

Chapter 3

GNOME and KDE

GNOME and KDE are Graphical User Interfaces (GUIs) that are available for Linux. Most Linux variants bundle both of these GUIs so you have your choice of which to use. Both are based on the X Window System (X Windows) and provide a fully functional graphical user environment. Both GNOME and KDE are independent of the core Linux operating system, including the kernel. You can customize and even crash either of these GUIs and Linux keeps running.

This chapter does not spend a lot of time explaining these environments and showing a lot of screen shots for each. Everyone has used a graphical environment and the best way to customize one is by experimenting and finding what best suits your needs. Thus, this chapter provides an overview of each with most customization preferences left to the reader. This chapter also touches on the free office software package, *OpenOffice.org*, available from www.openoffice.org.

This chapter covers the following.

- Overview of GNOME and KDE
- Obtaining and installing *OpenOffice.org*

GNOME

GNOME (GNU Network Object Model Environment) is a full graphical desktop environment and application framework for Linux and other Linux like systems. GNOME includes a panel for starting applications, a graphical desktop, and a set of standard desktop tools and applications. If you want a newer version of GNOME, want it for another platform, or want any information related to GNOME, you can find it at www.gnome.org. GNOME is part of the GNU project, which means it is open-source software.

GNOME is not a window manager itself. Instead, it uses a variety of window managers from which you can select (*Sawfish* being the default window manager). GNOME provides development libraries and session management. Applications that use these features are tightly integrated with GNOME. Since GNOME is based on X Windows, X-based applications work great with GNOME.

GNOME is included with Red Hat Advanced Server for your Integrity server and also comes with all Red Hat distributions. After logging in using GNOME, I had a fully functional GNOME windowing environment, as shown in Figure 3-1. Note that the windows displayed in Figure 3-1 are not the default. My session opens with the applications open from my last session. GNOME remembers these and my other preferences automatically. By default, when you logout, GNOME also asks you if you would like to save your current session settings. If you do, whatever you were doing last will be started when you login again. GNOME also lets you configure your session using the Session advanced preference tool (*Main (or Start) Menu ⇒ Preferences ⇒ More Preferences ⇒ Sessions*).

