

K-tools: CD Bake Oven

OVEN FRESH

Stefanie Tefuel takes a look at the graphical front-end CD Oven Bake, and shows us how burning, or should we say baking, CDs has never been so easy

As nice and powerful as all those Linux-based command line burner programs may be, who wants to have to immerse themselves in endless manpages just to find the parameters for copying a CD? You can save yourself the effort of information gathering by installing CD Bake Oven, a new graphical front-end for the programs *cdrecord*, *mkisofs*, *cdda2wav* and *cdparanoia*.

The *mkisofs* package enables you to create the ISO 9660 filesystems needed to store the data to be contained on data CD-ROMs. The program *cdrecord* copies that data onto the blank CD. The programs *cdparanoia* and *cdda2wav* enable you to read data from an audio CD in a CD-ROM drive and write it to the hard disk as WAV files.

To start your own CD bakery you need to get the program *cdbakeoven* from the project homepage (<http://cdbakeoven.sourceforge.net/download.php>). Users with a current Mandrake, Debian or SuSE distribution can then immediately install the rpm packages they have downloaded; anyone else first needs to unpack the source code, change into the directory created in the process and then compile and install the program with:

```
./configure; make; make install
```

Red Hat users can also try their luck with the Mandrake package – we had no problems installing it

K-tools

In this column we present tools, month by month, which have proven to be especially useful when working under KDE, solve a problem which otherwise is deliberately ignored, or are just some of the nicer things in life, which – once discovered – you wouldn't want to do without.

under Red Hat 7.2. You also need to ensure that the burner programs and utilities mentioned above can be found on your machine. This should not present any significant problems as they are usually included as standard with any major distribution.

Once you have installed the burner software you will notice a new entry, *Applications/CDBakeOven*, on your K menu, giving you quick and easy access to the program. To make sure you won't miss out on the fun of the burning experience even as a normal user, you should assign sufficient permissions for *cdrecord* before running this program. It can normally only be executed by *root*. Log in as the superuser and change this as follows:

```
chmod 4711 /usr/bin/cdrecord
```

Configure me!

CD Bake Oven does its best to recognise any hardware required for burning at startup. Should it fail you can add missing devices manually using the configuration dialog boxes. Select *Settings/Configure CDBakeOven...* from the menu bar and opt for the menu item *Device Settings*. If your hardware is recognised you should see something similar to Figure 1 on the *Autodetect* tab. If your device has not been detected change to the *Scanbus* tab and click on *Retry* to initiate another hardware scan. Should your endeavours continue to remain fruitless you can enter the hardware path yourself on the *Custom* tab.

Some burners, particularly ATAPI ones, often prove problematic at this point. If you own one of these you must activate the kernel's ATAPI SCSI emulation before burning! This is a module included in standard distributions and can be loaded easily using the command:

```
modprobe -k ide-scsi
```

If in doubt, it's best to swallow the bitter pill that is a

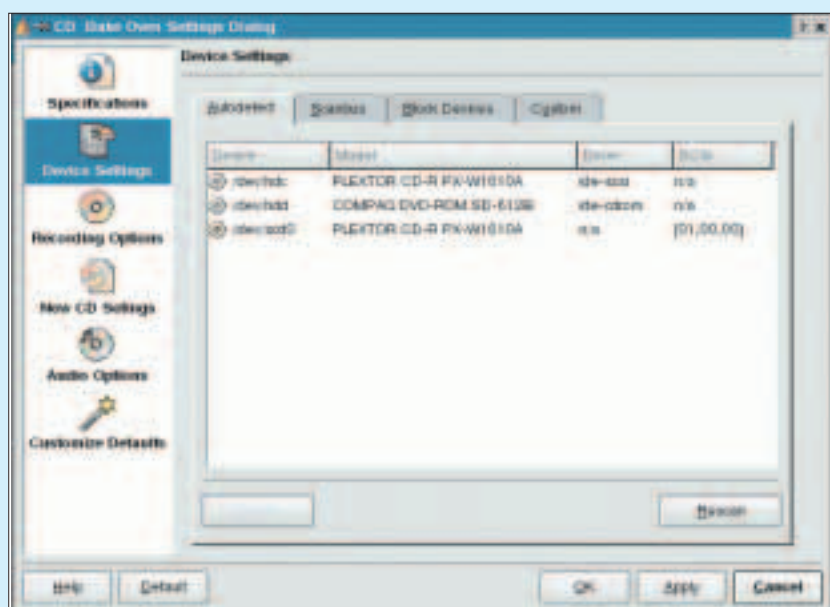


Figure 1: A lucky break: the hardware is detected straight off

BurnProof A special feature of newer CD burners. Previously the data stream could not be interrupted under any circumstances during the burning process, as this would allow the burner's buffer to become empty. If this happened, for example if another program required too many resources or the source CD was difficult to read, then the writing of the blank CD could not be completed and it would be unusable. If the data stream is interrupted during burning with BurnProof technology the system determines the position of the last data written and sends the burner into a loop. As soon as new data arrives, i.e. when the source drive is able to send more data to the burner and the buffer fills up again, the write laser moves to the marked position and resumes the burning process.

DAO The Disk At Once process writes the individual tracks without their own lead-in and lead-out; there is only one common lead-in/lead-out for the entire CD. Warning: not all recorders can cope with DAO.

