipper** (a clipboard tool) and displays status notifications, such as the status of network connections or remaining battery power.

- a clock. Click on the clock to see a calendar, or right-click on it to change the way that the panel displays the time and date.
- the *plasma toolbox* for the panel. Clicking here allows you to change the size and proportions of the panel, and to re-arrange the order of the widgets that it displays.

4.3.1. The Kickoff Application Launcher

The **Kickoff Application Launcher** contains:

- **Favorites** – your favorite applications and places. Right click on an application or folder icon to add it to this list. The initial list consists of:
  - **Web Browser** – **Konqueror**, the default web browser installed with KDE.
  - **System Settings**, which allows you to personalize your computer.
  - **File Manager**, which allows you to browse files and folders on your computer. The default file manager installed with KDE is **Dolphin**
- **Applications** – the applications installed on your computer, sorted into the following groups:
  - **Administration**
  - **Development**
  - **Education**
  - **Games**
  - **Graphics**
  - **Internet**
  - **Multimedia**
  - **Office**
  - **Settings**
  - **System**
  - **Utilities**
  - **Find Files/Folders**
  - **Help**
  - **Personal Files**
- **Computer** – information about your computer, and links to important places on it.
  - **Run Command**, which allows you to launch a piece of software by typing its name.
  - **Home**, your **`Home`** folder, the default storage location for your documents and media files.
  - **Network**, which displays information about your network connections and allows you to change network settings.

- **Root**, the folder that contains every other file and folder in your file system.

Warning

Do not move or delete items from this folder unless you are certain that you understand what you are doing. If you move or delete items within this folder, you might damage your installation of Fedora to the point where it can no longer function.

- **Trash**, which holds files and folders that you have deleted from your system.

- **Recently Used** – applications and documents that you used recently.
- **Leave** – options to finish working with your computer.
  - **Logout** ends your session, but leaves the computer running.
  - **Lock** leaves you logged in, but blanks the screen and prevents interaction with the computer until you type in your password.
  - **Switch User** leaves you logged in, but lets another user log in to the computer.
  - **Suspend to Disk** pauses your computer without logging out.
  - **Restart** restarts your computer.
  - **Shutdown** turns off your computer.

Tour of the Xfce desktop

This chapter introduces the **Xfce 4** desktop in Fedora. It is easier to explain how to use the desktop after explaining some of the common terminology used with the **Xfce 4** desktop.

5.1. The Xfce 4 desktop

One common reason for using the **Xfce 4** desktop is to provide a feature-rich desktop environment for a desktop computer or a laptop with limited memory.

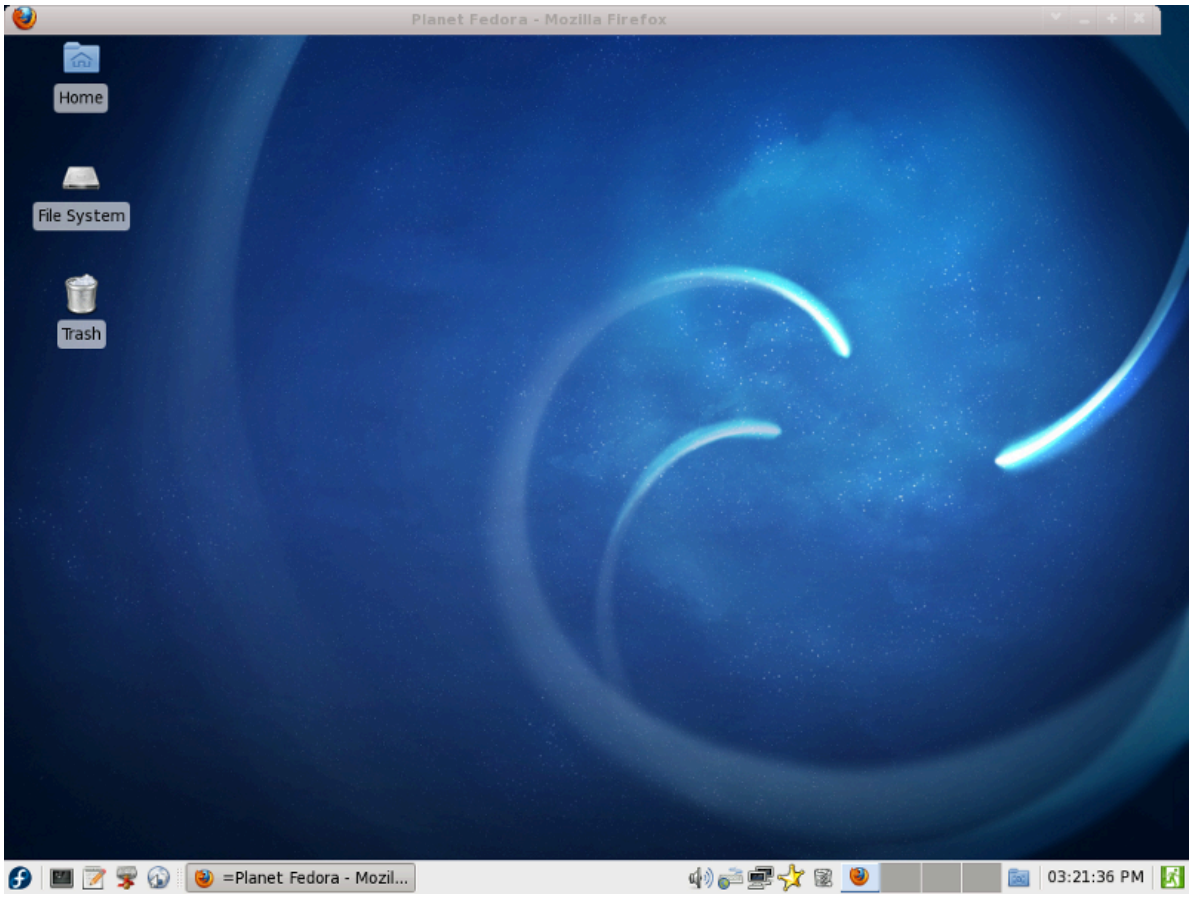

Figure 5.1. The Xfce desktop

The **Xfce 4** desktop has two distinct areas. From top to bottom, the areas are:

- the *desktop area*.
- the *menu panel*.

The layout and location of these items can be customized, but the term used for each of them remains the same.

The desktop area occupies most of the screen. The **Filesystem**, **Home Directory**, and **Trash** icons are located in the top left corner of this area.

The menu panel is located at the bottom of the screen. On the left part of the panel it contains a number of default icons that start software applications. On the right of the panel, from left to right,

there is a **Notification Area**, a **Trash** button, a **Workspace Switcher**, a **Show Desktop** button, a **Clock**, and **Switch User** and **Action** buttons. In between the two sets of icons there is a **Task List**.

The following sections discuss the **Xfce 4** menu panel and desktop area in further detail.

5.1.1. The Xfce 4 menu panel

This panel contains a number of *launchers* for common software. To customize the appearance of a launcher, right-click on it and select **Properties**.

- **Applications** contains all the programs.
- **Command Prompt** opens the console.
- **Editor** opens **Mousepad**, a generic text editor.
- **File Manager** opens **Thunar**, a file manager program.
- **Web Browser** opens **Firefox**, a popular web browser.
- **Notification Area** displays notices and applets from various applications, for example the network and power managers.
- **Trash** gives access to the **`Trash`** directory.
- **Workspace Switcher** allows you to switch to other workspaces. Four workspaces are provided by default.
- **Show Desktop** minimizes all open windows to show a clear work area.
- **Clock** is a generic clock that can be modified by right clicking on it.
- **Switch User/Action** are the buttons on which you click to swich to a different user, log out, restart, and shutdown Xfce.

The **Applications** button consists of several components:

- **Run Program...**
- **Terminal**
- **File Manager**
- **Web Browser**
- **Preferences**
- **Administration**
- **Accessories**
- **Development**
- **Games**
- **Graphics**
- **Multimedia**

- **Network**
- **Office**
- **Other**
- **System**
- **Help**, **About**, and **Quit** buttons.

Open applications appear as button icons in the middle part of the menu panel, known as the **Task List**.

The application window that has *focus* appears as a depressed button. Usually, this is the application whose window is on top of all others currently on the screen. To switch from one running application to another, click on the desired application's button in the task list.

Use the key combination `Alt+Tab` to switch between open windows

Holding down the **`Alt`** key while you tap the **`Tab`** key allows you to cycle through all open applications.

Customize the clock by right-clicking the clock on the right hand side of the panel and choose **Properties**. Properties allows you to:

- change to or from a digital clock style.
- change the clock's display to and from a 12 and 24 hour format.
- change the date format.

Change the appearance of the panel by right-clicking on it and selecting **Customize Panel...**. To add new items, right-click on the area where the new item should appear and select **Add New Items...**.

5.1.2. The Xfce 4 desktop area

Before any additional icons are added to the desktop, the desktop area contains three icons by default:

- **Filesystem** – this contains all mounted volumes (or disks) on the computer; all of these are also available by clicking on the **Applications** menu and selecting **Filesystem**.
- **Home** – this is where all files - such as music, movies and documents - belonging to the logged-in user are stored by default. There is a different home directory for each user and users cannot by default access each others' home directories.
- **Trash** – deleted files are moved here. Empty the **Trash** folder by right-clicking the Trash icon and clicking **Empty Trash**.

Permanently deleting files

To permanently delete a file, and bypass the file's move to **Trash**, hold down the **`Shift`** key when deleting the file.

Right-clicking on the desktop presents a menu of actions related to the desktop area. For example, clicking on **Desktop Settings...** lets you choose a different image or photograph to display on the desktop.

Media

When you insert or connect *media* such as a CD, DVD, hard drive, or flash drive, to your computer, the desktop enviroments in Fedora automatically recognizes the media and make it available for use. An icon is placed on your desktop and in the **Places** menu in **GNOME**. On the **KDE** desktop an icon is placed in the bottom panel next to the **pager**.

In **GNOME** you should *unmount* media before removing it from the computer. To do this, right-click on the device's icon and then select **Unmount Volume** or **Eject**, depending on what type of media you are using. During this process any remaining changes to the data on the media are *written* to the device, allowing safe removal without data loss. If you remove media without unmounting it first, you could cause data to be corrupted or lost.

There are several multi-media applications available for **GNOME** and **KDE** desktops. These applications will run in either Fedora desktop environment. To install software packages not already installed, refer to *Chapter 17, Managing software*. You can install applications either by using the **PackageKit** application or on the command line by using **Yum**.

6.1. ISO images

The instructions in this chapter refer to *image files* at various points. In this context, an *image file* (or *disc image*) is an archive file of an *optical disc*, in a format defined by the International Organization for Standardization (ISO). ISO image files typically have an **`.iso`** extension. The name ISO is taken from the *ISO 9660 file system* used with CD-ROM media, but an ISO image can also contain *Universal Disk Format* (UDF) file system because UDF is backward-compatible with ISO 9660. An ISO image includes all the data of files contained on the archived CD or DVD. They are stored in an uncompressed format.

In addition to data of the files it also contains all the file system metadata, including boot code, structures, and attributes. ISO images do not support *multi-track*, thus they cannot be used for audio CDs, VCD, and hybrid audio CDs.

6.2. Writing CDs or DVDs

Fedora includes support for writing to CDs and DVDs. This means that you can permanently *burn* files to CDs or DVDs for backup, file transport, or any other reason.

Required hardware

Not all optical drives (CD or DVD drives) are equipped to burn new media. An easy way to check whether that you can burn optical media is to look at the front of your disc drive. It should indicate the drive's capabilities. You can also look up the model of your drive on line. An even easier way is to simply try burning a disc; chances are, if you cannot select the option for burning discs, it is not a problem with Fedora; your drive simply does not support this operation.

6.2.1. Using CD/DVD Creator to burn media in GNOME

To open CD/DVD Creator

To open **CD/DVD Creator**, select **Applications** → **System Tools** → **CD/DVD Creator**. The help manual can be accessed by pressing the **F1** key or clicking **Help** → **Contents** on the top menu bar.

To create a data disc:

1. Drag the files and folders that you want to write to CD or DVD to the **CD/DVD Creator** folder.
2. Insert a writeable CD or DVD into your writer device. Doing this step first usually opens the **CD/DVD Creator** automatically or prompt you to choose an application. If not, you can configure the **CD/DVD Creator** to open automatically by going to any **Nautilus** window and selecting **Edit** → **Preferences** and on the **Media** tab select what applications should start with each media type. Also be sure that the **Browse media when inserted** box is checked.
3. Click the **Write to Disc** button, or choose **File** → **Write to CD/DVD.**

   Here you can choose write to your CD or DVD, or to a *File Image*. An image file (*ISO*) is a normal file that will be saved to your computer and you can write to a CD later.

   If you are copying regular data you can type a name for your CD or DVD in the **Disc name** window and select a *write speed* from the drop-down under **Write Options**. You will also see the size of your data that will be written to the disc.
4. Press the **Write** button to burn your data to the CD or DVD.

To burn an image file

To write a *disc image* to a CD or DVD, right-click the disc image file, then choose **Write to disk...** from the menu to burn the image using **CD/DVD Creator**. When you burn a a disc image, you cannot choose the disc name or write speed.

To make a copy of a CD or DVD

1. Insert the disc you want to copy.
2. Right-click on the **CD** icon, and choose **Copy Disc.**
3. Follow the **Write to Disc** dialogue as above. If you have only one optical drive, the program will first create a file on your computer. **CD/DVD Creator** will eject the original disk, and ask you to change it for a blank disk on which to burn.

6.2.2. Using K3b to burn media in KDE

K3b is included on the Live-KDE media but is not installed by default from the Gnome Live CD or the DVD. If you do not have access to the Internet, you can use the Fedora DVD to install **K3b**. After you install **K3b**, using one of the methods described above, launch the program by clicking the **Kickoff Application Launcher** → **Applications** → **Multimedia** → **K3b**.

When the application opens the *action buttons* are displayed at the bottom of the window:

- **New Data CD Project**

- **New Audio CD Project**
- **Copy Medium...**
- **More actions...**

To add files to your **K3b** project, drag the files into the project pane at the bottom of the screen. Everything in this project pane will be burned to your optical medium.

When you are ready to burn the files or folders to disk click the **Burn** button. If you need to delay burning the media, you can use the menus at the top to save your work and return at a later time.

To burn an ISO image file, use the **Tools** → **Burn Image**. Navigate to and select the .iso image, then click the **Start** button.

6.2.3. Using Brasero in GNOME

Brasero is the default GNOME application for burning audio and video media. It can also be used as an alternative to **CD/DVD Creator** to backup data or to burn an ISO image. Launch the program by clicking **Applications** → **Sound and Video** → **Brasero**.

When first launched, the left side of **Brasero** features buttons to create a new project. This can be an audio project, data project, video project, or it can be a project to copy a disk or burn an image. Once you choose a new project type, **Brasero** will provide instructions for that project. For example, to burn and Audio CD, click the **Audio Project** button or select **Project** → **New Project** → **New Audio Project**. On the following screen click the plus icon to add open a file browser and select files for the project.

When you are ready to burn your CD/DVD, select the image or media at the bottom of the application and click the **Burn...** button. If you need to delay burning your media, you can save your project and return to it later. Use the **Project** menu for these options.

6.3. Making bootable USB media

With the **liveusb-creator** tool, you can set up USB media to hold a bootable copy of Fedora. This allows you to run Fedora on a computer without making any changes to the computer's hard drive, as long as the computer is capable of booting from USB media, and is set up to do so.

To create a bootable copy of Fedora on USB media, you will need:

- a USB media device with at least 1 GB of free space on it. USB media often comes in the form of flash devices sometimes called pen drives, thumb disks, or keys; or as an externally connected hard disk device. Almost all media of this type is formatted as a vfat file system. You can create bootable USB media on media formatted as ext2, ext3, or vfat.

  The Fedora installation will occupy around 1 GB. Beyond this, you might want to allocate space for Fedora to store files such as documents or software installations. These documents and programs will be available to you every time you start a computer with this USB media device, since they are stored on the device itself and not on the computer to which it is attached. This feature is a major advantage of running Fedora from Live USB media rather than from a Live CD.

USB Image Writing is Non-destructive

Existing data on the media is not harmed and there is no need to repartition or reformat your media. However, it is always a good idea to back up important data before performing sensitive disk operations.

Unusual USB media

In a few cases with oddly formatted or partitioned USB media, the image writing may fail.

- a copy of the Fedora Live CD or Fedora KDE Live CD, or a connection to the Internet. The **liveusb-creator** tool copies the files from a Fedora Live CD or Fedora KDE Live CD to create bootable USB media. If you do not have a Fedora Live CD or Fedora KDE Live CD, **liveusb-creator** can download a CD image from the Internet. However, because this CD image is a very large file, you might find this approach impractical if you do not have a broadband Internet connection.
- the **liveusb-creator** tool, for Fedora or Microsoft Windows. Instructions for obtaining this tool appear in the following sections specific to each operating system.

6.3.1. USB image creation in Windows

1. Download the **liveusb-creator** program for Microsoft Windows at *http://fedorahosted.org/liveusb-creator*.
2. Follow the instructions given at the site and in the **liveusb-creator** program to create the bootable USB media.

6.3.2. USB image creation in Fedora

You can install **liveusb-creator** by clicking on **System** → **Administration** → **Add/Remove Software**, then searching for **`liveusb-creator`** and installing it.