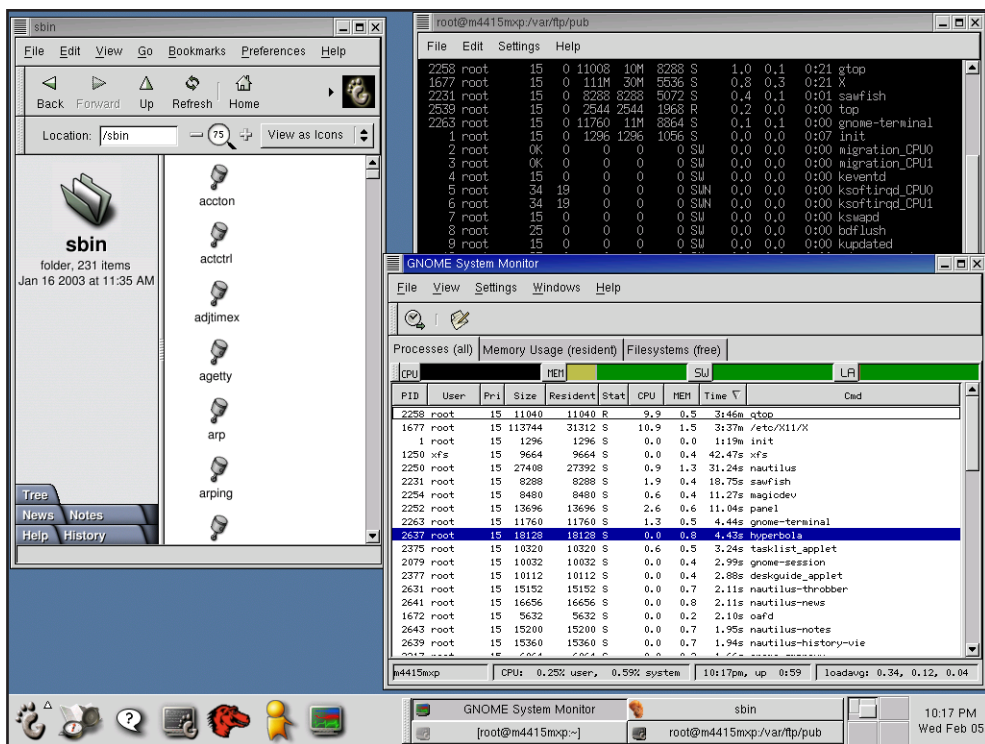


Figure 3-1 Full-Screen GNOME Screen Shot

As you can see, when you login, several windows are already open. At the bottom of the desktop is the main tool bar. Starting at the left are the GNOME icons for the *Start Menu* (footprint), *Start Here*, *Documentation*, *Terminal*, *Web Browser*, *Gaim* (instant messenger), and *GNOME System Monitor*.

In the middle of the main toolbar is a task list that lists the programs currently running. Just to the right of the task list on the bottom is the *Workspace Switcher*. The *Workspace Switcher* allows you to choose any one of four workspaces by default.

In the current workspace, you see several programs open, including a file manager window on the right, a terminal window on the top right, and *GNOME System Monitor* on the bottom right.

To open other programs, click the *Main Menu* on the lower left, as shown in Figure 3-2.



Figure 3-2 GNOME Menu Pick

Figure 3-2 shows the default organization of programs on the menu. Selecting *Start* \Rightarrow *Programs* \Rightarrow *System*, which brings up various system programs we can run. We'll invoke some of these shortly. For now, you can see that on the Integrity Advanced Server system, we can invoke many system-related programs.

Open the *System Monitor*. When it appears, it looks like the window shown in Figure 3-3.

The screenshot shows the GNOME System Monitor window. At the top, there is a menu bar with 'File', 'View', 'Settings', 'Windows', and 'Help'. Below the menu bar, there are icons for search and help. The main window is divided into several sections. The top section shows 'Processes (all)', 'Memory Usage (resident)', and 'Filesystems (free)'. Below this, there are four colored bars representing system metrics: CPU (black), MEM (yellow), SW (green), and LR (green). The main area is a table of processes with columns for PID, User, Pri, Size, Resident, Stat, CPU, MEM, Time, and Cmd. The process 'hyperbola' (PID 2637) is highlighted in blue. At the bottom, there is a status bar showing system information: 'm4415mcp', 'CPU: 0.16% user, 0.53% system', '10:39pm, up 1:21', and 'loadavg: 0.03, 0.02, 0.00'.

PID	User	Pri	Size	Resident	Stat	CPU	MEM	Time	Cmd
2258	root	15	11040	11040	R	10.0	0.5	5:50m	qtop
1677	root	15	113872	31440	S	1.0	1.5	4:48m	/etc/X11/X
1	root	15	1296	1296	S	0.0	0.0	1:19m	init
1250	xfs	15	9664	9664	S	0.0	0.4	42.47s	xfs
2250	root	15	28288	28272	S	0.0	1.3	38.64s	nautilus
2231	root	15	8176	8176	S	0.0	0.3	26.17s	sawfish
2254	root	15	8480	8480	S	0.6	0.4	19.56s	magicdev
2252	root	15	13776	13776	S	0.0	0.6	17.10s	panel
2857	root	15	22448	22448	S	0.0	1.0	7.73s	/usr/bin/python
2637	root	15	21008	21008	S	0.0	1.0	6.99s	hyperbola
2263	root	15	11760	11760	S	0.0	0.5	5.57s	gnome-terminal
2375	root	15	10320	10320	S	0.0	0.5	5.34s	tasklist_applet
2377	root	15	10112	10112	S	0.0	0.4	5.07s	deskguide_applet
2079	root	15	10032	10032	S	0.0	0.4	2.99s	gnome-session
2217	root	15	6080	6080	S	0.0	0.2	2.72s	gnome-smproxy
1672	root	15	5632	5632	S	0.0	0.2	2.44s	oafd
2641	root	15	16768	16768	S	0.0	0.8	2.29s	nautilus-news
2631	root	15	15328	15328	S	0.0	0.7	2.25s	nautilus-throbber
2647	root	15	15328	15328	S	0.0	0.7	2.01s	nautilus-places

m4415mcp CPU: 0.16% user, 0.53% system 10:39pm, up 1:21 loadavg: 0.03, 0.02, 0.00

Figure 3-3 GNOME System Monitor

GNOME System Monitor is similar to *top* in that it provides useful information about processes and overall system utilization (shown along the bottom of the window) including the system *loadavg*.

