

noppix is becoming a necessary part of our lives. Its uses are numerous, with some websites listing over a 100 different applications and jobs that it is capable of. These range from a teaching resource to a rescue system.

#### What is it?

Knoppix is a LiveCD Linux distribution. That means it is capable of running from the CD alone without harming your hard disk stored information, to give you a working Linux system. Speed is naturally slower as it is reliant on the size of your RAM and CD drive speed. An operating system running on a hard disk can supplement its RAM with swap space, and hard disk access is much faster than CD access time and data transfer. That said, it is an amazing system, capable of showing off Linux to all. Many institutions are using Knoppix as a basis to produce their own tailored system.

# How to start a Knoppix disc

Once you have burnt a Knoppix distribution ISO image to a CD, you need to alter your BIOS so that your computer will boot from the media drive where you have the CD. With this done, you can reset the power to the computer.

If your computer BIOS does not support the option of booting from the media drive, you have will need to create a boot floppy diskette.. You can create this disk from the image in KNOPPIX/boot.img which will be on your newly made CD.

**Linux Magazine DVD** 

The Knoppix CD contains a large collection of software; the Knoppix system is just under 700MBytes in size. Because of its compressed format, the system contains almost 2GBytes of executable software which is decompressed as and when needed. One of Knoppix's strengths lies in its ability to detect a broad range of computer hardware. This includes many graphics and sound cards as well as SCSI and USB devices.

### **Knoppix 3.4**

This is the standard Knoppix that the others are based on. Debian-based it has a 2.4.26 kernel, although a 2.6.6 option is available at boot time. The default desktop environment is KDE 3.2.2 and includes the latest Gimp version 2.0.

This version has had improvements made to its hardware detection from the previous 3.3 version, with better drivers now included. Additional software can easily be added with the Internet-based live installer, which can place the software either into a RAM disk or onto a hard drive-persistent home directory.

No matter what you want to do, Knoppix has the software you need. This can

range from OpenOffice 1.1 for your productivity requirements to Rosegarden, a MIDI sequencer and musical notation editor.

## **Gnoppix 0.60RC2**

The Gnoppix distribution is a LiveCD based on Debian GNU/Linux 3.0 (woody). It can be compared to Knoppix but, where Knoppix uses KDE, GNOPPIX uses the GNOME desktop environment.

With its GUI installation tool, it has never been easier to set up a Debian system with a GNOME desktop.

### Kanotix 07-2004-A

Kanotix is a complete distribution based on Debian/sid. It is optimized for hard disk installation. Many WLAN drivers have been added including NdisWrapper. (See cover story in this issue). It contains the 2.6.6 kernel and is designed for 586 processors or better.

## **Knoppix STD**

Knoppix-STD is a customized distribution of Knoppix. It aims at providing a security-enhanced version of the LiveCD, focusing on information security, and network management tools. It is meant



Figure 1: Knoppix showing off its KDE features.

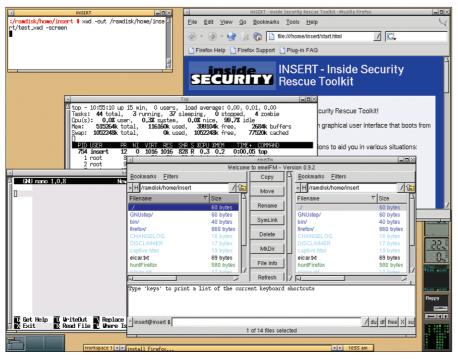


Figure 2: Tiny but powerful Insert.

to be used by both the novice looking to learn more about information security and security professionals looking for another Swiss army knife for their tool kits.

Its utilities are divided into a range of topics including: authentication, encryption, forensics, firewall, honeypots and many more.

#### **ZoneCD**

Based on Morphix, the ZoneCD offers a free WiFi access solution. It has been designed to implement safe, free, WiFi hotspots. The ZoneCD can be used by all levels of free WiFi providers, from experienced programmers to newbies. Setting up a free WiFi hotspot can be as easy as hooking up an access point, popping in a CD and rebooting your machine.

It is pre-configured to create a WiFi gateway. The CD is a tiny operating sys-

### **System requirements**

- Intel-compatible CPU (i486 or later).
- 20 MB of RAM for text mode, at least 96 MB for graphics mode with KDE (at least 128 MB of RAM is recommended to use the various office products).
- · Bootable media drive.
- · Standard SVGA-compatible graphics card.
- Serial or PS/2 standard mouse or IMPS/2compatible USB-mouse.

tem with automatic hardware detection and support for a wide range of graphics and sound cards. The WiFi gateway includes support for end-user authentication and web content filtering.

### **GNUStep**

GNUstep is a free implementation of the OPENSTEP framework. The GNUstep LiveCD has plenty of software for GNUstep. Displaying Postscript is one of

its powerful features. It includes a wonderful new tool called Gorm which is ideal for Rapid Application Development.

GNUstep has a fast, elegant and consistent design that is the result of over a decade of development.

### Insert 1.2.14

The Inside Security Rescue Toolkit is small in size. At under 50MBytes it can be burnt onto a business-card CD. If you have sufficiently fast Internet access, you can use the Internet-Installer option to download and install Mozilla into a RAM disk

Even without a fast connection you can still browse with the Links program. Despite its small size, Insert can perform many jobs such as network analysis, disaster recovery, virus scanning, and computer forensics.

#### Memtest86

Memtest86 is a small, stand-alone memory test for x86 architecture computers. Most computer BIOS based memory tests are very quick, and often miss many of the failures that are detected by a more rigorous Memtest86.

Memtest86 has a few online commands. *ESC* leaves the test and restarts the computer. *c* lets you chose from the configuration menu. In this option, 2 lets you select the test options.

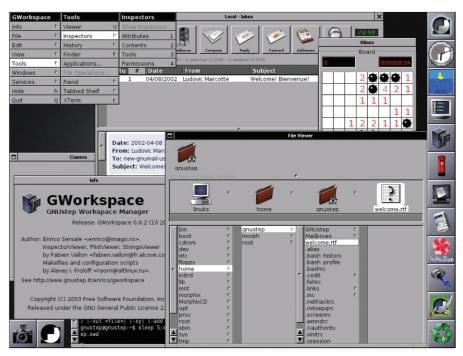


Figure 3: The GNUstep desktop.