You can also install the application from the command line with the following command:

```
# yum install liveusb-creator
```

To open **liveusb-creator** click on **Applications** → **System Tools** → **liveusb-creator**. To create live USB media,

1. Enter the root password if prompted.
2. Choose whether to **Use existing Live CD** and specify its location on your comptuer, or to **Download Fedora** and select a file from the *drop-down menu*.
3. Select your **Target Device** for your Fedora installation, such as a USB memory stick.
4. select how much **Persistent Storage** you want. This is space that Fedora can use to hold documents and other files.

After you have made all of your choices just press the **Create Live USB** button to start the process.

Visit the *liveusb-creator web page*[1] or the Fedora Wiki *How to Create a Live USB*[2] page for more information.

Another option to create a USB Image is:

Advanced usage

This content is written for the more advanced user. It assumes that you are comfortable with the command line and have a relatively good knowledge of Linux terminology. It is probably not necessary to using Fedora as a desktop user, but can help a desktop user expand his or her knowledge base and face more complicated troubleshooting issues.

1. Install the "livecd-tools package" on your system with the following command:

```
su -c 'yum -y install livecd-tools'
```

2. Plug in your USB media.

3. Find the device name for your USB media. If the media has a volume name, look up the name in **/dev/disk/by-label** or use **findfs**

```
su -c 'findfs LABEL="MyLabel"'
```

   If the media does not have a volume name, or you do not know it, use **blkid** or consult the **/var/log/messages** log for details:

```
su -c 'less /var/log/messages'
```

4. Use the **livecd-iso-to-disk** command to write the ISO image to the media:

```
su -c 'livecd-iso-to-disk the_image.iso /dev/sdX1'
```

   Replace *sdX1* with the device name for the partition on the USB media. Most flash drives and external hard disks use only one partition. If you have changed this behavior or have oddly partitioned media, you may need to consult other sources of help.

[1] http://fedorahosted.org/liveusb-creator
[2] http://fedoraproject.org/wiki/How_to_create_and_use_Live_USB

Connecting to the Internet

7.1. The Network Manager Applet

Network Manager has been the default network configuration application for the GNOME desktop since Fedora 11. This application can be used to configure a wide variety of network devices and connections that allow you to access the Internet. **Network Manager** is used to configure all your network connections from wired to wireless network as well as xDSL, VPN, and mobile broadband with extended support for Bluetooth DUN. And if you don't know about DNS, DHCP or pppoe, **Network Manager** does it all for you. If you use your computer at home, and have an xDSL connection that is already working, you do not need to configure anything. Just connect to the wired network. With a wireless or broadband connection, the steps needed to setup them are simple and easy to do, just a few clicks and fill in your personal information.

Network Manager executes automatically when you start your session and it is visible in GNOME as the **nm-applet** icon on the top right of the desktop. If you move the mouse over it, it shows the active connection.

Left-clicking on the icon provides a context sensitive menu divided in three sections. The first section shows the active connection or connections along with an option to **Disconnect** The second section views the other available connections. Switch to one of them with a simple click and the previous one closes automatically. The **VPN Connections** submenu provides option to configure or disconnect to a VPN.

Right clicking on the **nm-applet** show another context sensitive menu that allows you to **Enable Networking** and if available **Enable Wireless** or **Enable Mobile Broadband**. You can also **Enable Notifications** as well as view the **Connection Information** or **Edit Connections...** When editing connections, **Network Manager** opens in a new window, in which you configure the network devices and connections. The **About** option provides information about the project and the people that created the application, with a link to the *Project Web-Site*[1] .

Just like its GNOME counterpart, KDE provides an applet interface for NetworkManager, known as **KNetworkManager**. This application development was started by *Novell*[2] and provides an integrated QT-based experience with similar usage and configuration as its GNOME counterpart, **nm-applet**.

For more information on **Network Manager** , you can refer to:

- *Network Manager Project Web-Site*[3]
- *Network Manager FAQ*[4]
- *Network Manager in Fedora 13*[5] overview and interview with Dan Williams.
- *Fedora 13 Release Notes*[6]

7.2. The Network Manager window

To access to the **Network Manager** window to setup your network devices and connections, right-click on the Network Manager applet icon then select **Edit Connections...**.

[1] http://live.gnome.org/NetworkManager/
[2] http://www.novell.com

Be root to save your configurations

Before creating your new configuration, the application opens a window to confirm your operation. To continue enter the root password.

When editing, in the **Network Manager** window, you will find these items:

- **Connection name** : A user-readable connection identifier/name
- **Connect automatically** : If checked, **Network Manager** will activate this connection when its network resources are available. If unchecked, the connection must be manually activated by you.
- **Available to all users** : If checked, **Network Manager** gives all users access to this network connection.

Additional tabs vary depending on the type of Internet connection.

7.3. Wireless connections

The most common items you should fill in, when using a wireless connection will appear in the **Wireless Tab**:

- **SSID** : The SSID of the WiFi network
- **Mode** The available modes are: **Infrastructure** (default), **Ad Hoc**
- **BSSID** : If specified, directs the device to only associate with the given access point. This capability is highly driver dependent and not supported by all devices. *Note: this property does not control the BSSID used when creating an **Ad Hoc** network.*

The **Wireless Security** tab allows you to choose no security or to specify one of the following security methods:

- **WEP 40/128-bit Key** : Your WEP personal key
- **WEP 128-bit Passphrase** : The passphrase to decipher your WEP
- **LEAP** :
- **Dynamic WEAP (802.1x)** :
- **WPA & WPA2 Personal** : Your WPA personal key
- **WPA & WPA2 Enterprise** :

The **IPv4-Settings** tab configures DHCP or static Internet settings. View *Section 7.5.3, "IPv4 Tab"* with wired connections below for more information or see the *Wireless Guide* at *docs.fedoraproject.org*[7].

The **IPv6 Settings** tab similarly allows the configuration of IPv6 addresses with DHCP or static settings.

[7] http://docs.fedoraproject.org/

7.4. Mobile Broadband

In Fedora 13, once your card is inserted, you can easily create a Mobile Broadband connection, as indicated below. For many mobile broadband cards, **Network Manager** can visualize in the NM applet icon, cellular signal strength and technology, and listen for signal strength changes or poll modem-manager for such changes while connected. In this way, you are able to know when the device has a signal and if it is roaming or not.

Network Manager in Fedora 13, uses the gnome-bluetooth plugin to help to configure your Mobile Broadband with the service provider. Also, if you have a Bluetooth adapter and a mobile phone (GPRS) that supports Bluetooth DUN, you can pair the phone with the computer, and let **Network Manager** recognize your mobile phone; at the end of the pairing process you'll see a screen with checkbox that says **Access the Internet using your mobile phone**. After checking that box, a progress indicator will appear and say **Detecting phone configuration**.

Supported Mobile Broadband

For a list of supported devices, look at *NetworkManager - Mobile Broadband*[8] , on the gnome.org site. If your device is not supported, please contact the *mailing list* [9] with information on your device.

7.4.1. Create a Mobile Broadband network connection

Right-click on the **Network Manager** applet Icon and select **Edit Connections...** then select the **Mobile Broadband** tab, and click on the **Add** button. A wizard will open that will assist you in the configuration and ask for information about your provider. Specifically, you should know:

- Broadband Provider's name
- Broadband Billing Plan name
- Broadband Billing Plan APN (Access Point Name)

The wizard displays:

1. An information page that let you choose, if more than one are available, the Mobile device to configure.
2. A page where you select the Provider's Country
3. A page where you select your Provider
4. A summary page of your selections.

Then you need to *Section 7.4.2, “Setup a Mobile Broadband connection”* .

My Service Provider is not listed

If your Service Provider, or plan (ie, APN) is not listed, you can submit additional information to *Bugzilla*[10] , or *Bugzilla Gnome*[11] and tell us your provider name, your country, the common name of your plan, and the APN you use.

7.4.2. Setup a Mobile Broadband connection

Enter your information for the Mobile Broadband connection in following tabs.

- The **Mobile Broadband** tab specifies the number to dial when establishing a PPP data session with the GSM-based mobile broadband network. In most cases, leave the number blank and a number selecting the APN will be used automatically when required. The tab also specifies the username and password used to authenticate with the network, if required. Note that many providers do not require a username or accept any username.
- The **PPP-Settings** tab is used to configure the authentication and compression methods. In most cases the defaults are sufficient and the provider's PPP servers will support all authentication methods. Point-to-point encryption is not enabled by default but can be selected on this tab.
- The **IPv4 Settings** tab configures the Internet settings automatically (default), automatically for the addresses but manually for DNS settings, or completely manually.

7.5. Wired connections

For wired connections, a common user, generally, doesn't need to do any configuration. Most users use DHCP to obtain all configuration information from the network.

7.5.1. Wired Tab

- **Mac Address** : The HW address of your network card. When the system boots, it recognizes the network card and its HW address. If you need to know the Mac Address of an interface, open a terminal and run **`ip link`**

```
$ ip link show eth0
2: eth0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc pfifo_fast state DOWN qlen 1000
    link/ether 00:23:8b:dc:ae:67 brd ff:ff:ff:ff:ff:ff
```

- **MTU** (Maximum Transmission Unit): If non-zero, the card transmits packets of the specified size or smaller, breaking larger packets up into multiple Ethernet frames. You could set this to **Automatic** and les the system determine the MTU for you.

7.5.2. 802.1x Tab

Use this tab if you want cipher your Ethernet communications (default is unset)

7.5.3. IPv4 Tab

- **Automatic (DHCP)** : Specifying this method, then the O.S. does it all for you (default)
- **Automatic (DHCP) addresses only** : Specifying this method, then only automatic DHCP is used and at least one IP address must be given in the **DNS servers** entry.
- **Manual** : Specifying this method, static IP addressing is used and at least one IP address must be given in the **DNS servers** entry.
- **Link-Local Only** : Specifying this method, a link-local address in the 169.254/16 range will be assigned to the interface.

- **Shared to other computers** : Specifying this method, (indicating that this connection will provide network access to other computers) then the interface is assigned an address in the 10.42.x.1/24 range and a DHCP and forwarding DNS server are started, and the interface is NAT-ed to the current default network connection.
- **DNS Servers** : List of DNS servers. For the **Automatic (DHCP)** method, these DNS servers are appended to those (if any) returned by automatic configuration. DNS servers cannot be used with the **Shared to other computers** or **Link-Local Only** methods as there is no usptream network. In **Automatic (DHCP) addresses only** and **Manual** methods, these DNS servers are used as the only DNS servers for this connection.
- **Search domains** : List of DNS search domains. For the **Automatic (DHCP)** method, these search domains are appended to those returned by automatic configuration. Search domains cannot be used with the **Shared to other computers** or **Link-Local Only** methods as there is no upstream network. In **Automatic (DHCP) addresses only** and **Manual** methods, these search domains are used as the only search domains for this connection.
- **Routes...** : Fowarding table or routing table. Each IPv4 route structure is composed of 4 32-bit values; the first, **Address** being the destination IPv4 network; the second, **Netmask** the destination network, the third, **Gateway** being the next-hop if any, and the fourth, **Metric** being the route metric. For the **Automatic (DHCP)** method, given IP routes are appended to those returned by automatic configuration. Routes cannot be used with the **Shared to other computers** or **Link-Local Only** methods as there is no upstream network.
- **DHCP client ID** : The local machine which the DHCP server may use to customize the DHCP lease and options.

7.6. VPN connections

Here are some items, depending on the VPN connection type, required when configuring a VPN connection:

The **VPN** tab allows you to specify the **Gateway**, **Type**, **Username**, and **CA Certificate**.

The **IPv4 Settings** tab configures the Internet settings automatically (default), automatically for the addresses but manually for DNS settings, or completely manually.

7.7. xDSL connections

The items generally used in the xDSL connections are:

- On the **xDSL** tab specify the **Username** and if needed, the **Password** used to authenticate with the Service Provider. For most providers, the **Service** entry should be left blank.
- **PPP-Settings** tab: default values.
- **Wired** tab: View *Section 7.5.1, “Wired Tab”*
- The IPv4 Settings Tab configures the Internet settings automatically (default), automatically for the addresses but manually for DNS settings, or completely manually.

7.8. Network Manager in a CLI

For those users who prefer the command line, Fedora 13 introduces two new tools for managing networks with Network Manager at the command line.

7.8.1. nmcli

`nmcli` , is the console command that makes **Network Manager** available in a console. **`nmcli`** has the following format: nmcli [OPTIONS] OBJECT { COMMAND | help }.

- OPTIONS: allows you to view the output in terse **`-t`** or pretty **`-p`** mode.
- OBJECT: can be **`nm`** (NetworkManager status), **`con`** (NetworkManager connections) or **`dev`** (devices managed by NetworkManager)
- COMMAND: is the action on OBJECT

Type **`nmcli`** OBJECT **`help`** to see a list of the available actions. For example when OBJECT is **`nm`** , the COMMAND are:

```
nmcli nm help
Usage: nmcli nm { COMMAND | help }

 COMMAND := { status | sleep | wakeup | wifi | wwan }

  status
  sleep
  wakeup
  wifi [on|off]
  wwan [on|off]
```

So, running **`nmcli nm status`** , we have:

```
NM running:               running
NM state:                 connected
NM wireless hardware:     enabled
NM wireless:              enabled
NM WWAN hardware:         enabled
NM WWAN:                  enabled
```

Refer to **`man NetworkManager`** for more information.

7.8.2. nm-tools

The **`nm-tool`** utility provides information about NetworkManager, device, and wireless networks. For example:

```
$ nm-tool
NetworkManager Tool

State: connected
```

```
- Device: eth0  [System eth0] ------------------------------------------------
  Type:              Wired
  Driver:            8139too
  State:             connected
  Default:           yes
  HW Address:        00:21:C0:C1:B3:29

  Capabilities:
    Carrier Detect:  yes
    Speed:           100 Mb/s

  Wired Properties

    Carrier:         on

  IPv4 Settings:
    Address:         192.137.1.2
    Prefix:          24 (255.255.255.0)
    Gateway:         192.137.1.1

    DNS:             192.137.1.1
$
```

Accessing the Web

For Fedora, **Mozilla Firefox** is the default web browser when using GNOME, and **Konqueror** is the default web browser when using KDE. These broweser are used to access the *Internet* (World Wide Web). There are many other browsers available to suit different users' needs. **Dillo** is an example of a lightweight browser, and browsers such as **lynx**, **w3m**, and **elinks** are console based.

Besides being standards-compliant web browsers, **Firefox** and **Konqueror** have many features beyond basic web browsing. This chapter explains how to use some of the more popular features, and provides links to further information.

The Internet can also be used to transfer files. This chapter covers different methods of doing this using graphical applications as well as the command line. If you wish to transfer files using email, please refer to *Chapter 9, Communications* . This is often the best choice for smaller files such as pictures and documents.

8.1. Browsing web pages

Firefox and **Konqueror** are the suggested web browsers for most users. If you require a more lightweight browser (especially if you are using a slower system), you may want to try **Dillo**. If you are using the command line, then you may want to use **lynx**, **w3m**, or **elinks**. None of these programs are installed in Fedora by default, but can be installed using the instructions in *Chapter 17, Managing software*.

8.1.1. Using Firefox

To start **Firefox** in GNOME, select **Applications** → **Internet** → **Firefox Web Browser** or use the menu panel icon. To start **Firefox** in KDE, select **KMenu** → **Applications** → **Internet** → **Firefox Web Browser**.

Firefox has many more features than discussed here; you can find more information on **Firefox** at the Mozilla Firefox website: *http://www.mozilla.org/support/firefox/*.

8.1.1.1. Navigating the web

Fedora starts **Firefox** with a default home page that has links to useful Fedora-related sites. Navigate to other web pages by typing the web address – also called the *univeral resource locator*, or URL – into the long navigation bar across the top of the **Firefox** window, replacing **`http://start.fedoraproject.org`**.

If you do not know the URL, enter a keyword (or words) into the search bar to the right of the navigation bar, then press the **`Enter`** key. The search engine used to perform your search can be changed by left-clicking the logo in the search box. You will be presented with a list of options including *Google*, *Yahoo*, *eBay*, *Amazon*, and *Creative Commons*.

Like other web browsers, **Firefox** makes it possible to save the address for a web page for future reference, by adding it to a list of *bookmarks*. Use the key combination **`Ctrl`**+**`D`** to bookmark a page you are viewing. To manage bookmarks, use the **Bookmark** menu from the top of the **Firefox** window. You can also create a live bookmark (a *feed*) that automatically checks for updates from a page with an *RSS* or *Atom* feed. If a feed is available for a particular web page, there will be an orange icon at the right hand edge of the address bar while you are visiting that page. Left click the feed icon and a preview of the feed is displayed. Select the method you would like to use to subscribe to the feed.

Use your favorite feed reader

Firefox can use a number of popular web-based options for subscribing to feeds, such as *Bloglines*, *My Yahoo*, and *Google Reader*, as well as **Firefox**'s own live bookmarks. Another option is to use a stand-alone, desktop feed reader, such as **Liferea**.

8.1.1.2. Tabs

Open a new tab with **Ctrl**+**T**. A blank page is presented and a new bar is available under the navigation bar showing all open tabs; to switch between them left-click the desired tab. To close a tab you can either right click to access the **context menu** or press the red "X" on the tab.

Navigating a large number of open tabs can be difficult. To make it easier, use the arrow icon on the right hand side of the tabs toolbar. Click this to reveal a list of all open tabs that you can switch to by clicking on the relevant item.

8.1.1.3. Extensions

Firefox is designed to be moderately fast and lightweight. As a result, some functionality found in other browsers may not be available by default. To solve this problem the **Firefox** team made the browser extensible, so it is easy to create and integrate *extensions* that add new functionality to the browser.