If you select *Start* ⇒ *Programs* ⇒ *System* ⇒ *Network Configuration*, the *Network Configuration* program appears, as shown in Figure 3-4.

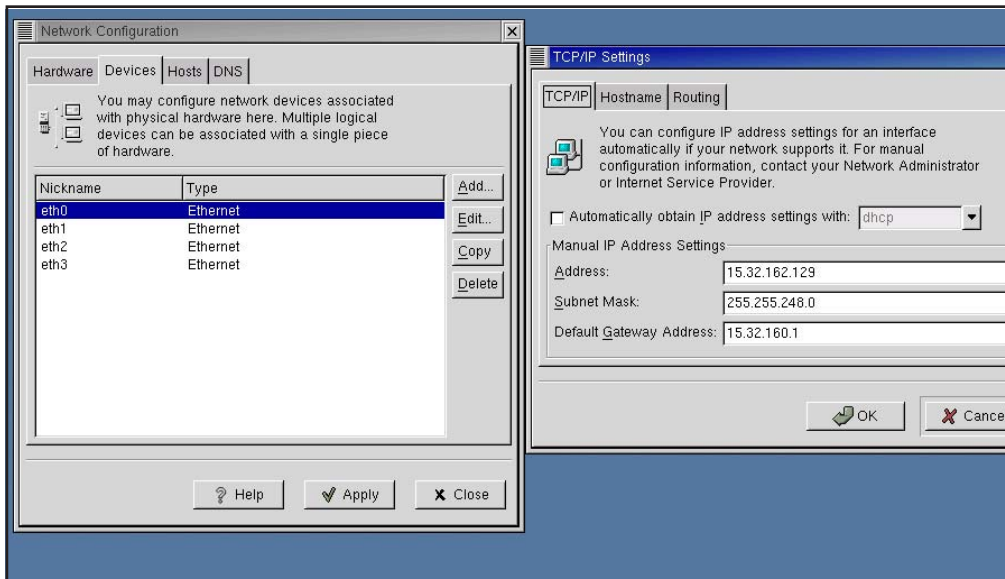


Figure 3-4 Network Configuration

This *Network Configuration* tool is covered extensively in Chapter 8. You can see that this tool lists the four network cards in the rx2600 Integrity server, which allows us to edit information related to each of the interfaces.

Figure 3-5 shows the *Gnome Red Hat Package Manager (RPM)* tool, which is used to manage software packages on Linux systems.

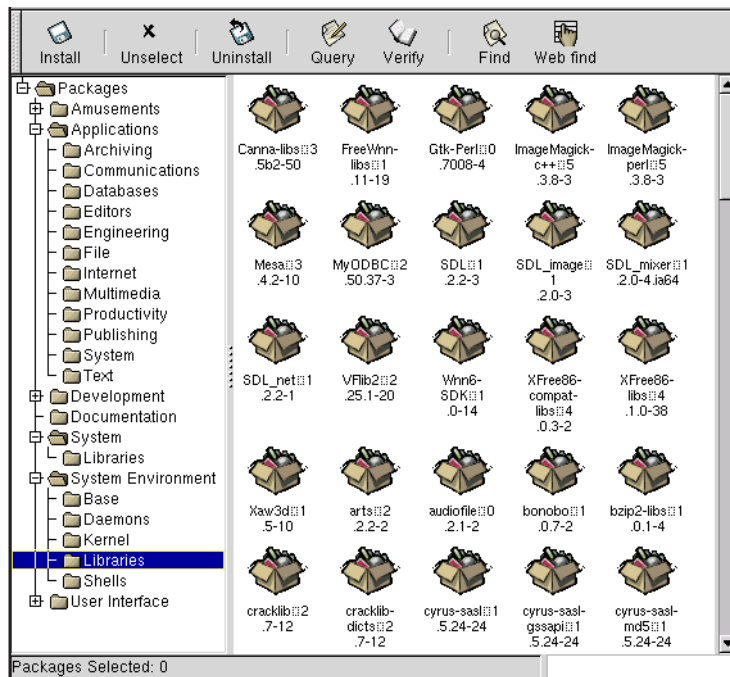


Figure 3-5 *Gnome RPM Package Management*

Using this tool, you could load, remove, and perform other package-related work. Working with Linux software packages is covered in Chapter 2.

The last system-related tool that this chapter covers is the *Hardware Browser*. Figure 3-6 shows two different *Hardware Browser* windows.