To manage and install extensions, plug-ins, and themes, select the **Tools** → **Add-ons** menu entry. New extensions are found by visiting Mozilla's **Firefox** add-on site at *https://addons.mozilla.org/en-US/firefox/*. To install an extension from this site follow the **Add to Firefox** link, and when prompted click **Install Now**.

Themes, plug-ins and search engines

Firefox can also be extended by adding new search engines to the search box, installing new themes to customize the look, and installing new plug-ins allowing the use of Java and other web technologies. All of these can be found at Mozilla's **Firefox** add-ons site.

8.1.2. Using Konqueror

To start **Konqueror** in KDE, select **KMenu** → **Applications** → **Internet** → **Konqueror**. To start **Konqueror** in GNOME, select **Applications** → **Internet** → **Konqueror**.

Konqueror on the GNOME and Xfce desktops

Konqueror is installed by default with the KDE desktop, but not the GNOME or Xfce desktops. If you want to use **Konqueror** on the GNOME or Xfce desktops, you will need to install it first. Refer to *Chapter 17, Managing software* for instructions on adding new software to your system.

8.2. Transferring files

Advanced Usage

This content is written for the more advanced user. It assumes that you are comfortable with the command line and have a relatively good knowledge of Linux terminology. It is probably not necessary while using Fedora as a desktop user, but can help a desktop user expand his or her knowledge base and face more complicated troubleshooting issues.

Fedora includes several programs for transferring files between different computers on the same network (or on the Internet). One of the most common methods is called the *File Transfer Protocol* (FTP). There are several graphical programs available to use FTP, including **FileZilla** and **gFTP**. You can also use the command line utilities **ftp**, **lftp**, and **sftp**.

FTP is insecure

If you are transferring files over a public network (such as the Internet), you may not want to use FTP. FTP transfers can be easily intercepted, and FTP data is not encrypted. For more security, use SFTP, which encrypts your data over SSH.

8.2.1. Using FileZilla

FileZilla, an application with a simple, graphical interface, allows you to use the FTP protocol to transfer files over a network (and the Internet). Like many FTP applications, it has two important panes: a file browser for your local machine, and a file browser for the remote machine. This way, you can browse to a file on a remote server and drag-and-drop it to a folder on your local machine.

To install **FileZilla**, refer to *Chapter 17, Managing software*. You can install **FileZilla** by either using **PackageKit** or on the command line using **Yum**. More information about FileZilla is available at *http://filezilla-project.org/*.

FTP with web browsers

If you do not need to send a file, but only retrieve it, you can use **Firefox**, **Konqueror**, and many other web browsers. Just browse to the ftp server in the address bar, and make sure to specify that you want to use FTP. Generically, you would type **`ftp://ftp.server.com`**, where *`ftp.server.com`* is the address of the FTP server.

8.2.1.1. Connecting to a server

To connect to an FTP server in **FileZilla**, you must add the server to your *Site Manager*. You can open the Site Manager dialog in three ways:

- Click on **File** → **Site Manager**
- Click the first icon to the left on the tool bar
- Use the keyboard shortcut **`Ctrl`**+**`S`**

Click the **New Site** button when the **Site Manager** dialog is open. In the text entry box under **My Sites** (on the left side of the dialog), enter the name you want to use to refer to this new server. This name does not have any technical implications; choose something convenient for you.

On the right side of the dialog box, you will need to enter the following information:

Host
: This is the address of the server. If the server has a URL (such as **`ftp.server.com`**), you can type it in here. If you do not have a this, you will need to type in the *IP address*. An IP address is of the form *`A.B.C.D`*, where *`A`*, *`B`*, *`C`*, and *`D`* are integer values between 0 and 255 (inclusive).

Port
: Only enter a value in this field if the server you want to connect to is not using the default ports (port 21 for FTP, port 22 for SFTP).

Servertype
: Choose either FTP, SFTP, FTPS, or FTPES. Note that this section only discusses FTP and SFTP.

Logontype
: This field allows you to choose how you will authenticate with the server. This information should be provided to you by the server administrator.

User, Password, Account
: These fields are only active when certain Logontypes are used. If active, you should use them for your username, password, and account on the remote server.

Comments
: This field has no technical relevance. It may be convenient for you to make a note of something about the server here.

When you have filled out the fields, click **OK** to close the Site Manager or **Connect** to close the Site Manager and connect to the FTP server immediately. Clicking **Cancel** will ignore any changes you made to the Site Manager and close the dialog.

To connect to servers already added to Site Manager, open Site Manager and click on the server you want to connect to, and then click **Connect**.

8.2.1.2. Transferring files

Once connected successfully, status messages (in most cases) will appear in the top pane. The right-hand file browser pane will also display the contents of the directory.

To transfer a file, simply drag-and-drop it from one browser pane into the folder of the other browser pane. To disconnect from the server, press **`Control`**+**`D`** or select **Server** → **Disconnect** .

8.2.2. FTP on the command line

To use the **ftp** program, type **`ftp`** in the command line prompt. You should be put into an FTP shell that looks like this:

```
ftp>
```

Type **help** to get a list of commands, and **help command** for a simple description of that command. This guide will only cover a fraction of these commands; refer to the **ftp** manual page for further details.

8.2.2.1. Connecting to an FTP server

Use the **open** command to connect to an FTP server. The syntax for this is **open *ftp.server.com port*** where *ftp.server.com* is the server you want to connect to. Only specify a port if you are connecting to a server that uses a non-default port(the default is 21). Alternatively, you can connect to an FTP server as you start the **ftp** program. To do this, use the syntax **ftp ftp.server.com port**, where the port option is optional.

8.2.2.2. Downloading and Sending files

FTP is used to retrieve a file from a public server. Use the **get *file*** command, where *file* is the name or path of the file you want to retrieve. Use the **pwd** command to determine which directory you are currently in, and the **ls** command to view all files in that directory. Use the **cd** command to change directories.

Use the **put *file*** command to send a file to the server, where file is the name or path of the file you want to send. Use the **lcd** command to view all files in your local directory (not the remote server). You can also type **lcd directory** to change to a new directory on your local machine.

8.2.2.3. SFTP on the command line

Secure FTP (SFTP), is an encrypted version of FTP. It connects to a remote server through a secure socket layer using SSH. This means that it is a much more secure solution than traditional FTP. Use the command **sftp** to start the client. The syntax is similar to that of FTP.

8.2.2.4. Secure copy (SCP)

The **scp** command is another option for transferring files between two computers via SSH. **scp** attempts to use the same syntax as the traditional copy command (**cp**), but differs in that you can specify remote servers. The following is an example of using scp to send a file to a remote server, type:

```
$ scp localFile user@server:/destination/directory/
```

You can similarly fetch a file:

```
$ scp user@server:/path/to/wantedfile destinationFile
```

Or even between two remote servers:

```
$ scp user1@server1:/path/to/source user2@server2:/path/to/destination
```

In every case that you access a remote server, you will be prompted for your credentials (such as a username and password).

Communications

Fedora can be used to send electronic mail and communicate in real time with people around the world through instant messaging and chat rooms. In GNOME, **Evolution** is used to send electronic mail (email) by default. **Evolution** can also be used as a personal information manager, or *PIM*. You can maintain a calendar, manage a list of tasks, and keep an address book of contacts.

In KDE, **Kmail** is used to send email by default. While **Kmail** does not include a calendar, a calendar application called **KOrganizer** is included as part of the **KDE PIM** suite. There is also an application called **Kontact** which groups **KMail**, **Korganizer** and other KDE PIM tools into a single interface (comparable with GNOME's **Evolution**).

Thunderbird is an open-source mail client maintained by Mozilla. It is very extensible, with an online plug-in library akin to **Mozilla Firefox**. **Claws Mail** is a more lightweight email client and news reader, which is also extensible via additional plug-ins. **Claws Mail** only supports plain text emails by default.

Empathy and **Kopete** are both Instant Messaging (IM) programs that allow you to talk to people in real-time using chat networks like AIM, Yahoo! Messenger, or Gmail chat. **XChat** is Fedora's default graphical IRC client and **Konversation** is the default IRC client for KDE. **ChatZilla** is an IRC client installed and used via the **FireFox** web browser. These clients can all connect to *IRC* servers which provide chat rooms for people around the world to discuss specific topics.

9.1. Evolution

Evolution is a full featured email program. In addition to email, Evolution features a *personal information manager* (PIM), a calendar, task manager and an address book for your contacts. More documentation for **Evolution** is available at: *http://www.gnome.org/projects/evolution/documentation.shtml*

9.1.1. Configuring Evolution

To configure an email account:

1. Start **Evolution**
   - in GNOME, click **Applications** → **Office** → **Evolution** on the top menu bar.
   - in KDE, click the **Kickoff Application Launcher** → **Applications** → **Office** → **Groupware Suite** menu entry.
2. Running the software for the first time displays the **Evolution Setup Assistant** wizard. After the initial welcome screen you will have an opportunity to restore Evolution from a backup or click the **Forward** button to continue and answer questions with information provided by your ISP or email provider.
   - The **Identity screen** relates to personal information about the account, including **Name**, **Organization**, and **Email Address**. There is also a **Reply-To** field, which will allow you to specify that recipients of mail from this account can reply to a different email address than the one that sent the email.
   - The **Receiving Email** and **Sending Email** screens both require information from the e-mail provider. There are many server types available from the pull down menu. The most common protocols for receiving email are IMAP and POP. If your provider support IMAPs, choose IMAP as the **Server Type** then select an encryption method from the **Security** settings.

To add a new account in the future, or to modify an existing account, launch the preferences dialog from the **Edit** → **Preferences** menu. In the dialog that appears, press the **Add** button to launch the **Evolution Account Assistant** again.

9.1.2. Using Evolution

Evolution allows you to create, store and send email by clicking the appropriate buttons located on the top toolbar. Use the mouse to hover over each icon for a pop-up description of each button. You can also use the pull down menus to find each action as well as keyboard shortcuts for those actions. These actions include creating New email messages, Send/Receive queued emails, replying to the sender of an email or replying to all recipients of an email, printing an email, deleting an email, and moving to the next or previous email in the folder. There are also buttons to mark an email as Junk or Not Junk.

Do not miss important emails

Check your **Junk** folder frequently as you begin with **Evolution** and if needed, mark items that are **Not Junk**. **Evolution** will learn what is Junk and what is Not Junk with each item that you mark.

In the lower left section of **Evolution** are buttons to switch from the default email tasks to other tasks including Contacts, Calendar, Memos, and Tasks. As you select each of these components of **Evolution** the toolbar at the top will adjust to provide buttons for the most common actions.

Using Contacts in emails

As you read an email, right click on the sender's email address and select **Add to Address Book...**. This will add an entry to your contacts. When sending an email, click the **To:** or **CC:** buttons to select recipients from your contacts.

9.2. Thunderbird

Thunderbird Is Mozilla's email application. To install **Thunderbird**, refer to *Chapter 17, Managing software* You can install **Thunderbird** by either using the **PackageKit** or on the command line by using **Yum**. More information about **Thunderbird** is available at: *http://www.mozilla.org/support/thunderbird/*. You can find add-ons for Thunderbird at: *https://addons.mozilla.org/en-US/thunderbird*[1].

9.2.1. Configuring Thunderbird

To configure your email account you will need the email information provided by your ISP or email provider.

1. Open **Thunderbird**:
   - in GNOME, click **Applications** → **Internet** → **Thunderbird** on the top menu bar.
   - in KDE, click **Kickoff Application Launcher** → **Applications** → **Internet** → **Email** menu entry.

[1] https://addons.mozilla.org/en-US/thunderbird/

2. The first time you start **Thunderbird** the **Account Wizard** opens to guide you through the setup of your account. If the **Account Wizard** does not open, select **File** → **New** → **Mail Account...** in the main window to open the wizard.

3. Fill in your name, email address, and password, and click **Continue**.

4. **Thunderbird** will attempt to detect your account settings automatically. If the automatic detection is successful, your account settings will appear.

5. If **Thunderbird** fails to automatically detect the account settings, enter the names of the **Incoming** and **Outgoing** servers. Choose **POP** or **IMAP**, and the appropriate secure setting if required. Select 'Re-test configuration'.

6. When **Thunderbird** has detected your account, select **Create Account**. Now **Thunderbird** connects to the server to download your email messages.

7. If the download fails, your email account may require secure connections. In this case, select **Edit** → **Account Settings** → **Server Settings** and select your secure setting. Often the setting is SSL, but this information should be provided by your email service.

9.2.2. Moving your Thunderbird profile data from Windows to Fedora

The **Thunderbird** data profile folder contains your email messages, addresses, and program settings. To move your profile data from Windows to Fedora requires that the data folder be copied to a CD/DVD, memory stick, or other mobile media. If you have set up multiple accounts in **Thunderbird**, they can be moved as well, one at a time, following these steps:

1. Find your profile data folder

   - In Windows 2000 or Windows XP, click **Start** → **My Computer** → **Local Disk (C:)** → **Documents and Settings** → ***`YourUserName`*** → **Application Data** → **Thunderbird** → **Profiles**. The profile data folder looks like ***`xxxxx.default`***, where *xxxxx* is a sequence of random numbers and letters.

     

     If you cannot find the Application Data folder

     If you cannot find the **`Application Data`** folder, go to the top menu and select: **Tools** → **Folder Options** → **View** and check the box **Show Hidden Files and Folders**.

     If you still cannot find the folder, click: **Start** → **Run**, type **`%AppData%`** and press **`Enter`**.

   - In Windows Vista, click **Start** → **Computer** → **C:** → **Users** → ***`YourUserName`*** → **AppData** → **Roaming** → **Thunderbird** → **Profiles**. The profile data folder looks like ***`xxxxx.default`***, where *xxxxx* is a sequence of random numbers and letters.

If you cannot find the Application Data folder

If you cannot find the **`Application Data`** folder, click **Start** → **Control Panel** → **Classic View** → **Folder Options** → **View** and check the box **Show Hidden Files and Folders**.

If you still cannot find the folder, click: **Start**, type **`%AppData%`** into the **Start Search** box and press **`Enter`**.

2. **Copy your profile data folder to removable media**

   Right click on the profile data folder and select: **Send To** → **CD/DVD or memory stick**. Then press the **Back** button until you arrive at **My Computer** and check to make sure the folder was saved to the media.

3. Copy your profile data folder to Fedora

Set up your email account or email accounts first

To move the folder to Fedora you need to have your email account, or accounts, set up in **Thunderbird** on your Fedora installation. When you set up an email account, **Thunderbird** creates the profile data folder for that account. If this folder does not yet exist, you do not yet have a destination for the copy of the folder on your removable media. Refer to *Section 9.2.1, "Configuring Thunderbird"*.

a. Open the Thunderbird profile data folder in Fedora:

- In GNOME, click **Places** → **Home Folder** to open **Nautilus**. Next check the box under **View** to show hidden files and navigate to **.thunderbird** → ***xxxxxx*.default**, where *xxxxxx* is a random sequence of letters and numbers. Note that this sequence will be different from the sequence that you saw in your **Thunderbird** installation on Windows.

If you cannot find the .thunderbird folder

If your Fedora installation originally had an early version of **Thunderbird** installed on it, your profile data folder might be under **`.mozilla-thunderbird`** instead of **`.thunderbird`**.

If you cannot find either a **`.thunderbird`** or **`.mozilla-thunderbird`** folder within your **Home Folder**, press **`Ctrl`**+**`H`** to display *Hidden Files*.

- In KDE, click **Kickoff Application Launcher** → **Computer** → **Home**. Once **Dolphin** starts, show hidden files from the **View** menu, then navigate to **.thunderbird** → ***xxxxxx*.default**, where *xxxxxx* is a random sequence of letters and numbers. Note that this sequence will be different from the sequence that you saw in your **Thunderbird** installation on Windows.

If you cannot find the .thunderbird folder

If your Fedora installation originally had an early version of **Thunderbird** installed on it, your profile data folder might be under **`.mozilla-thunderbird`** instead of **`.thunderbird`**

If you cannot find either a **`.thunderbird`** or **`.mozilla-thunderbird`** folder within your **Home Folder**, press **`Alt`**+**`.`** to display *Hidden Files*.

b. In the ***`xxxxxx`*`.default`** folder, press **`Ctrl`**+**`A`** to select all files and folders, then press **`Delete`** to move them to the **Trash**. The folder should now be empty.

c. Plug in the media containing the folder you copied from Windows.

d. Open the media and click on the ***`xxxxxx`*`.default`** folder saved from Windows to open it. Click **Edit** → **Select All** → **Edit** → **Copy**

e. Move back to the empty ***`xxxxxx`*`.default`** window and click **Edit** → **Paste**.

f. Start **Thunderbird** and verify that you can see the email messages, addresses, and settings from your **Thunderbird** installation on Windows.

9.2.3. Using Thunderbird

The first time you press the **Get mail** button you are asked for your password. Type in your password and press **`Enter`** or click the **Ok** button. You might want to check the box **Use Password Manager to remember this password**. If you do, Thunderbird will automatically check your email without asking for your password in the future. Before choosing this option, remember that there is always some risk associated with storing a password. If your password and setup was correct, **Thunderbird** will now download your email messages from the server.

Thunderbird allows you to download and create email by clicking the appropriate buttons located on the toolbar at the top of the screen. **Get Mail** prompts **Thunderbird** to send and receive all email. **Write** opens a new email message dialog box. **Address Book** opens the email addresses you have on file. **Tag** Color-codes messages that are important or need follow-up.

Click on an email to view it in the message pane. Double-clicking on an email will open it in a new tab. Buttons at the top right of the email message give access to various functions. In addition to **Reply**, **Reply All**, **Forward**, and **Delete**, **Archive** compresses the message and stores it in the Archive, **Junk** marks the email as junk, and **Other Actions** provides access to other options, including **Save as...** and **Print**.