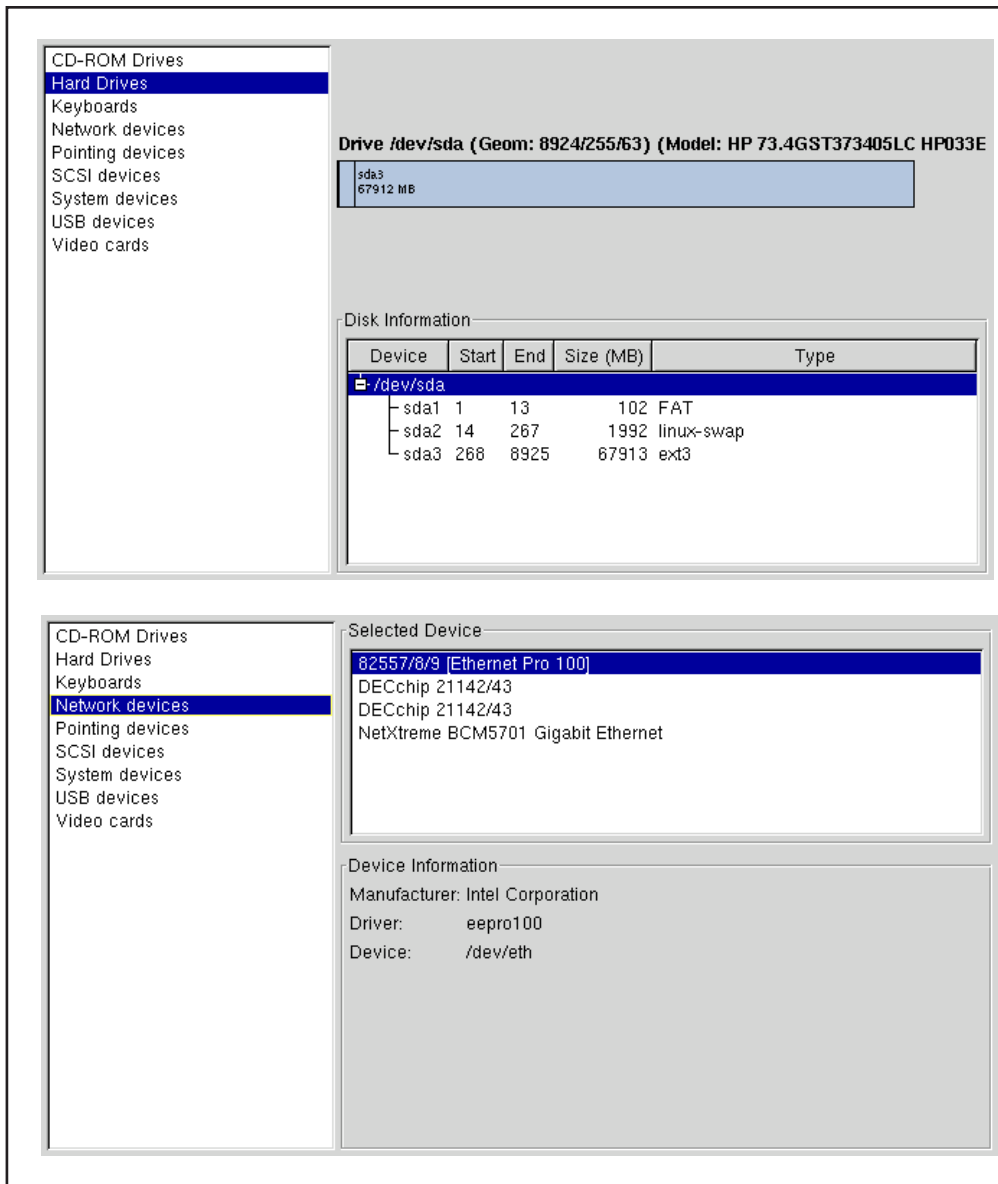


Figure 3-6 *Hardware Browser Showing Hard Drives and Networking devices*

The top window of Figure 3-6 shows the three internal hard drive partitions on our rx2600 that are all part of `/dev/sda`, and the bottom window shows the four network devices (although the DEC-

chip cards shown are not supported in Linux, at the time of this writing, but the four-port cards are supported). The Hardware Browser can be a useful tool if you have forgotten what's installed in your system.

When you want to logout, select *Logout* from the *Start* menu. GNOME asks you if you want to save the current configuration. If you do, check the *Save the Current Configuration* checkbox, and click *OK*. The next time you log in, you will see the same windows you were working with when you logged off.

If you like GNOME and you're an HP-UX user, you can get GNOME for HP-UX from the GNOME project at www.gnome.org. Check out the Web site listed earlier. You can download and work with the latest version of ximian GNOME on HP-UX. Be sure to read the requirements for your system and other related information when you visit the Web site.

KDE

The K Desktop Environment (KDE) is an enhanced window manager. KDE not only describes the interface of the window environment, it also includes a set of libraries that allow applications to take advantage of special KDE features. This means that applications designed specifically for KDE may have to be ported to other window managers in order to work.

If you've selected KDE as the default for your window environment, it starts automatically when you login. If GNOME is your default and you want to use KDE, select *Session* at the bottom of your login screen. When the session dialog appears, select KDE. When you login, you may be asked again if you want to use KDE as your default window manager. If you do, select *yes*. If you only want to use KDE for the current session, select *no*. You can also use a **switchdesk** command to switch desktops.

After logging in, you see a fully functional KDE environment. The one shown in Figure 3-7 is different than what you will see because KDE, like GNOME, is configured to remember your last session and to start all the applications you had open when you last logged out.



Figure 3-7 Full KDE Screen Shot

As you can see, because KDE remembers your last session, when you login, several application windows are already open. But, let's start at the bottom of the desktop with KDE's main toolbar. Starting at the left is the KDE icon for *Start Applications* (the "K") followed by the icons for *Show Desktop*, *Control Center*, *Help* (a life preserver), *Home Directory*, *Konqueror Web Browser*, *Email*, *KOffice* (office productivity tool), and finally *Kate* (a KDE editor).

Immediately to *Kate*'s right are the four *Desktop* names (GNOME calls them *Workspaces*). In this case, they are named *dev*, *web*, *office tools*, and *sysadmin*, but by default, they are called *Desktop 1*, *Desktop 2*, and so on. To the right of the Desktops, on the bottom, are the programs currently running. In this case, *Konqueror*, *Control Center*, and a terminal window for root are open and running. To the

right of the open applications, there are miscellaneous icons, such as the lock and time.

In Figure 3-7, the visible open windows are the *Control Center* on the left and the *Konqueror* file manager on the right. The *Control Center* is particularly interesting because from it, you can perform almost all system administration tasks, but more on that later.

If you click the “K” (or *Start Applications*) menu at the bottom of the screen, you see a menu from which you can select most of the programs available through the KDE window manager. Figure 3-8 shows the default organization of the *Start Applications* menu.