9.3. Claws Mail

Claws Mail is an email client and news reader built to be lightweight and easy to operate. Claws Mail features mostly basic functionality, but plugins can be used to add many of the features found in **Evolution** and **Microsoft Office Outlook**. To install **Claws Mail**, refer to *Chapter 17, Managing software*. You can install **Claws Mail** by either using **PackageKit** or on the command line by using **Yum**. More information about **Claws Mail** is available at: *http://www.claws-mail.org/*.

9.3.1. Configuring Claws Mail

To configure your email account you will need the email information provided by your Internet service or email provider

1. Open **Claws Mail**:
   - in GNOME, click on **Applications** → **Internet** → **Claws Mail**.
   - in KDE, click the **Kickoff Application Launcher** → **Applications** → **Internet** → **Claws Mail** menu entry for **Claws Mail**.
2. The first time you start **Claws Mail** the **Claws Mail Wizard** appears and will guide you through the set up of your account:
3. After the welcome screen, follow the dialogs to fill in your name, (sometimes it is guessed from the operating system) and your email address.
4. On the next page choose a protocol and enter details of how to retrieve your mail:
   POP3
   Enter the **server address**, **username**, and **password**. Also select encryption in needed when connecting to your provider. If you do not enter your **password** here you will be prompted for it each time it is needed.

   IMAP
   Enter the **server address**, **username**, **password**, encryption, and **IMAP server directory**. The **password** is optional, if you do not provide it here you will be prompted for it each time it is needed. The **IMAP server directory** is also optional, often it is not needed and can be left empty.

   Local mbox file
   Enter the location of your local mailbox spool file. Values such as **`/var/mail/`*`username`*** or **`/var/spool/mail/`*`username`*** are common, **username** is your system login.
5. On the next page enter the address of your **SMTP** (Outgoing) server. Also fill in any authentication and encryption information that your provider requires for sending email.
6. If you chose either **POP3** or **Local mbox file**, the next page will the show the default where it will save your mail.
7. Click on the **Save** button to finish the configuration.

9.3.2. Using Claws Mail

Claws Mail allows you to create, store and send email by clicking the appropriate buttons located on the toolbar. Retrieving your email can be done from the toolbar button named **Get mail** or from the **Receive** submenu of the **Message** menu.

From the **Tools** menu you can collect addresses for the address book, configure filters, and manage certificates. The **Configuration** lets you configure accounts, filters, templates, actions, and tags.

Claws Mail by default is a lightweight and fast email client that handles plain text email only. With the addition of plugins **Claws Mail** can also render HTML email, handle vCalendar messaging, integrate with spamassasin, or report spam to various locations. Fedora packages many plugins as separate packages. To install additional plugins refer to *Chapter 17, Managing software*. You can install plugins

by either using **PackageKit** or on the command line by using **Yum**. Use the search features to locate *claws-mail-plugin-** packages. Additional plugins can also be found at *http://www.claws-mail.org/plugins.php*

9.4. Kmail

Kmail is the standard email client used in KDE it is installed by default from the Fedora KDE Live CD and is also included in the DVD. To start **Kmail** in KDE, click the **Kickoff Application Launcher** → **Applications** → **Internet** → **Mail Client** menu entry for **Kmail**, or in GNOME, click **Applications** → **Internet** → **Kmail** in GNOME.

9.4.1. Configuring Kmail

Running the software for the first time displays a wizard to configure mail accounts or cancel and create an account later.

Using IMAPs or POPs with KMail

If your email provider requires the use of a secure connection such as IMAPs, you may need to configure the account at a later time. Not all configuration options are available through the connection wizard.

The dialog boxes will prompt you through:

- choosing an account type such as IMAP or POP
- specifying your account information including real name, email address, and organization,
- providing login information for your email account
- specifying server information for incoming and outgoing email

Finally, KDE may ask you to set a password for **KDEWallet** which manages account passwords across the KDE Internet applications.

To add a new account in the future, or to modify an existing account, click **Settings** → **Configure Kmail**. In the dialog that appears, select **Accounts** then press the **Add** button to add an account or **Modify** to modify an existing account.

9.4.2. Using Kmail

Kmail allows you to create, store and send email by clicking the appropriate buttons located on the toolbar or by selecting the appropriate menu options. From the pull down menus, specifically the **Tools** menu, you can also manage the address book, configure encryption, and edit "Out of Office" replies. From the **Settings** you can configure filters, shortcuts, toolbars, accounts, and more. The **Help** menu provides access to the KMail Handbook, a KMail Introduction, and a "Tip of the Day" feature.

9.5. Empathy

Empathy is an *instant messaging* (IM) client that can access Gmail, MSN, AOL, Yahoo!, Jabber, and other IM and chat networks. **Empathy** is the default instant messaging client for the GNOME desktop. For further information please refer to: *http://live.gnome.org/Empathy*.

9.5.1. Configuring Empathy

To start and configure **Empathy**, select **Applications** → **Internet** → **Empathy IM Client** from the menu panel in GNOME or the **Kickoff Application Launcher** → **Applications** → **Internet** → **IM Client** menu entry for **Empathy** in KDE.

Starting **Empathy** for the first time goes directly into the **Messaging and VoIP Accounts Assistant** dialog. Choose to configure **Empathy** to use an existing account, create a new account, or see people online nearby.

Fedora does not register all accounts

Many IM networks require you to create an account before you can use them. In many of these cases, you cannot create the account in **Empathy** and will normally need to visit the website of the network to create an account. For example, you cannot use **Empathy** to create a Yahoo Instant Messenger account. Instead, you much first visit *http://messenger.yahoo.com* to set up the account, then access it using Empathy.

To configure **Empathy** to use an existing account follow these steps:

1. Select **Edit** → **Accounts** to bring up the **Messaging and VoIP Account Assistant** dialog, select the **Yes, I'll enter my account details now** button and click **Forward**.
2. Click the drop-down menu to show the available protocols and select the network appropriate for the account being created.
3. Enter details for the selected account, including **Screen name** and **Password**. Click on the **Apply** button to add the account to the account list and return to the main window.

To modify, delete, or add additional account, select **Edit** → **Accounts** from the main menu. Highlight an account to modify or delete or click the **Add...** button to configure an additional account.

9.5.2. Using Empathy

You can use the menus or double click on a Buddy to start a conversation. All supported protocols are available at the same time within **Empathy**. If you have setup several accounts, such as Yahoo, Google Talk, and AIM accounts, then all of your contacts for each of these accounts will be available to chat with at the same time, in the same contact list. Each conversation that is started with have menu options appropriate for the protocol of that account.

Select **Edit** → **Preferences** to customize themes, notifications, sounds, and more. The **Room** menu allows you to join a chat room. If you want to temporarily disable an account, select **Edit** → **Accounts**, select the account to disable, and uncheck the **enabled** box. Your account settings will be saved and you can enable the account at any time.

9.6. Pidgin

Pidgin is an *instant messaging* (IM) client that can access Gmail, MSN, AOL, Yahoo!, Jabber, and other IM and chat networks. For further information please refer to: *http://www.pidgin.im*

In previous versions of Fedora, **Pidgin** was the default instant messaging program. If you upgrade Fedora from a previous version you will still have **Pidgin** installed and configured. If you have a fresh

install of Fedora, **Empathy** is the default IM client. See *Section 9.5, "Empathy"* for more information. To install **Pidgin**, refer to *Chapter 17, Managing software* You can install **Pidgin** by either using the **PackageKit** or on the command line by using **Yum**.

9.6.1. Configuring Pidgin

To start and configure **Pidgin**, select **Applications** → **Internet** → **Pidgin Internet Messenger** from the menu panel in GNOME or the **Kickoff Application Launcher** → **Applications** → **Internet** → **Instant Messenger** menu entry for **Pidgin** in KDE.

Starting **Pidgin** for the first time goes directly into the **Accounts** dialog. To configure a new account follow these steps:

1. Click on the **Add** button to bring up the **Add Account** dialog.
2. In the **Add Account** window, under **Login Options**, click on the right side of the Protocol drop-down menu to show the available protocols and select the network appropriate for the account being created.
3. Enter details for the selected account, including **Screen name**, **Password**, and **Alias**. Select **Remember password** if desired. Click on the **Save** button to add the account to the account list.
4. Once the account is added, the **Accounts** window displays the new account.
5. New accounts can be added in the future by navigating to the **Accounts** → **Manage Accounts** menu entry in the main **Pidgin** window.

9.6.2. Using Pidgin

All supported protocols are available at the same time within **Pidgin**. If you have setup several accounts in Pidgin, such as Yahoo, Google Talk, and AIM accounts, then all of your contacts for each of these accounts will be available to chat with at the same time, in the same contact list.

For more information see: *http://developer.pidgin.im/wiki/Using%20Pidgin*

Not all features supported

Pidgin does not support some features of the included protocols. **Pidgin** is useful for chatting via text across different IM protocols, but not all the features in each IM system are supported. For example, video is not supported at this time.

Fedora does not register all accounts

Many IM networks require you to create an account before you can use them. In many of these cases, you cannot create the account in **Pidgin** and will normally need to visit the website of the network to create an account. For example, you cannot use **Pidgin** to create a Yahoo Instant Messenger account. Instead, you much first visit *http://messenger.yahoo.com* to set up the account, then access it using Pidgin.

9.7. Kopete

Kopete is the Instant Messenger installed in KDE by default. To start the program in KDE, click the **Kickoff Application Launcher** → **Applications** → **Internet** → **Instant Messenger** menu entry for **Kopete**. In GNOME, click **Kopete** can be found in **Applications** → **Internet** → **Kopete**. For further documentation on **Kopete**, refer to: *http://kopete.kde.org/*

9.7.1. Configuring Kopete

To configure an account in **Kopete** select **Settings** → **Configure...** then click **Add Account**. Follow the dialog questions to choose a messaging service from the list then specify the account information for that service. Make sure to fill out the details on the other tabs. Once the account is added, click **Next** and choose the option to connect to the service and then click **Finish**.

Kopete comes with a wide range of messaging services such as:

- AIM
- Bonjour
- GroupWise
- ICQ
- Jabber
- Meanwhile
- WLM Messenger
- Testbed
- WinPopup
- Yahoo

You can add accounts for these services to **Kopete** using the steps above.

9.8. XChat

XChat is an IRC chat program. It allows you to join multiple IRC channels (chat rooms) at the same time, talk publicly, private one-on-one conversations and is capable of transferring files. To install **Xchat**, refer to *Chapter 17, Managing software* You can install **Xchat** by either using the **PackageKit** or on the command line by using **Yum**. More information is available at *http://xchat.org/*.

9.8.1. Configuring XChat

1. When you open **XChat** the **XChat: Network List** window appears. Fill in your choices for your **Nick name**, **username** and **realname**. Your **username** can be anything you like.

2. Now choose a network to join from the **Networks** window. Select the one you want by clicking it. For example, most Fedora projects use the FreeNode network to host chat rooms.

3. Select **Edit** which opens another window listing the network you selected. For now make sure the box **Use global user information** is checked. Go down to the **Favorite Channels** field and type

in the channel you want to join. You can also click on the small button to the right of the field which will bring up a window where you can **Add**, **Remove** and **Edit** your channels . Most networks require **#** placed before the name of the channel. For example, **#fedora-doc** is where you ask about writing and updating this and other documentation. The **#fedora** chat room is a good place to find help using fedora.

4. Click the **Close** button.

5. Select **Connect** and you are connected to your channel.

9.8.2. Using XChat

On the top menu bar select **Applications** → **Internet** → **XChat IRC**. Click the **Connect** button and you are attached to the networks and channels that you selected above.

You can configure your preferences for **XChat** while attached to the network. On the top menu bar select **Settings** → **Preferences** and choose your text, background and sound preferences. You can also configure alerts and logging. Once logging to the disk is enabled in the preferences, right click on the channel name and and select **Settings** to enable or disable logging for an individual channel.

XChat defaults to showing each channel as a tab. Either right click the channel name or select **Xchat** and click **Detach** to view a channel in a separate window.

9.9. Konversation

Konversation is the default IRC application for the KDE Desktop. You can find details at *http://konversation.kde.org/*.

9.9.1. Configuring Konversation

To configure **Konversation** select:

1. **Kickoff Application Launcher** → **Applications** → **Internet** → **IRC Client**.

2. The **Servers List** window pops up and has a default network listed. Select **New** or click on the default network then select **Edit**.
   a. Type in your chosen network in the **Network Name:** field.

   b. Under **Identity** click **Edit** and add your **user names**.

   c. Check the box **Connect on application start-up** to attach automatically when you open **Konversation**

3. In the **Auto Join Channels** window:
   a. Click on the default channel listed then **Edit** or just click the **Add** button to ad your choice.

   b. Type in your desired channels, and passwords if needed, then click the **Ok** button.

4. You are returned to the **Edit Network** window. Select the **Ok** button. Now click the **Connect** button at the bottom right in the **Servers List** window to attach to the network and your channels.

9.9.2. Using Konversation

Choose **Kickoff Application Launcher** → **Applications** → **Internet** → **IRC Client**.

If you selected the **Connect on application startup** then **Konversation** will automatically attach to your networks and channels.

To customize colors, highlighting, logging, and more, select **Settings** → **Configure Konversation**

9.10. ChatZilla

ChatZilla is an IRC chat program from Mozilla. It is easy to use and is a highly extensible IRC client. It has all the usual features including a built-in list of standard networks, easy searching and sorting of available channels, logging, DCC chat and file transfers. For more information go to *http://chatzilla.hacksrus.com/faq/*.

9.10.1. Installing ChatZilla

You can install **ChatZilla** using **Firefox**.

1. Launch **Firefox** and from the top menu bar select **Tools** → **Add-ons** .
2. In the box to the left of the **Browse All Add-ons** link, type **`ChatZilla`** and press **`Enter`**.
3. Select **Add to FireFox** then **Install Now**. You may get a message to re-start **Firefox**.

9.10.2. Configuring ChatZilla

1. Open **Firefox**.
2. On the top menu bar click **Tools** → **Chatzilla**.
3. The **ChatZilla** window opens where you will see the word ***Client*** as a tab near the bottom. In the main window are welcome messages with links to additional help and at the bottom of that window are links to a few of the most popular Networks. If your Network is among them just click on the link and **ChatZilla** will attach to it as a new tab.
4. To configure your chosen networks so they automatically connect, go to **Chatzilla** → **Preferences**, make sure that **Global Settings** is selected and choose the **Startup** tab. Scroll down to the **Auto-connect URLs** window, click **Add**, and type in your network. For example, **`irc://your.network`**, click **OK** to add the entry then **Ok** to exit the preferences window.
5. To configure channels in a network so they automatically connect, select **Chatzilla** → **Preferences** then select the Network and click on the **Lists** tab. To automatically join a channel, click **Add** by the Auto-Perform box and type **`/join #your-channel`** then click **OK**. Add any username to the Nickname list or the Notify List then click **Ok** to save all changes.

9.10.3. Using ChatZilla

1. Open **Firefox**.
2. On the top menu bar click **Tools** → **Chatzilla** and you will automatically attach to your networks and channels.

Note

It is not necessary to have your channels connect when you start **ChatZilla**. Once you have attached to your networks you can select **IRC** → **Join channel** and type in your favorite channel, or part of it in the **Quick Search** box. Then click on the **Join** button when your channel appears in the box. But you will have to do these steps each time unless you setup **ChatZilla** to attach automatically

Office Applications

In today's communication-oriented world, the ability to create, view, and edit content-rich documents is an important feature of any operating system. In Fedora, you have the option to select from many of options when it comes to document and spreadsheet editing.

In Windows, you may have been familiar with the Microsoft Office suite of products. Programs like Microsoft Word, Excel, and Publisher all have multiple counterparts in the realm of free software. Each of these free and open source products has a distinct flavor; some are minimalistic with few options and a simplistic interface, some are feature-rich with capacities even beyond proprietary options, and many others fall in between these extremes. This chapter will help you survey your options and choose the right application for you.

10.1. Office Suites Overview

One of the most popular opensource Office Suites is OpenOffice.org. This suite is included with Fedora and is also available for many other operating systems including Windows. Documentation for OpenOffice.org is available at *http://documentation.openoffice.org/*. The OpenOffice.org team has provided exceptional documentation in the form of an OpenOffice.org manual, entire documents devoted to using Writer and Impress, and several smaller documentation sets that should answer any questions you might have about their software. There are also many tutorials available at *http://wiki.services.openoffice.org/wiki/Documentation/Tutorials*.

The **KOffice** suite is optimized for the KDE desktop environment. The **KOffice** applications also create documents and files in open standards formats including OpenDocument (.ODF), Rich Text Format (.RTF), and HTML. Officially, the *KOffice FAQ* recommends using .RTF or .PDF formats for compatibility with Microsoft Word.[1] **KOffice** does support Microsoft file formats, but there are issues with compatibility. For the most up-to-date information on all of **KOffice**'s program offerings, visit the official **KOffice** site at *http://www.koffice.org/*. This site also includes detailed documentation and help for each individual **KOffice** program.

GNOME does not provide a suite but instead a number of individual office applications optimized for GNOME. For more information on using these applications refer to *http://live.gnome.org/GnomeOffice*

Remember that any office application or suite will run on any Fedora desktop environment. Once installed, all office tools are available from the **Applications** → **Office** menu in GNOME, the **Kickoff Application Launcher** → **Applications** → **Office** menu in KDE, or as icons located in the menu bar or on the desktop. To install any Office suite or application, refer to *Chapter 17, Managing software*. You can install them by either using the **PackageKit** application or on the command line by using **Yum**.