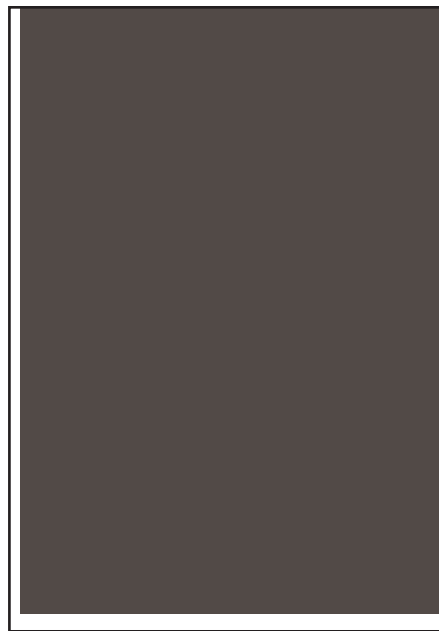


Figure 3-8 KDE Menu Pick

From the main menu, you select the *System* sub-menu to illustrate the number and variety of system administration tools available.

If you select the *KDE Control Center* either by finding and clicking it on the *Start Applications* menu or clicking the *Control Center* icon on the toolbar (fourth icon from the left in Figure 3-7), you can control almost any aspect of your system. Along the left side of the *KDE Control Center* window are menus that allow you to configure any aspect of your KDE environment. Figure 3-9 shows the *Control*

Center open to the *Web Browsing* controls. If you look closely, you can see the many *Web Browser* options that you can configure using this selection.



Figure 3-9 *KDE Control Center Showing Web Browsing*

If you click *System* and then *Login Manager* in the *KDE Control Center*, you can customize almost every aspect of your environment, as shown in Figure 3-10.



Figure 3-10 *KDE Control Center Showing System-Login Manager*

In this window, you can manipulate *Appearance*, *Font*, *Background*, *Sessions*, *Users*, and *Convenience*. The *Sessions* window is open, which includes additional *Session types* that you can choose. The *gnome* and *kde* types are included by default.

Window environments and managers are purely a matter of preference. In the case of Linux, you have GNOME and KDE as widely used window managers and you can download many others.

You can customize your GNOME or KDE desktop environments in an almost unlimited number of ways. In this section, we've only scratched the surface of what you can do. For more information about these window managers, look at the help included with the distribution.

To log out from either desktop environment, select *Logout* from the *Start* menu.

OpenOffice.org

OpenOffice.org is a suite of office software. It comes with many Linux distributions or you can download it from www.openoffice.org. This software provides your Linux (or other operating system) with a complete set of office software for free. You can download many other great products to your Linux system, but I included *OpenOffice* in this introductory desktop chapter because it demonstrates the power of the Open Source community. The software is easy to download and configure and provides a word processor, spreadsheet, drawing, and presentation program...all for free. At the time of this writing, the software is not available for Integrity servers, so the examples in this chapter are from a Red Hat 8.x system but plans are for it to be available in RHEL 3. Because the Integrity servers are new, there is still some software yet to be fully certified on the platform. I included the next section because the tools will be available at some point in the near future. As a sidenote, the “retail” versions of Red Hat, such as 8.x used in this section, have been replaced by Fedora. Fedora Project is a Red Hat-sponsored and community-supported open source project. Fedora Core 2 is available at the time of this writing.

I’m not going to describe the download and setup of *OpenOffice.org* in detail. I am only going to show you enough to get you started. The Web site provides all the information that you will need. Instead, I’ll show a few screen shots of *OpenOffice.org* so you can see how powerful it is. The screenshots should also indicate how similar it is to *Microsoft Office*, thus illustrating that you won’t have to learn a new way of working with office software. Lets start with the download. Figure 3-11 shows how easy it is to download *OpenOffice.org* from the *Open Office* Web site.