10.2. Word Processing

A word processor is an extension of the classic text editor. While text editors can write and store words and sentences to files, word processors take this a step further by allowing the user to format his work with colors and fonts. Word processors also allow users to format the way a document will appear on the printed page by managing page margins, paper size, and document orientation (portrait or landscape).

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http://www.koffice.org/faq/#AretherefiltersforOpenOfficeWriterMSWordStarWriterRTF

This section will explore the popular word processors available in Fedora, and help you become familiar with the abilities and usage of each.

10.2.1. OpenOffice.org Writer

Writer is the word processing component of OpenOffice.org. Writer is arguably the most powerful of the open source word processors in the sense that it has the most features. Writer, like all of OpenOffice.org, is available for most operating systems including Linux, OS X, and Windows.

If you have used a word processor before, Writer may seem immediately familiar to you. The interface displays a large page where you can type your document, and there are several toolbars across the top of the window with which you can choose formatting options and advanced features like mail merging or embeddable media.

From the **View** menu you can customize which toolbars are visible. Some toolbars will appear as needed. For example, when a table is inserted, a floating toolbar with options to manage the table appears. For more information, read Writer's documentation *online*[2] or under **Help** → **Contents**.

10.2.2. KWord

KWord is the **KOffice** word processing program. Open **KWord** by selecting the **Kickoff Application Launcher** → **Office** → **Word Processor** entry for **KWord**.

The first window contains options for opening **New**, **Recent** or **Existing** documents, the type of **Template** for a new document, as well as a menu bar.

On the menu bar,

- choose **File** to create a **New** file, **Open**, **Close** or **Import** a file, or **Quit** the application.
- choose the **Settings** drop-down menu select **Show Toolbar**, **Configure Shortcuts** or **Configure Toolbars**.
- click **Help**to open the *KWord Handbook* or **Report a Bug**. You can also access the *KWord Handbook* by pressing the **F1** key.

After selecting a template click the **Use This Template** button and check the box **Always use this template** if you want to make it the program default.

The next window has two menu panels on the top, the document work area on the left, and several dockers on the right. The Tools Options docker provides text style edits such as bold, italic, and font type, size, and color. Other Dockers provide shapes, statistics, and tools. Configure dockers and toolbars from the **Settings** pull down menu.

The bottom panel shows the number of pages in the document, which page is in the work area window and the **Zoom** in percentage.

10.2.3. Abiword

Abiword is a word processor with many of the everyday capabilities of OpenOffice.org Writer or Microsoft Word, but the omission of some advanced but less used features makes it significantly more lightweight. Since Abiword does not depend on the *Java virtual machine* like Writer does, you may find

[2] http://www.openoffice.org/product/writer.html

that it runs more quickly on older machines. Abiword's interface is similar to that of Writer and most other word processors.

For more information, use Abiword's built-in help or open the online manual at *http://www.abisource.com/support/manual/*.

10.3. Spreadsheets

Spreadsheets are commonly used to lay out data in a grid format or for tracking simple financial information. All of the spreadsheets discussed in this section have the ability to merge cells, split screens, format text, and define formulas and macros. They also all have some advanced features for automatic calculations, projections, graphs, and importing of raw data.

10.3.1. OpenOffice.org Calc

Calc is the intuitive, flexible, yet powerful spreadsheet program in the OpenOffice.org suite. When started, Calc presents a new untitled document with menu and toolbars across the top. On the bottom are tabs for each sheet and notations of your current location and zoom level.

From the **View** menu you can customize which toolbars are visible. The **Tools** and **Data** menus allow for advanced data manipulation such as solving optimization problems, creating scenarios for comparison, and pull in raw data from other databases. For more information, read Calc's documentation *online*[3] or under **Help** → **Contents**.

10.3.2. KSpread

KSpread is the **KOffice** spreadsheet program. Open **KSpread** by selecting the **Kickoff Application Launcher** → **Office** → **Spreadsheet** entry for **KSpread**.

The first window contains options for opening **Recent** or **Existing** documents, the type of **Template** for creating a new document, as well as a menu bar.

On the menu bar,

- choose **File** to create a **New** file, **Open**, **Close** or **Import** a file, or **Quit** the application.
- choose the **Settings** drop-down menu to select **Toolbars Shown**, **Configure Shortcuts** or **Configure Toolbars**.
- Click **Help**to open the *KSpread Handbook* or **Report a Bug**. You can also access the *KSpread Handbook* by pressing the **F1** key.

After selecting a template click the **Use This Template** button and check the box **Always use this template** if you want to make it the program default.

The next window has two toolbar panels on the top, the spreadsheet, spreadsheet tabs running along the bottom, and dockers on either side with additional tools. Select which toolbars and dockers are visible from the **Settings** menu item at the top. You can now add data and formulas, merge cells, change fonts and colors, insert charts and more.

The row of icons under the top menu bar contains the most frequently used functions plus a few icons for data manipulation.

[3] http://www.openoffice.org/product/calc.html

Several Dockers surround the spreadsheet. The Tool Options shows the contents of the cell and allows for adding formulas. There are also Styles and Shapes dockers visible by default.

The panel at the bottom shows in bold which spreadsheet is currently selected and how many worksheets are in the file. Worksheets can be added with a right mouse click on a worksheet tab. This pop-up window allows **Rename the Sheet**, **Insert**, **Remove**, **Hide** or **Show the Sheet** and provides access to **Sheet Properties**.

A **KSpread** tutorial is available at *http://docs.kde.org/development/en/koffice/kspread/*. You can download pre-formatted templates and scripts from *http://kde-files.org/index.php?xcontentmode=611*

10.3.3. Gnumeric

Gnumeric is a spreadsheet optimized for the GNOME desktop. **Gnumeric** is a good spreadsheet alternative for those that needs a program which uses less memory then the larger OpenOffice.org or KOffice suites. In exchange for a lightweight program, **Gnumeric** has fewer toolbars and not all other spreadsheet formats can be imported. **Gnumeric** does have solver, scenario, and simulation tools but other advanced tools which can be applied to very large sets of data may not be supported.

Start **Gnumeric** by clicking on **Applications** → **Office** → **Gnumeric Spreadsheet** in GNOME or the **Kickoff Application Launcher** → **Applications** → **Office** → **Spreadsheet** menu entry for **Gnumeric** in KDE.

A tutorial on using **Gnumeric** is available from *http://projects.gnome.org/gnumeric/doc/chapter-quick-start.shtml*.

10.4. Presentations

A Presentation program is designed to assist a speaker and energize the audience. Both OpenOffice.org Impress and KOffice KPresenter offer the ability to create dynamic presentation containing not only text but also animations, images, sounds, and more.

10.4.1. OpenOffice.org Impress

OpenOffice.org Impress is used to create multimedia presentations. Like many other presentation programs, Impress supports 2D and 3D clip art, special effects, and animation. Like all OpenOffice.org components, Impress can import or save as other presentation formats.

When Impress is first opened a presentation wizard launches to assist in the initial layout of a new presentation. You can open an existing presentation, start an empty presentation, or work on a new presentation from a template. For new presentations, the wizard then offers a choice of backgrounds and output mediums followed by a choice of slide transition and presentation types. Finally, when creating a new presentation, the wizard asks for some basic idea to start your title page. With a template, the wizard will also offer a choice of pages to include.

Once a presentation is opened, toolbars are placed around the main slide. You can customize which toolbars are visible from the **View** menu. Each toolbar can also be *undocked* and placed in different locations. For more information, read Impress's documentation *online*[4] or under **Help** → **Contents**.

[4] http://www.openoffice.org/product/impress.html

10.4.2. KPresenter

KPresenter is the **KOffice** application for creating and performing presentations.

Open **KPresenter** by selecting the **Kickoff Application Launcher > Office > Presentation** entry for **KPresenter**.

The first window contains options for opening **Recent** or **Existing** documents, the type of **Template** or **Screen Presentation** you want, as well as a menu bar.

On the menu bar,

- choose **File** to create a **New** file, **Open** or **Import** a file, or **Quit** the application.
- choose the **Settings** drop-down menu select **Show Toolbar**, **Configure Shortcuts** or **Configure Toolbars**.
- click **Help**to open the *KPresenter Handbook* or **Report a Bug**. You can also access the *KPresenter Handbook* by pressing the **F1** key.

After selecting a template click the **Use This Template** button and check the box **Always use this template** if you want to make it the program default.

The next window has two menu panels on the top, a workspace , and a number of dockers with additional tools. From the top menu, choose **Settings** to customize which Dockers are visible or customize the Toolbar or Shortcuts. You presentation can not be created with styles, shapes, text in different fonts or colors, images, and more.

A **KPresenter** tutorial is available at *http://docs.kde.org/development/en/koffice/kpresenter/*. You can download pre-formatted templates from *http://kde-files.org/index.php?xcontentmode=612*

10.5. gLabels

gLabels is a light-weight GNOME application for creating labels, business cards, and labels for CD and DVDs.

Start **gLabels** by clicking on **Applications** → **Office** → **gLabels Label Designer** in GNOME or **Kickoff Application Launcher** → **Applications** → **Office** → **gLabels Label Designer** in KDE.

When you open a new file from the icon or the menus at the top, you will have a chance to choose a template for your labels. From the menus or toolbars you can then add objects such as text, box, line, ellipse, images, or barcodes. You can then resize, move,or align the objects. You can customize the view, magnification, and toolbars. The panel at the bottom of the work window allows you to configure the appearance of your data, such as font selection, alignment, bolding, and italics, as well as text and line color.

For more information on using **gLabels**, refer to the gLabels website at *http://glabels.sourceforge.net/*.

Financial software

Fedora offers software financial software for both the GNOME and KDE environments. **GnuCash** is the financial software recommended for users with the GNOME desktop environment, and **KMyMoney** is recommended financial software for the KDE environment. Although each financial software application is recommended for a specific desktop environment, remember both will work on any Fedora desktop environment. Both applications can be used for personal and business, and configured for online banking.

GnuCash and **KMyMoney** are not installed by default from the Live or Install DVD. If you do not have access to the Internet, you can install them from the Fedora Install DVD. Refer to *Chapter 17, Managing software* for instructions. You can install them by either using the **PackageKit** application or on the command line by using **Yum**.

11.1. GnuCash

GnuCash allows you to track personal and business bank accounts, stocks, income and expenses, and is based on double-entry accounting principles.

For additional help using the application, refer to *http://www.gnucash.org/docs.phtml documents*[1].

11.1.1. Configuring GnuCash

To configure GnuCash:

1. Start **GnuCash** by clicking **Applications** → **Office** → **Gnucash Finance Management**. Click the **Close** button to close the **Tip of the Day** window.
2. From the **Welcome Window** select which wizard you want to open and click the **OK** button.
3. Select **Create a new set of accounts** and click the **Forward** button on the **New Account Hierarchy Setup** window.
4. Choose your curency and click the **Forward** button.
5. Select all of the boxes next to the accounts you want to create in the **Categories** window, then push the **Forward** button.
6. Follow the directions in the **Setup selected accounts** window, then click **Forward**.
7. Click the **Apply** button to finish your account setup.
8. To import a Quicken .qif file, select the box then press the **Forward** button.
9. Select the .qif file to load and click the **Forward** button.
10. Now you have the option to load more QIF files for additional accounts. Select the **Forward** button.
11. Pressing the **Forward** button guides you through **Matching QIF accounts** with **GnuCash account**, **Matching QIF categories** with **GnuCash accounts**, and currency selection.
12. Click the **Apply** button to import your data, or the **Back** button to review your matchings.

[1] http://www.gnucash.org/docs.phtml

11.1.2. Using GnuCash

Open **GnuCash** by selecting **Applications** → **Office** → **GnuCash** on the top menu panel. The **Accounts** tab opens.

The top menu bar allows you to manipulate your accounts. You can:

- **Edit**, **Delete** and **Create new accounts**.
- **Set Preferences**.
- **Schedule Transactions**.
- Do **transfers**.
- **Reconcile** an account.
- Enter **Stock Splits**.
- Add **Customers**, **Vendors**, and **Employees** for a business.
- **Set Reminders**.
- Generate **Reports**.
- **Setup Online Banking**.
- **Edit Prices** of inventory.
- Access the **General Ledger**.

Double click on an account to bring up a check book type register for that account. The top menu bar changes to allow manipulation of transactions. This menu includes the options above, plus you can:

- Change the view of the ledger from **Basic Ledger** to **Auto-Split Ledger**, **Transaction Journal**, or **Double Entry**.
- **Cut**, **Copy**, **Paste**, **Duplicate**, **Delete**, **Void**, and **Enter** transactions.
- **Set Billing Terms** for customers.
- Create **Bills**, **Invoices**, and **Vouchers**.

11.1.3. Setting up online banking

Online banking setup begins from the **Accounts** window or the **Register**.

1. On the top menu bar select **Tools** → **Online Banking Setup**.
2. The **Initial Online Banking Setup** window lists what you need to complete the setup.
3. Click the **Forward** button.
4. Select the **Start AqBanking Wizard** in the **Start Online Banking Wizard** window.
5. The **Configuration** window **Intro** provides a summary of what you can do.
6. Type in the information required in the **Users**, **Accounts**, and **Backends** tabs on the top of the window.

7. Select the **OFX-Direct** Bbackend if you are not sure which one to use.
8. You may need to call your bank to get their server URL. If you chose the **OFX-Direct** backend it is likely their URL is **`https://ofx.yourbank.com/`**.
9. Return to the **Start Online Banking Wizard** and click the **Forward** button.
10. Check the appropriate boxes under the **New?** column to match the bank accounts with your **GnuCash** accounts.
11. Click the **Forward** button.
12. Click the **Apply** button to finish.
13. To download your bank transactions select the **Accounts** or **Register** tab then: **Actions** → **Online Actions** → **Get Transactions** or → **Get Balance** and fill in the information asked for to complete the operation.

11.2. KMyMoney

KMyMoney Is a double entry accounting software package, for personal and small business use.

For additional help using **KMyMoney**, refer to *http://kmymoney2.sourceforge.net/faq.html*.

11.2.1. Configuring KMyMoney

1. Open **KMyMoney** by selecting **Kickoff Application Launcher** → **Applications** → **Office** → **Personal Finance Manager**.
2. Click the **Next** button on the **Welcome to KMyMoney** screen.
3. Type in the information and press **Next**.
4. Select your currency and click **Next**.
5. Now type in the information for your bank account. Then select **Next** again.
6. Find your country and click on the **+** next to its name.
7. Select the type of account you want setup, then click **Next**. You can select multiple types of accounts.
8. Press the **Next** button.
9. You can keep the default path where **KMyMoney** will save your files, type in a path, or browse by clicking the button maked with a small folder on the right of the path window.
10. Click the **Finish** button and your **Home** window opens.
11. Open the account register by clicking on your account's link in **Your Financial Summary** window.
12. Click the **Show KMyMoney welcome page** link at the bottom to:
    - **Get started and setup my accounts**.
    - **Use an existing KMyMoney data file**.

- **Learn how to use KMyMoney**.
- **Visit the KMyMoney Website**.
- **Get help from the KMyMoney community**
- **See What's New in this Version**.

11.2.2. Setting up online banking

1. Click the **Institutions** icon on the left panel to make sure your bank information is linked to your new account.
2. Highlight your account under the bank in the main window.
3. On the top menu, choose **Account** → **Map Account** and the program will load a list of financial institutions in the **Online Banking Account Setup** window.
4. Type the name of your bank in the **Search** bar, or scroll down the list to find it.
5. Click on your bank's name to select it then press the **Next** button.
6. Fill in your **Username** and **Password**.
7. Choose an option for **Identify as** and click the **Next** button.
8. This window shows the accounts you have available at the bank. Click on the whichever one you want to link to your **KMyMoney** account and click **Next**.
9. Click the **Finish** button to complete the setup.
10. Press the blue icon on the top menu to **Update the Account** or select **Account** → **Account update** also on the top menu bar.
11. The program connects to your bank and the **Account selection** window asks you to which **KMyMoney** account you want to download information. You also have the option here to **Create** a new account.
12. Select your account and click **Ok**.
13. The **Statement stats - KMyMoney** window summarizes the information downloaded. Click the **OK** button.
14. Click the **Ledger** icon on the left menu panel to see the loaded information.

Playing multimedia

Media formats not supported by default in Fedora

Because of licensing and patent encumbrances, Fedora cannot ship with certain audio and video playing capabilities, known as *codecs*. An example is the MP3 codec. Refer to *Section 12.1, "The Fedora Project's approach to multimedia support"* for more information.

Fedora includes several tools for listening to audio and viewing video on both the GNOME and KDE desktops. These applications will run in either Fedora desktop environment. To install software packages not already installed, refer to *Chapter 17, Managing software*. You can install applications by either using the **PackageKit** application or on the command line by using **Yum**

Fedora provides the following applications for audio and video by default:

- **Amarok** is a music player that features tools for organizing music, CDs, Internet radio stations, and more, and is included in KDE by default.
- **Brasero** is an application for copying and making audio, video, and data CDs and DVDs in GNOME.
- **Cheese Webcam Booth** takes photos and videos with your webcam is installed in GNOME and KDE.
- **Dragon Player** is a simple video player in KDE.
- **JuK** is a collection and playlist manager as well as a music player installed in KDE.
- **Kaffeine** is an application for viewing videos in KDE.
- **KMix** is a Sound Mixer for KDE.
- **KsCD** is an application for listening to audio CDs in KDE.
- **Rhythmbox** is a music player that features tools for organizing and listening to music, CDs, Internet radio stations, and more, and is included in GNOME and KDE by default.
- **Sound Juicer** is an application for converting CDs to music files (also known as *ripping*) in GNOME and KDE.
- **Sound Recorder** can record and play .flac, .oga (OGG audio), and .wav sound files.
- **Totem Movie Player** is an application for viewing videos in GNOME and KDE.