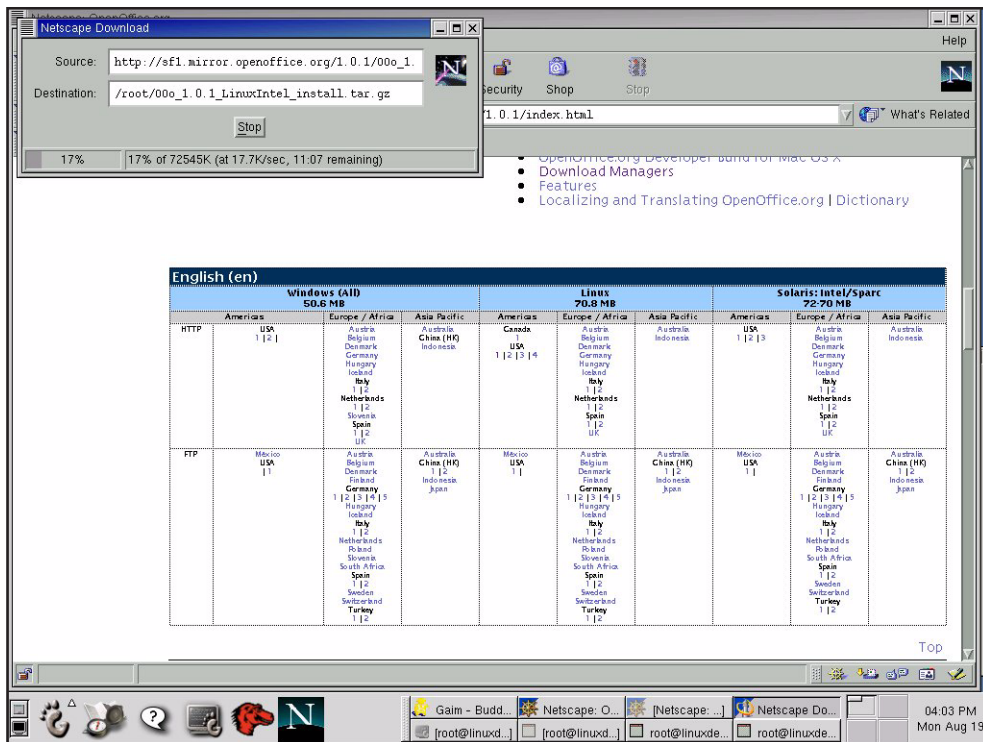


Figure 3-11 *OpenOffice.org* Download

After selecting the language for *OpenOffice.org* that you want to download, you simply select the destination for the software (as shown in the upper-left corner of the figure) and download. Notice that *OpenOffice.org* is available not only for Linux, but for other operating systems as well. After the download is complete, you simply run the setup program. The complete instructions for the download and setup are on the Web site.

If downloading is a problem, *OpenOffice* is available with the Red Hat 8 or 9 CD-ROMs. If you didn't install *OpenOffice.org* when you installed your Red Hat product, select *System Settings* ⇒ *Packages* (or *System Settings* ⇒ *Add/Remove Applications*) from the GNOME menu. When the *Package Management* tool opens, find the *Applications* section and check *Office/Productivity* and then click *Details*. When the *Office Productivity Details* window opens, check the box next to *OpenOffice*, then click *Close* to

close the details window. When the *Package Management* window reappears, click *Update* to install the suite.

After the download (or CD-ROM install) and setup of *OpenOffice.org* are complete, your user environment is enhanced to allow you to use the *OpenOffice.org* programs. Figure 3-12 shows the *OpenOffice.org* menu structure together with all the great tools available in the suite.



Figure 3-12 *OpenOffice* Menu Picks

You create new *OpenOffice* files in much the same way you would create them using the tools included with *Microsoft Office*. Additionally, if you already have *Microsoft Office* files, many can be read and modified using the

tools supplied with *OpenOffice.org*. Figure 3-13 shows an file created with *Microsoft PowerPoint* file open for editing in *OpenOffice.org*.



Figure 3-13 Existing File Read into *OpenOffice.org*

I have found that *OpenOffice.org* can create new (or modify) old files created in *Microsoft Office* easily and efficiently. I believe it will only get better. With the open-source community working on this application, you can only expect better things. I am using version *1.0.1* at the time of this writing, and it works great. I'm sure that future releases will include even more functionality.

Of all the almost unlimited number of applications of all types available for download and use on your Linux system, I've found that this is one of the best. It really enhances your Linux user environment and office tools.