To open these programs, in the GNOME desktop, click on their entries in the **Applications** → **Sound and Video** menu in the top menu bar. In the KDE desktop, click on their entries in the **Kickoff Application Launcher** → **Applications** → **Multimedia** menu.

12.1. The Fedora Project's approach to multimedia support

In short, the Fedora Project encourages the use of open formats in place of restricted ones.

Fedora includes complete support for many freely-distributable formats. These include the Ogg media, Vorbis audio, Theora video, Speex audio, and FLAC audio formats. These freely-distributable formats are not encumbered by patent or license restrictions, and provide powerful and flexible alternatives to popular yet restricted formats such as MP3 that are not legally distributable with Fedora. For more information, refer to the Fedora Multimedia wiki at *https://fedoraproject.org/wiki/Multimedia*.

12.2. Cheese Webcam Booth

Cheese Webcam Booth takes photos and videos with your webcam.

12.2.1. Using Cheese Webcam Booth

The top menu provides the following operations and options:

- Selecting **Cheese** you can choose to turn on the **Countdown** timer, **Take a photo** or **Record**, depending on if you selected **Photo** or **Video** button, see the **Fullscreen**, and **Quit** the application.
- **Edit** lets you turn on **Effects**, **Move to Trash**, **Move All to Trash**, and change the **Preferences**.
- Clicking on **Help > Contents**, or pressing **F1**, opens the *Cheese Manual*.

The tabs, between the windows, are shortcuts of the choices in top menu.

More information is available on the Cheese website at *http://www.gnome.org/projects/cheese*

12.3. Rhythmbox Music Player

Rhythmbox Music Player plays CDs, internet radio, and is a music collection manager.

The first time you launch the **Rhythmbox Music Player**, an assistant will help you import your music. On the second panel of the assistant, click the **Browse** button and select the folder where your music is stored, normally in your home directory under **`Music`**.

12.3.1. Using Rhythmbox Music Player

The main functions of the **Rhythmbox Music Player** window are:

- The top panel Menubar which has all of the menus to perform tasks. Press **F1** or click **Help** → **Contents** on the menubar to open the manual.
- The second Toolbar panel accesses the **player functions** and provides details about the track that is playing.
- A **Time Slider**, under the Toolbar panel, displays the position of the read of a track and allows you to jump to another part of a track.
- In the left window the **Source List** lets you access your **music library**, **internet radio**, **internet**, your **portable music player**, your **playlists**, and **CDs**. This consists of:
  - The **Rhythmbox Music Player** library, where all of the imported tracks are saved.
  - The **Radio** with internet radio stations.
  - **Podcasts**.
  - **Online Stores**:

- All **Playlists** (normal and smart).
- **Audio CDs** inserted into the computer's drives.
- Portable players, such as an MP3 player, plugged in to your computer.

If you have a wheel mouse you can adjust the volume by placing the cursor on the volume icon and turning the wheel.

In the **Browser**, the rectangle window right of the **Source List**, you can browse and filter the **Library** tracks by **genre**, **artist**, or **album** name. It also provides a **Search** function.

The **Tracks** list is the bottom window and contains the lists of the tracks that belong to the source you selected.

The **Statusbar** is the panel that runs along the bottom that displays information about the source you selected.

Visit the Rhythmbox website at *http://projects.gnome.org/rhythmbox/* for more information.

12.4. Audio CD Extractor (Sound Juicer)

Audio CD Extractor (Sound Juicer) lets you extract the audio from CDs and convert them to audio files your computer can play. This program also plays CDs.

12.4.1. Using Sound Juicer

To enter track data, insert an audio CD and **Sound Juicer** will locate and retrieve the data from MusicBrainz (a free service). If MusicBrainz cannot match the CD you have the option to enter the track information manually. The notifier will also ask you if you want to submit your album to the MusicBrainz database. You will need to open a MusicBrainz account to submit albums to their database.

To enter track data manually:

1. Fill in the text boxes for the **title**, **artist**, **year**, and **genre** of the CD.
2. Below that is a list of the audio tracks on the CD. You can determine the **track title** and **artist** for each track.

To edit the title of a track, first select the track, then click on the title. When you have finished entering the title, press the **Enter** key. Each track of the CD is automatically updated if they matched the artist before the edit.

Extracting Track Data:

1. Select the tracks you want to save by clicking on the boxes in front of the tracks. You can also use **Edit** → **Select All** or **Edit** → **Deselect All**.
2. Click the **Extract** button. This will change to a **Stop** button when the program begins to extract the data. You will see an icon next to the track being extracting.

Press **F1**, or **Help** → **Contents** to see the manual.

For more information see the Sound Juicer website at *http://burtonini.com/blog/computers/sound-juicer*

12.5. Sound Recorder

Sound Recorder can record and play .flac, .oga (OGG audio), and .wav sound files.

12.5.1. Using Sound Recorder

- From the top menu select **File** → **New**, or press the **New** button on the second panel.
- On the **Record as** drop-down menu choose what type of file you want to record to.
- Press the red **Record** button or select **Control** → **Record** from the top menu to start recording.
- Press the **Stop** button or use **Control** → **Stop**, on the top menu, to end the recording.
- Press the **Play** button or **Control** → **Play** to start the play-back.
- To open the audio mixer select **File** → **Open Volume Control**.
- To save your file choose **File** → **Save As**, and name your sound file.
- You can play an existing sound file by clicking the **Open** button, or selecting **File** → **Open** on the top menu, choose the file and click the **Open** button. Now press the **Play** button, or select **Control** → **Play**, to play the selected file.
- Selecting **File** → **Properties** displays information about the current sound file.
- Access the Sound Recorder manual by choosing **Help** → **Contents** or press the **F1** key.

12.6. Totem Movie Player

Totem Movie Player plays DVDs, CDs, and VCDs.

12.6.1. Using Totem Movie Player

- To open an audio or video, file, select **Movie** → **Open** Select the file you want and click the **Add** button. You can also drag a file in to the **Totem Movie Player** window. If **Totem Movie Player** displays error messages when you try to play a file, refer to the information about codecs at *http://www.gnome.org/projects/totem/#codecs*.
- Click **Movie** → **Open Location** to open a file by URL location.
- **Movie** → **Play Disc** will play a DVD, VCD, or CD.
- **Movie** → **Eject** will eject the disc.
- Under the **Eject** option is the **Playlist**.
- **Movie** → **Play** and **Movie** → **Pause** will play or pause the disc.
- Choosing **Movie** → **Properties** opens the sidebar which displays the properties of the file.

- From the **Edit** menu you can **Take a Screenshot** or **Create a Screenshot Gallery**, turn the **Repeat Mode** or **Shuffle Mode** on or off, **Clear the playlist**, configure **Plugins** and set **Preferences**.
- **View** allows you to go to **Fullscreen**, **Fit Window to Movie**, set the **Aspect Ratio**, **Switch Angles**, **Show Controls**, **Subtitles**, and show, or hide, the **Sidebar**.
- **Go** will let you go to the **DVD**, **Title**, **Audio**, **Angle** and **Chapter** menus, the **Next Chapter** or **Movie** the **Previous Chapter** or **Movie**, **Skip** to a track, and **Skip Forward** or **Backwards**.
- The **Sound** drop-down menu lets you change **Language** and turn the **Volume Up** or **Down**.
- You can open the manual by selecting **Help** → **Contents** or pressing the **F1** key.

For more information visit the **Totem Movie Player** website at *http://projects.gnome.org/totem/*.

12.7. GNOME multimedia applications

12.7.1. CD/DVD Creator

CD/DVD Creator is a CD and DVD burner.

12.7.1.1. Using CD/DVD Creator

To open select **System** → **CD/DVD Creator**. You can access the Help manual can be accessed by pressing the **F1** key or clicking **Help** → **Contents** on the top menu bar.

To create a data disc:

1. Drag the files and folders, that you want to write to CD or DVD, to the **CD/DVD Creator** folder.
2. Insert a writeable CD or DVD into your writer device. Doing this step first usually opens the **CD/DVD Creator** automatically. You can configure the **CD/DVD Creator** to open automatically by going to **System** → **Preferences** → **Hardware** → **Multimedia Systems Selector** and on the **Audio** and **Video** tabs select **Autodetect** from the drop-down menu.
3. Click the **Write to Disc** button, or choose **File** → **Write to CD/DVD**. Choose to write to your **CD/DVD** or to a **File Image**. An image file (ISO) is a normal file that will be saved to your computer and you can write to a CD later.

   You can type a name for your CD or DVD in the **Disc name** window and select a **Write speed** from the drop-down under **Write Options**. You will also see the size of your data that will be written to the disc.
4. Press the **Write** button to copy your data to the CD/DVD.

To write a disc image to a CD/DVD, right-click on the **Disc Image File**, then choose **Write to Disc** from the popup menu.

To make a copy of a CD or DVD

1. Insert the disc you want to copy.
2. Choose **Places** → **CD/DVD Creator** from the top panel menu bar.

3. Right-click on the **CD** icon, and choose **Copy Disc**.

4. Follow the **Write to Disc** dialogue as above.

   If you have only one write drive the program will first create a file on your computer. The original disk will be ejected, and ask you to change it for a blank disk to copy on.

12.8. GNOME multimedia applications in the repository

These applications are not usually installed by default but are in the repository. To install these packages, refer to *Chapter 17, Managing software*. You can install applications by either using **PackageKit** or on the command line by using **Yum**.

12.8.1. Brasero

Brasero can burn music or data to a CD. Refer to *Section 6.2.3, "Using Brasero in GNOME"* or the Brasero website at *http://projects.gnome.org/brasero* for more information.

12.8.2. GNOMEBaker

GNOMEBaker can burn music or data to a CD. the GNOMEBaker website at *http://www.biddell.co.uk/gnomebaker.php* for more information.

12.9. KDE multimedia applications

The KDE desktop groups multimedia applications together in the **Kickoff Application Launcher > Applications > Multimedia** menu.

12.9.1. Amarok

Amarok is a CD player and music collection manager. For more information refer to the **Amarok** website at *http://amarok.kde.org/*

12.9.1.1. Using Amarok

- Click **Play Media** to play existing sound files, go to a **Previous Track**, **Play/Pause**, **Stop** go to the **Next Track** or **Quit** the application.
- **Playlist** lets you **Add Media**, **Add Stream**, **Save Playlist**, **Undo**, **Redo**, **Clear Playlist**, **Repeat** and choose **Random** play.
- **Tools** lets you access the **Cover Manager Script Manager** and to **Update Collection**.
- Under **Settings** you can **Configure Shortcuts** and **Configure Amarok**.
- Clicking **Help > Amarok Handbook**, or pressing the **F1** key opens the manual.
- On the left side of the application window you can select the **Files** you want to play, **Playlist**, **Collections** or access the internet for **music**, **podcasts** and **radio** stations. Details about your selection are displayed in the window to the right.
- The bottom center icons are: **+** adds a widget, **-** deletes a widget, the arrows let you go to a **Previous** or **Next Group**, and you can **Zoom** in or out.

- In the **Playlist** window you can do a **Search**, go to the **Next** or **Previous** selection, and **Search Preferences**. The options along the bottom allow you to **Clear Playlist**, **Show Active Track**, **Undo**, **Redo**, **Save a Playlist**, and **Export a Playlist As**.

12.9.2. Dragon Player

Dragon Player is a simple video player. For more information refer to the **Dragon Player** website at *http://dragonplayer.org/*

12.9.2.1. Using Dragon Player

- When you first open **Dragon Player** a pop-up window asks what you would like to **Play File** or **Play Disc**. If you choose one of these the program loads the file. You can also **Close** the window or **Quit** the application.
- Selecting **Play > Play Media** allows you to play a **DVD**, **VCD**, or **Video File**, **Play/Pause** lets you pause and re-start the movie, **Stop** will stop the playback, and **Quit** closes the application.
- The **Settings** menu lets you choose the **Full Screen Mode**, **Aspect Ratio**, **Subtitles**, **Audio Channels**, to **Configure Shortcuts** and **Toolbars** or to **Show Toolbar**.
- **Help > Dragon Player Handbook**, or pressing the **F1** key, opens the manual.

12.9.3. JuK

JuK is a collection and playlist manager as well as a music player. For more information refer to the **JuK** website at *http://developer.kde.org/~wheeler/juk.html*

12.9.3.1. Using JuK

- When the application opens you can choose to **Add** or **Remove a Folder**, and **Import playlists**, from the pop-up window.
- Selecting **File** on the top menu bar, you can choose to open a **New** file, **Open** an existing file, **Add Folder**, **Rename**, **Edit**, **Search**, **Duplicate**, **Reload**, **Remove Save**, **Save As** or **Quit** the application.
- **Edit** allows you to **Undo**, **Cut**, **Copy**, **Paste**, **Clear** or **Select All**.
- Under **View** you can configure **JuK** to **Show the Search Bar**, **Show Tag Editor**, **Show History**, **Show Play Queue** or **Columns**, **Resize Playlist Columns Manually** and **View Modes** (Default, Compact or Tree).
- From the **Player** drop list you select to **Random Play**, **Loop Playlist**, **Play**, **Pause**, **Stop**, **Next**, **Previous** and **Play the Next Album**.
- **Tagger** lets you **Save** or **Delete tags**, **Refresh**, **Guess Tag Information** open the **Cover Manager** and **Rename a File**.
- From the **Settings** menu you can choose which **Toolbars** to display, **Show Splash Screen on Startup**, **Dock in System Tray**, **Stay in System Tray on Close**, **Open Track Announcement**, **Tag Guesser**, **File Renamer** and **Configure Shortcuts** or **Toolbars**.

- The second menu panel displays icons of the most used commands, which are also located in the top menu bar.
- The right window is home to your **collection** or **playlist**.
- The main window displays information about the file, such as: **Track Name**, **Artist**, **Album**, **Cover**, **Track**, **Genre**, **Year** and **Length**.
- To open the manual select **Help > JuK Handbook** or press the **F1** key.

12.9.4. Kaffeine

Kaffeine is a media player that can play streaming content, DVBs, DVDs, and CDs. To get streaming content over the web, you need a Mozilla plug-in for the program, which is available from *http://sourceforge.net/project/downloading.php?groupname=kaffeine&filename=kaffeine-mozilla-0.2.tar.bz2&use_mirror=internap*. For more information about **Kaffeine** generally, refer to the **JuK** website at *http://kaffeine.kde.org/*

12.9.4.1. Using Kaffeine Media Player

The first window that opens contains five shortcut icons:

- **Play Playlist** takes you to a current playlist.
- **Audio CD encoding** will help you rip tracks from a CD.
- **Play Audio CD** plays a CD.
- **Play DVD** plays a DVD.
- **Play VCD** plays a VCD.

On the left side of the window are four small icons:

- The KDE icon on top brings up the first window, wherever you are in the program.
- The Kaffeine icon opens the **Player Window**.
- Clicking the next icon opens the **Playlist**.
- The disc icon takes you to the **Play CD window** that lists the details of the CD.

The toolbar along the bottom of this window allows you to **Play**, **Pause**, **Skip Backward** or **Forward**, **Stop**, and **Adjust the Volume**.

The top menu panel has:

- **File** which allows you to **Open a File**, **URL** or **Directory**, **Open** a **DVD**, **VCD**, **Audio CD** and **Network Broadcasting**. You can also **Save Stream**, **Save a Screenshot**, **Quit with Options**, or **Quit**.
- From the **View** menu you have the options for the **Full Screen Mode**, **Minimal Mode**, **Toggle Playlist/Player**, **Enable Auto Resize** or **Keep Original Aspect**.
- Selecting **Player** gives you the option to **Play**, **Pause**, **Stop**, go to the **Next** track or **Previous** track, **Fast Forward**, **Slow Motion**, and **Jump to Position**. You can also **Navigate** a **DVD**, **CD**, **Video**, configure **Subtitles**, access **Track Info** and enable or disable **Plugins**.

- The **Playlist** drop-down lets you **Shuffle**, **Repeat**, **Download covers**, **Clear Current Playlist**, start a **New Playlist**, **Import**, **Save** or **Remove a Playlist**.
- **Settings** allow you to select a **Player Engine** (Xine or GStreamer), choose the **Toolbars**, **Configure Shortcuts**, **Toolbars** and **Kaffeine Player**, and to set **xine Engine Paramenters**.
- Clicking **Help > Kaffeine Player Handbook** or pressing the **F1** key, opens the manual.

12.9.5. KMix

KMix is a sound mixer that allows you to control volume settings for sound inputs to and outputs from your computer. For more information refer to the **KMix** website at *http://docs.kde.org/stable/en/kdemultimedia/kmix/index.html*

12.9.5.1. Using KMix Sound Mixer

The application window has three sections with different controls: **Output**, **Input** and **Switches**. These sections contain volume sliders, switches for enabling/disabling record or playback, and multiple-choice selectors.

- **Output** controls are playback-related, like the **Master volume control**.
- **Input** controls are recording-related, like **Capture**.
- **Switches** has all controls allowing you to switch some functionalities **ON** or **OFF** (like **Mic Boost (+20dB)**), and multiple-choice controls (like **Mic Select: Mic1 or Mic2**).

KMix also features *LEDs*.

- Green for playback
- Red for recording
- Yellow is for special soundcard functions

Most of these controls have a context menu, you can access by a right mouse click on the icon.

- For Split Channels the right slider controls right side volume, and the left controls left side volume.
- Muted can be on or off.
- You can select Hide to hide this device

To configure **KMix** from the menubar choose **Preferences > Use Settings > Configure KMix** The options are:

- **Dock into panel** will dock in the systray when pressing the window **Close** button.
- **Show labels** will display labels for each of the sound devices.
- **Show lines** to mark positions on the sliders.

12.9.6. KsCD

KsCD is a simple CD player.

12.9.6.1. Using KsCD

The button cluster on the left side contains:

- **Play** in the center.
- **Previous** to the left.
- **Next** on the right side.
- **Stop** on the bottom.
- **Eject** on the top.

The center window displays information about the file being played.

The icons along the bottom allow you to setup **Random play**, **Loop**, **Tracklist**, and **Mute**.

The three buttons on the top and center right are:
- **Volume control** – place your cursor on the white dot, hold down the right mouse key and drag it to the desired level.
- The **-** button lets you minimize **KsCD**.
- The **X** icon closes the application.

12.10. Multimedia applications in the repository

The applications below are not usually installed by default but are in the repository. To install these packages, please read *Chapter 17, Managing software*. You can install applications either by using the **PackageKit** application or on the command line by using **Yum**.

12.10.1. K3b

K3b is a CD and DVD burning application. Refer to *Section 6.2.2, "Using K3b to burn media in KDE"* or the K3b website at *http://www.k3b.org/* for more information.

12.11. MP3 players

Personal digital media players can be used to store and listen to music away from a computer. These are often referred to as *MP3 players*, which is a potentially misleading name. Not all of these players use MP3 files to store music.

Many MP3 players can be mounted as storage mediums, and music can be added to them just like a file can be added to any other disk. See *Chapter 6, Media* for more information.

Some players, however, require special applications to transfer music.

12.11.1. Grip

Grip is a CD player and a ripper for the GNOME desktop. It provides an automated frontend for MP3, and other audio format, encoders, letting you transform the disc straight into MP3s. Internet disc lookups are supported for retrieving track information. Details are available on the **Grip** website at *http://nostatic.org/grip/doc/index.html*

Grip is not installed by default but it is in the repository for installation with either using the **PackageKit** application or on the command line by using **Yum**. Refer to *Chapter 17, Managing software* for more information.

12.11.2. iPod connectivity

There are several high-quality tools available for Linux users to manage media content on the iPod. Among them are **gtkpod**, **YamiPod**, and tools built into media players such as **AmaroK**, **Rhythmbox**, and **Banshee**.

Gtkpod is not installed by default from the Live-CD or the DVD. If you do not have access to the Internet, you can use the Fedora DVD to install **Gtkpod**. You can install applications by using **PackageKit** , or on the command line by using **Yum**. Refer to *Chapter 17, Managing software* for more information.

Start **Gtkpod** by clicking **Applications** → **Music and Video** → **gtkpod** in GNOME or **Kickoff Application Launcher** → **Applications** → **Multimedia** → **iPod Manager**.

For further help on iPod support through **Gtkpod**, refer to the **Gtkpod** website at *http://www.gtkpod.org/about.html*.

12.12. Further information

For more information on freely-distributable formats and how to use them, refer to the Xiph.Org Foundation's web site at *http://www.xiph.org*

Playing games

A Fedora installation includes a selection of games by default. You can also select additional game packages during or after installation. To install new games on your Fedora system, refer to *Chapter 17, Managing software*. Most packages have games as part of their name. You can find more information about games for Fedora at *https://fedoraproject.org/wiki/Games*. For more information about the games in this list, refer to the **Help** menu within each individual game.

You do not need to switch desktops to play games

You can play KDE games while logged into GNOME and GNOME games while logged into KDE. Graphical environment components are very modular. When you install the game packs any dependencies will also be installed. You may need additional packages to view the online help.

13.1. Default GNOME games

Many GNOME games are not installed by default from the Live-CD or the DVD. If you do not have access to the Internet, you can use the Fedora DVD to install them, either using the **PackageKit application** or on the command line by using **Yum**. Refer to *Chapter 17, Managing software* for help installing new software. Be sure to also install the separate **Help Files for gnome-games** which provides the instruction for playing each game.

With the **Help Files for gnome-games** installed, use the menus to navigate to **System** → **Help** → **Games** to view a list of the available games. There is a brief description along with a link to details about playing each game. The detailed instructions can also be found from the **Help** → **Contents** menu in each game.

There are a handful of small games in the basic GNOME games pack.

Aisle Riot Solitaire
: is a collection of solitare card games.

Iagno
: is a A Reversi-like disk flipping game.

Mines
: is a clone of a popular puzzle game.

Sudoku
: is popular logic puzzle where you place numbers in a grid.

Additional games are in a package called *gnome-games-extra*. These games provide a variety of styles and genres including board games such as Chess, card games such as Freecell, puzzle games such as Klotski, arcade games such as Robots, and tile matching games such as Mahjongg. These are only a sampling of the games provided.

13.2. Default KDE games

Many KDE games are not installed by default from the Live-CD or the DVD. If you do not have access to the Internet, you can use the Fedora DVD to install them, either using the **PackageKit application**

or on the command line by using **Yum**. Refer to *Chapter 17, Managing software* for help installing new software. The *kdegames* package contains games for the current version of KDE and the *kdegames3* package contains additional games which have not yet been ported to KDE4.

The KDE games pack includes popular games similar to those provided by the GNOME games pack such as Kfourinline, Kbots, Ksudoku, Kreversi, and many more. A sampling of other games included in the KDE games pack that may not be in other game packs include:

Bomber
An arcade bombing game

Kapman
Pac-man type game

KAtomic
Fun and educational game built around molecular geometry

KBlackBox
Find the balls hidden in the black box by shooting laser beams

KGoldrunner
A Lode Runner type of game

KJumpingCube
A territory capture game

KNetWalk
A network construction game

Kolf
A little mini-golf game

Kollision
A ball dodging game

Konquest
A galactic space game

KSquares
Connect the dots to make squares

Kubarick
3D game based on Rubik's Cube

LSkat
A card game

Shisen-Sho
A mahjongg like game

Managing photos

Most USB-compatible cameras will work automatically with Fedora and require very little configuration. If your digital camera offers a choice of USB connection types, set the camera's USB setting to *PTP*, or *point-to-point* mode. Consult your camera's user manual to determine if this option is available and how to choose it. If it is not available, the default settings should be sufficient.

14.1. Connecting Your camera

To connect the camera to your Fedora system:

1. Make sure your camera is powered off.
2. Connect a USB cable from the camera to your computer.
3. If your camera requires you to select a knob or dial setting before connecting it to a computer, make that selection now.
4. Power the camera on.

When your camera powers on, Fedora will recognise the device and launch any software that you have configured to import and manage photos, for example the **Shotwell Photo Manager** on the GNOME desktop or the **digiKam** photo management program on the KDE desktop.

14.2. Managing photos on the GNOME desktop

After your camera powers on, an informational window should appear on your desktop. From the drop-down menu you can select:

- **Open with Shotwell Photo Manager**. When the Shotwell window appears, select your camera in the left hand pane. When Shotwell asks if it can unmount the camera from the filesystem, click **Unmount**. Your photos will appear in the main pane. Select the photos you want to import and choose **Import Selected**, or choose **Import All**.
- **Open folder** to view the files in the file manager.
- **Open with Other Application** and select the appropriate application.

If you decide you do not want to import photos, click the **Do Nothing** button. If you do not want to see this dialog each time you connect a camera, you can select the **Always perform this action** option in conjunction with any option to make the choice permanent.

Other ways of accessing your photos are:

- Click on the desktop device icon that contains the photos.
- Click **Places** on the top menu bar, and then click the camera or other device that stores your photos.

14.2.1. Organizing and viewing photos

If you have imported your photos using Shotwell, click on **Photos** in the left hand pane to view them. You can use Shotwell's powerful event and tagging features to group your photos and make them easier to manage.

14.2.1.1. Categorising by Event

When you import your photos, Shotwell looks for information embedded by the camera in the images indicating the time and date at which they were taken. You can then browse your photos by date by clicking on **Events** in the left hand pane. A single photo representing all the photos taken on each date will appear in the main pane. Double-click on a specific date to see all the photos taken on that date.

You can rename each event to something more appropriate by right-clicking on the date in either pane - for example, 'Fri 25 Dec 2009' can become 'Christmas Day'. You can also merge events into longer timeframes - for example, 'Christmas Eve', 'Christmas Day' and 'Boxing Day' can be merged into a single event called 'Christmas'.

14.2.1.2. Categorizing by Tag

You can add tags to your photos by selecting them in the main pane and choosing **Tags** → **Add Tags...**. To add more than one tag at once, enter them as a comma-separated list, without spaces.

Once you have added your tags, a new menu option called **Tags** will appear in the left hand pane. Click on a tag name to see all the photos under that tag. You can modify, rename and remove tags by selecting the appropriate option in the **Tags** menu.

14.2.1.3. Publishing Photos to the Web

You can publish your photos to Facebook, Flickr or Picassa Web Albums from within Shotwell. Select the photos you want to publish in the main pane and click **Publish** in the bottom bar, or choose **File** → **Publish...** in the top menu bar. A dialog box will appear in which you can select the service you want to publish to, and log in if you are not already logged in.

When you log in via Shotwell for the first time, you must allow Shotwell Connect to be enabled on your account. Once this has been set up, you will be given options regarding the size and viewing permissions of the uploaded photos. Select your desired options and choose **Publish**. Your photos will now be uploaded to your online account.

14.3. Managing photos on the KDE desktop

The KDE desktop uses **digiKam** to import and organize your photos. **DigiKam** also provides image editing features through the **showFoto** program.

When you turn on a camera connected to your computer, or plug in device containing photos such as a USB flash drive, Fedora will notify you by opening a window from the **Device Notifier** located at the left of the KDE panel. If you do not see a window, click the **Device Notifier** to open the window manually. You should see the camera or other storage device listed in the window. Click on the device, and a dialog box will open to ask **What do you want to do?**. Click **Download Photos with digiKam** and **OK**.

14.3.1. Importing photos with digiKam

When you first start **digiKam**, it prompts you for a default location in which to store your photos, and will suggest the **`Pictures`** folder inside your **`Home`** folder. It will also ask for a location to store a database that it will create to store information about your photos. **DigiKam** will use this database to help you organise and manage your photos and will again suggest the **`Pictures`** folder as the location for this database. For both the default picture location and the database location, you can type in the name of a folder on your computer, browse to a folder by clicking on the folder icon, or accept

the defaults. When you have made your choices, click **OK** and the main **digiKam** window will open, together with a separate window to show you the files on the camera or storage device.

In this dialog, you can select or deselect photos to import by clicking on the corresponding thumbnail. To select all photos, click any photo and then press the key combination **Ctrl**+**A**. To deselect all photos, press **Ctrl**+**Shift**+**A**. Once you have selected all the photos that you want to import, click the **Download Selected** button. To cancel the import process before you begin the download, close the window. To cancel the process once the download is underway, click the **Cancel** button.

DigiKam asks you for a name for this group of pictures, which it calls an *album*. Either click on an existing album on the list, or click **New Album** and provide a name for the album. **DigiKam** will suggest the current date as a name for the album, but you might want to choose a name that will better help you to remember the subject of these photos. When you have selected an album, click **OK** and **digiKam** will import the photos to your computer.

To clear the photos from your camera, click **Image** → **Delete Selected** to delete just the images you imported to your computer, or click **Image** → **Delete All** to delete all images from your camera.

14.3.2. Organising photos with digiKam

A *tag* is a piece of information that you add to **digiKam**'s database that helps you to identify a photo again in future. For example, you might tag a photo with the names of the people who appear in it, the location at which that the photo was taken, or the name of an occasion.

To tag an image, right-click on it, then click **Apply Tag**, then place checks against one or more tags from the list. To add a new tag to the list, click **Add New Tag** and then apply it to the photo. When **digiKam** displays the image in future, any tags that you have applied will appear below the picture. Applying tags does not alter the photo itself, and you will not damage your photo by tagging it. **DigiKam** stores tags separately from the photos.

To search for images with a particular tag, click the **Search** button, type the tag into the search box, and press **Enter**. **DigiKam** will display all the images to which you have applied that tag.

Sharing your desktop

Use this capability carefully

Remote desktop sharing can be a serious security risk. You should leave it turned on only when needed and should not leave it active.

Fedora lets you share your desktop remotely across a network, so that a user at a different computer can view and – with your permission – interact with your computer. This is useful for receiving technical support from a remote location or for demonstrating a desktop feature to another user. You may also find it to be a useful way to remotely access files on your desktop from another computer.

Fedora uses a method called *Virtual Networking Computing* (VNC) to enable remote desktop sharing. Therefore, the remote viewer must use VNC as well. Apple OS X uses VNC by default, but Microsoft Windows uses a different method to share desktops, called *Remote Desktop Connection* (RDC). To access your Fedora desktop from a computer with a Microsoft Windows operating system, that computer will need a VNC viewer. **TightVNC** is a free and open-source VNC program available for Linux and Microsoft Windows from *http://www.tightvnc.com/*.

15.1. GNOME

To activate desktop sharing, select **System** → **Preferences** → **Remote Desktop** from the user menu. This opens the **Remote Desktop Preferences** window.

To share your desktop securely:

1. Under **Sharing**, tick the box labeled **Allow other users to view your desktop**.
2. Next, tick the box next to **Allow other users to control your desktop**.
3. Under **Security**, tick the box next to **You must confim each access to this machine**.
4. Next, check **Require the user to enter this password** and enter a password. This should not be your account's password; pick a new password that you will only reveal to the remove viewer.
5. Finally, click on the **Close** button.

Be sure to inform the person performing remote technical support or remote viewing the assigned password. When the person connects to your desktop, click on the **Yes** button when asked for confirmation.

Once the remote viewing feature is no longer needed, turn off desktop sharing:

1. Select **System** → **Preferences** → **Remote Desktop**.
2. Uncheck the **Allow other users to view your desktop** box.
3. Click the **Close** button.

15.2. KDE

To activate desktop sharing in KDE, select **Kickoff Application Launcher** → **Applications** → **System** → **Desktop Sharing**. This opens the **Desktop Sharing** control module window. There are two methods by which you can share your desktop:

- You can create an invitation. By default, invitations are only valid for one hour. This lessens the chance of forgetting to disable Desktop Sharing, and is a good option if you only need it enabled temporarily.
- You can leave Desktop Sharing turned on at all times.

To create a Desktop Sharing invitation, open the Desktop Sharing window as described above, click **New Personal Invitation** and give the information to the person you want to invite. Alternatively you can share the same information via email by clicking on **New Email Invitation**.

If you want to have Desktop Sharing running at all times:

- In the Desktop Sharing window, click **Configure** → **Security** then check the box **Allow uninvited connections**.
- Next, check **Confirm uninvited connections before accepting** (optional, but recommended).
- If you wish to approve each connection individually check **Ask before accepting connections**
- A password should be set for security; enter one in the **Uninvited connections password:** box. This should not be your user account password.
- Select the **Network** tab at the top of the window, check **Use default port** and make a note of the port listed.
- Finally, click on the **Apply** button followed by the **OK** button.

The person connecting to your computer remotely will need your IP address or hostname, followed by a **:** and the port number that you noted above. When the person connects to your desktop, click on the **Yes** button when asked for confirmation.

Once the remote viewing feature is no longer needed, turn off desktop sharing:

1. Select **Kickoff Application Launcher** → **Applications** → **System** → **Desktop Sharing**.
2. Uncheck the **Allow uninvited connections** box.
3. Click the **Apply** button.

15.3. Other desktops

Various desktop environments may offer their own graphical assistants for desktop sharing, but the VNC server program can be used from the command line to accomplish this task on almost any desktop environment. Setting up this service is beyond the scope of this guide.

Customizing the desktop

Fedora allows you to customize the "look and feel" of your desktop environment. All of the settings that determine the appearance of your desktop are referred to collectively as a theme.

16.1. Changing the theme

Most desktop environments, including GNOME and KDE, allow you to install new themes to tweak the appearance of the desktop. The process for installing a theme varies for each desktop. You can find the process for installing themes under GNOME and KDE in this chapter, and most desktop environments include installation instructions in their own documentation.

16.1.1. Changing the theme in GNOME

To change the desktop theme, choose **System** → **Preferences** → **Appearance**. The **Appearance Preferences** window appears with the **Theme** tab selected. To change the theme, select one from the list, the theme will be applied automatically.

Fedora's repositories include many other themes that you can install, in the *gnome-themes-extra* package. You can install *gnome-themes-extra* by either using the **PackageKit** or on the command line by using **Yum**. Refer to *Chapter 17, Managing software* for instructions.

When the *gnome-themes-extra* is installed on your computer, the themes can be selected by using the **Appearance** program described in this section.

16.1.2. Changing the theme in KDE

By default KDE uses **0xygen** as its theme, with many more available from *http://www.kde-look.org/*.

To change the theme, click **Kickoff Application Launcher** → **Computer** → **System Settings** → **Appearance**. Expand the **Appearance** item and click **Style**.

To change the theme, select one from the list and click the **Apply** button at the bottom of the window.

You can download additional icons and themes for KDE by installing the *kdeartwork-icons* and *kdeartwork* packages. You can install these packages by either using the **PackageKit** or on the command line by using **Yum**. Refer to *Chapter 17, Managing software* for instructions.

16.2. Changing the background

16.2.1. Changing the background in GNOME

To change the background image on your desktop, right-click on an empty area of the desktop, and select the **Change Desktop Background** option. The **Appearance Preferences** window appears with the **Background** tab selected. To change your desktop background, choose a new image from the list. You can add your own images by clicking the **Add** button.

To set a color or gradient, select **Vertical gradient** and make your choice of **Solid color**, **Horizontal gradient**, or **Vertical gradient**. Then click the color bars next to the gradient window and select the colors you want.

16.2.2. Changing the background in KDE

To change the background in KDE, right click an empty area of the desktop, and select the **Desktop Activity Settings** option. When the **Desktop Setting - Plasma Workspace** window appears, you can select a new wallpaper style from the drop-down menus, or get new ones by clicking the **Get New Wallpapers...** button.

16.3. Customizing file browsing behavior

16.3.1. Customizing file browsing behavior in GNOME

By default, GNOME uses the **Nautilus** file manager. New in Fedora 13, Nautilus defaults to opening in Browser mode which use one window with **Forward** and **Back** buttons. You can change this behavior to the previous default where a new window is opened each time you open a folder.

To change this, double-click on **Computer** on the desktop, click **Edit** and then **Preferences**. You can also select **Places** → **Computer** → **Edit** → **Preferences** from the menu panel. Click the **Behavior** tab and click on the box next to the text **Open each folder in its own window**.

To install a program that modifies several aspects of using **Nautilus**. Install **Gtweakui** which enables you to modify your GNOME desktop quickly and easily.

Applications → **Add/Remove Software** then searching for *gtweakui* will provide the program to install. The program's location can be found under **System** → **Preferences**.

16.3.2. Customizing file browsing behavior in KDE

By default, KDE uses the **Dolphin** file manager. To modify the appearance of **Dolphin** windows, open the program by clicking the **Kickoff Application Launcher** → **Applications** → **System** → **File Manager** icon for **Dolphin**. At the top of the **Dolphin** window, click **Settings** → **Configure Dolphin**. The tabs in the **Dolphin Preferences** window allow you to specify the folder that **Dolphin** displays when it starts, the size of the icons it displays, the font it uses to label icons, and many other options.

16.4. Customizing input methods

For many people, there is a need to switch between input methods such as Japanese or Chinese character sets. This is handled in Fedora 13 by **ibus**. The default keyboard shortcut to enable and disable input methods is **`Control`**+**`Space`**. Once enabled, the default keyboard shortcut to cycle through input methods is **`Alt`**+**`Shift`**.

To enable, disable, or select the type of input method in GNOME, click **System** → **Preferences** → **Input Method** or in KDE, click **Kickoff Application Launcher** → **Applications** → **Settings** → **Input Method**. You can also get to these settings from the command line with **`im-chooser`**. Once enabled, configure the preferences by clicking the **Input Method Preferences** button. The first tab allows you to customize the keyboard shortcuts. The second tab allows you to add and remove input methods and set the prefered input method. The third tab has advanced settings. You can customize preferences later by right clicking the ibus applet and selecting **Preferences** or from the command line with **`ibus-setup`**.

16.5. Compiz-Fusion

The Compiz Fusion Project brings 3D desktop visual effects that improve usability of the **X Window System** and provide increased productivity though plugins and themes contributed by the community giving a rich desktop experience.

Note

There may be problems with running **Compiz Fusion** if you do not have a 3D-capable video card.

The Fedora Project does not enable **Compiz Fusion** by default and therefore, if you want to use it, you will need to install it first. Refer to *Chapter 17, Managing software* for instructions on managing software. You will need the *compiz-gnome* or *compiz-kde* depending on which desktop you use.

When you have installed **Compiz Fusion**, you can launch the program by selecting **System** → **Preferences** → **Desktop Effects** in GNOME or **Kickoff Application Launcher** → **Applications** → **Settings** → **Compiz Switcher** in KDE.

16.6. Widgets>

16.6.1. GDesklets

GDesklets are **Calendar**, **Weather**, and **Quote of the day** widgets for the GNOME desktop. To install them go to **Applications** → **Add/Remove Software** then go to the **Search** tab and search for *gdesklets*. **GDesklets** is the program that needs to be installed and the other programs listed are the plugins. You will need to install both **GDesklets** and the **GDesklets-goodweather** plugin. They can also be installed by using **Yum** at the command line.

When you have installed the software, you can access **GDesklets** by going to **Applications** → **Accessories** → **Gdesklets**. This will load up a program with all available plugins. Select the **uncategorized** category and double-click **GoodWeather Display**.

After a few moments the the desklet will appear on the desktop and allow you to move it to a preferred location on the desktop.

Note

Where you initially place it is not important. The desklet can be moved at any time by right-clicking on the desklet and choosing move desklet

To configure the the **weather gdesklet**, right-click and select **configure desklet**. A dialog will appear with general settings. Modifying the location can be done by going to *http://www.weather.com/*. At the very top of the weather.com website is a search box for local weather information. Type in the location. After searching the code for the location will be found in the url. For example, the weather for Perth, Australia is at the following link:*http://www.weather.com/outlook/travel/businesstraveler/local/ASXX0089?from=search_city*.

To use that information, note the location code – in this example, **ASXX0089** – enter it into the **weather desklet**, and select **Close** button. The weather information will be available after the next update interval.

To get additional plugins visit *http://gdesklets.de/*

16.6.2. KDE plasmoids

Plasmoids are widgets for the KDE desktop. You can add plasmoids by clicking the **plasma toolbox** icon located at the top right of the desktop or right-hand edge of the panel and then clicking **Add Widgets...**. You can also add plasmoids by right-clicking on the desktop and panel and clicking **Add Widgets...**.

When you install the KDE desktop, a number of plasmoids are installed on your system by default, although most of them are not visible until you add them to your desktop or panel. These include various clocks, calendars, small games, and widgets that present you with information about the status of your computer hardware or about multimedia files as you play them. When you click the **Add Widgets...** menu option, the **plasma toolbox** presents you with a list of the widgets currently available to you, along with short descriptions of each one. The **plasma toolbox** also gives you the option to **Get New Widgets** either by downloading from *KDE-Look.org*, or by installing ones that you have previously downloaded and saved to your computer.

Managing software

17.1. Using PackageKit

Fedora 13 uses a program called **PackageKit** to graphically assist the user with installing and removing software. Any application from the Fedora repositories, including the ones described in this user guide, can be installed with the following method.

17.1.1. Installing software

Here is how to install software using **Add/Remove Software** in the GNOME desktop environment.

Click **System** → **Administration** → **Add/Remove Software**. This will open the **Add/Remove Software** application.

In the **Search Box** with the magnifying glass icon, type the name of the application you wish to install. If you are unsure of the specific application you need to install, you can also type keywords in this box, just like you would for an internet search engine.

Next, click the **Find** button – The message **`Querying`** appears in the lower left corner breifly and then zero or more listings will appear that match your search query.

Tick the box next to the description of the application or applications you wish to install. The message **`Downloading repository information`** appears in the lower left corner. The window area below the list of packages contains additional information about the selected software.

Select any additional packages to install or remove at this time by changing tick boxes next to the package name.

Finally, click the **Apply** button. This starts the installation process and concurrently installs or removes any additional packages where you modified the tick box. Follow any prompts to install additional packages.

Unless an error is displayed, the application is now installed (or removed) on your computer.

17.1.2. Removing software

To remove software using **PackageKit**, you should follow the standard installation procedure, but untick boxes beside the programs you wish to uninstall instead of ticking boxes to install new programs.

Click **System** → **Administration** → **Add/Remove Software**. This will open the **Add/Remove Software** application.

In the **Search Box** with the magnifying glass icon, type the name of the application you wish to remove. If you are unsure of the specific application you need to remove, you can also type keywords in this box, just like you would for an internet search engine.

Next, click the **Find** button. The message **`Querying`** appears in the lower left corner briefly then zero or more listings will appear that match your search query.

Untick the box next to the description of the application or applications you wish to remove.

Software Installed Outside of PackageKit

If the box is already unticked, then the program is probably not already installed. If you are sure that you have selected the right application, but it still appears to not be installed, then it may have been installed using a method other than **PackageKit**. If, for example, the program was compiled and installed from source, then it may not register as installed in **PackageKit**. If this is the case, you will need to find an alternate method of removing it. If it was installed from source, you may find more information in the source distribution's **Readme** file.

The message **Downloading repository information** appears in the lower left corner. The window area below the list of packages contains additional information about the selected software.

Select any additional packages to install or remove at this time by changing tick boxes next to the package name.

Finally, click the **Apply** button. This starts the removal process and concurrently installs or removes any additional packages where you modified the tick box. Follow any prompts to remove additional packages, such as dependencies that only your newly uninstalled program relied upon.

Unless an error is displayed, the application is now removed from your computer.

17.2. Using the command line interface

Another way to install or remove an application is to use the command line and **Yum**, the Yellowdog Update Manager. This can be a much faster process than the **PackageKit** method, but requires the user to use the command line. If this feels uncomfortable, the **PackageKit** method may be a more familiar way to manage software.

17.2.1. Installing software

Click **Applications** → **System Tools** → **Terminal** to open the command line.

Type:

```
su -c 'yum install application'
```

Where *application* is the name of the program you wish to install.

If you are unsure of the exact name of your desired installation, you can search your installed repositories for a keyword:

```
su -c 'yum search keyword'
```

Where *keyword* is the word you wish to search for among the names and descriptions of programs in the available repositories.

After using the **yum install** command, you will be prompted for the computer's root password. Type in the root password and press **Enter**. You will not see the password as you type. The terminal will start giving information about the application, and end with `Is this ok [y/N]:`. Oftentimes, the

installation of an application will require that other programs, called *dependencies*, are installed as well. These are programs or utilities upon which your selected application relies.

If you wish to continue installation after seeing the dependencies and their disk space requirements (which may be unexpectedly considerable), type:

```
y
```

The terminal downloads the necessary files and completes the installation of your application.

17.2.2. Removing software

Click **Applications** → **System Tools** → **Terminal** to open the command line.

Type:

```
su -c 'yum remove application'
```

Where *application* is the name of the program you wish to remove.

If you are unsure of the exact name of your desired installation, you can search your installed repositories for a keyword:

```
su -c 'yum search keyword'
```

Where *keyword* is the word you wish to search for among the names and descriptions of programs in the available repositories.

After using the **yum remove** command, you will be prompted for the computer's root password. Type in the root password and press **Enter**. You will not see the password as you type. The terminal will start giving information about the application, and end with `Is this ok [y/N]:`. If dependencies that were installed with the application are unneeded by other applications, you may be prompted to remove these as well.

If you wish to continue the software removal, type:

```
y
```

The terminal deletes the necessary files and completes the removal of your application.

17.3. Advanced Yum

Advanced usage

This content is written for the more advanced user. It assumes that you are comfortable with the command line and have a relatively good knowledge of Linux terminology. It is

probably not necessary to using Fedora as a desktop user, but can help a desktop user expand their knowledge base and face more complicated troubleshooting issues.

Use the **Yum** utility to modify the software on your system in four ways:

- to install new software from package repositories.
- to install new software from an individual package file.
- to update existing software on your system.
- to remove unwanted software from your system.

Installing Software from a Package File

The **Yum** commands shown in this section use repositories as package sources. **Yum** can also install software from an individual package file. This advanced usage is beyond the scope of this Guide.

To use **Yum**, specify a function and one or more packages or package groups. Each section below gives some examples.

For each operation, **Yum** downloads the latest package information from the configured repositories. If your system uses a slow network connection yum may require several seconds to download the repository indexes and the header files for each package.

The **Yum** utility searches these data files to determine the best set of actions to produce the required result, and displays the transaction for you to approve. The transaction may include the installation, update, or removal of additional packages, in order to resolve software dependencies.

This is an example of the transaction for installing **tsclient**:

```
================================================================================
Package                 Arch       Version          Repository        Size
================================================================================
Installing:
tsclient                i386       0.132-6          base              247 k
Installing for dependencies:
rdesktop                i386       1.4.0-2          base              107 k

Transaction Summary
================================================================================
Install      2 Package(s)
Update       0 Package(s)
Remove       0 Package(s)
Total download size: 355 k
Is this ok [y/N] :
```

Example 17.1. Format of Yum transaction reports

Review the list of changes, and then press **Y** to accept and begin the process. If you press **N** or **Enter**, **Yum** does not download or change any packages, and will exit.

Package Versions

The **Yum** utility only displays and uses the newest version of each package, unless you specify an older version.

The **Yum** utility also imports the repository public key if it is not already installed on the rpm keyring. For more information on keys and keyrings, refer to the *Fedora Security Guide*.

This is an example of the public key import:

```
warning: rpmts_HdrFromFdno: Header V3 DSA signature: NOKEY, key ID 4f2a6fd2
public key not available for tsclient-0.132-6.i386.rpm
Retrieving GPG key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-fedora
Importing GPG key 0x4F2A6FD2 "Fedora Project <fedora@redhat.com>"
Is this ok [y/N] :
```

Example 17.2. Format of Yum public key import

Check the public key, and then press **Y** to import the key and authorize the key for use. If you press **N** or **Enter**, **Yum** stops without installing any packages. Ensure that you trust any key's owner before accepting it.

To ensure that downloaded packages are genuine, **Yum** verifies the digital signature of each package against the public key of the provider. Once all of the packages required for the transaction are successfully downloaded and verified, yum applies them to your system.

Transaction Log

Every completed transaction records the affected packages in the log file **/var/log/yum.log**. You may only read this file with root access.

17.3.1. Installing new software with Yum

To install a generic package *my-package*, enter the command: **su -c 'yum install my-package'** Enter the password for the root account when prompted.

To install a package group *PackageGroup*, enter the command: **su -c 'yum groupinstall "PackageGroup"'** Enter the password for the root account when prompted. Examples of package groups include *MySQL Database* and *Authoring and Publishing.*

New Services require Activation

When you install a service, Fedora does not activate or start it. To configure a new service to run on bootup, choose **System** → **Administration** → **Services** from the top desktop panel, or use the **chkconfig** and **service** command-line utilities. See the man pages for more details.

17.3.2. Updating software with Yum

To update the generic package *my-package* to the latest version, type: **su -c 'yum update my-package'** Enter the password for the root account when prompted.

New Software Versions Require Reloading

If a piece of software is in use when you update it, the old version remains active until the application or service is restarted. Kernel updates take effect when you reboot the system.

Kernel Packages

Kernel packages remain on the system after they have been superseded by newer versions. This enables you to boot your system with an older kernel if an error occurs with the current kernel. To minimize maintenance, yum automatically removes obsolete kernel packages from your system, retaining only the current kernel and the previous version.

To update all of the packages in the package group *PackageGroup*, enter the command: **su -c 'yum groupupdate "PackageGroup"'** Enter the password for the root account when prompted.

Updating the Entire System

To update all of the packages on your Fedora system, use the command: **su -c 'yum update'** Enter the password for the root account when prompted.

17.3.3. Removing software with Yum

Data and Configuration File Retention

The removal process leaves user data in place but may remove configuration files in some cases. If a package removal does not include the configuration file, and you reinstall the package later, it may reuse the old configuration file.

To remove software, **Yum** examines your system for both the specified software, and any software which claims it as a dependency. The transaction to remove the software deletes both the software and the dependencies.

To remove the generic package *my-package* from your system, use the command: **su -c 'yum remove my-package'** Enter the password for the root account when prompted.

To remove all of the packages in the package group *PackageGroup*, enter the command: **su -c 'yum groupremove "PackageGroup"'** Enter the password for the root account when prompted.

Appendix A. Contributors

Note — Translator credits

Due to technical limitations, the translators credited in this section are those who worked on previous versions of the *Fedora User Guide*.

To find out who translated the current version of the guide, visit *https://fedoraproject.org/wiki/Fedora_13_Documentation_Translations_-_Contributors*. These translators will receive credit in subsequent versions of this guide.

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Appendix B. Revision History

Revision 13.0.1	Fri Apr 24 2010	Luigi Votta, Ruediger Landmann, Susan Lauber

Additional updates for Fedora 13 version
New Connecting to the Internet with Network Management unit (Luigi)
Rewrite of Office applications (Susan)
pointer to recognition of current fabulous translation team. (Ruediger)

Revision 13.0.0	Tues Apr 6 2010	Eli Madrinich, Nathan Thomas, David Nalley, Paul Frields, Ruediger Landmann, Susan Lauber

Update for Fedora 13 version

Revision 12.0.4	Mon Mar 29 2010	Eli Madrinich, Susan Lauber

Bumping revision to reflect a number of updates from "bug stomping day"
Fixed bug#538628
Fixed grammar and format issues
Merged recommendations from Murry's email

Revision 12.0.3	Sat Feb 06 2010	Nathan Thomas

Update Xfce desktop descriptions for v4.6 BZ#551197

Revision 12.0.2	Tue Jan 12 2010	Nathan Thomas

Update Thunderbird instructions for v3.0 BZ#532186

Revision 12.0.1	Fri Jan 8 2010	Nathan Thomas

Change name of the desktop environment combo box from "Desktop" to "Sessions".
Add note stating that the desktop environment combo box will be shown only if more than one desktop environment is installed.

Revision 12.0.0	Thu Oct 01 2009	Ruediger Landmann

Update for Fedora 12

Revision 11.0.0	Thu Apr 23 2009	Laura Bailey, Matthew Daniels, Tim Kramer, Ruediger Landmann, Susan Lauber, Kirk Ziegler

Update for Fedora 11, Convert to Docbook XML

Revision 0.6.0	Sat Feb 24 2007	Matt Bird, Cody DeHaan, Damien Durand, John Babich, Paul W. Frields, Dimitris Glezos, Bart Couvreur

Version for Fedora Core 6