ISO image An ISO image is an exact reproduction of the track that is being copied onto the CD, i.e. the new CD is a 1:1 copy of the ISO image.

kernel compilation.

While we are in the configuration menu let's take a look at the other settings. The Recording Options dialog (Figure 2) is of special interest. At the very least you ought to activate the **BurnProof** option if your burner supports it. Your blanks CD-Rs will thank you for it.

If you would like the finished CD to be ejected once the burning process is completed you need to activate the Eject when done field. It is also a good idea to tick the option *Fixate CD*, otherwise CD players and quite a few CD-ROM drives will not be able to read your data. In this dialog you can also specify whether you want to use the **DAO** option.

The option *Customize defaults* (Figure 3) is also

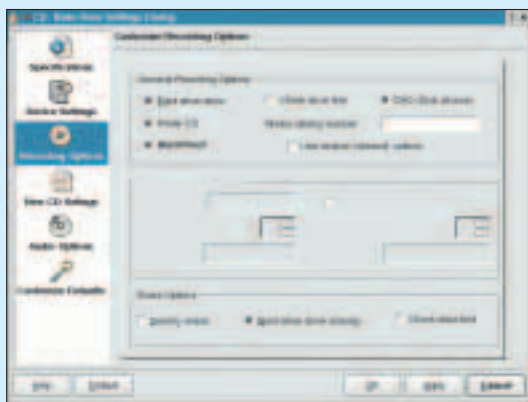


Figure 2: Choose your recording settings

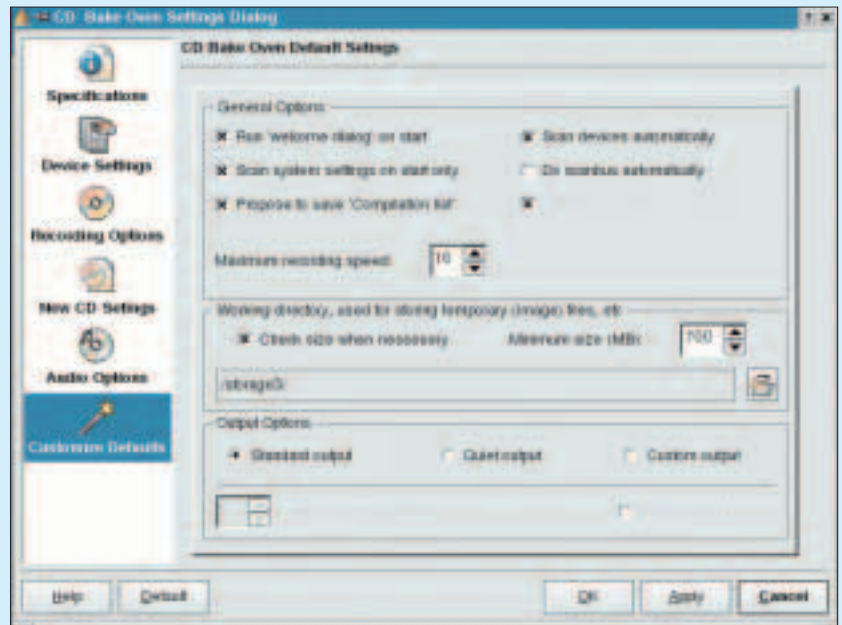


Figure 3: General options for CD Bake Oven

worth a second look. CD Bake Oven automatically displays a selection dialog featuring the main burning actions (copy, create new CD, etc.) at startup (Figure 4). If you primarily compile your own data CDs you are probably better off without it. To stop this dialog appearing, deactivate the option 'Run welcome dialog' at start. The arrow buttons next to the Maximum record speed field allow you to set the burning speed. If you frequently work with **ISO images**, you should use the Working directory section directly below to specify a directory that will continue to have sufficient space available.

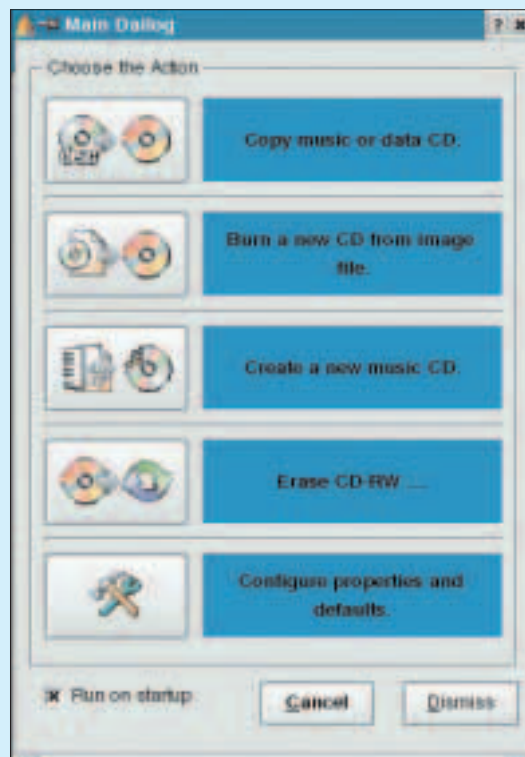


Figure 4: The optional welcome dialog

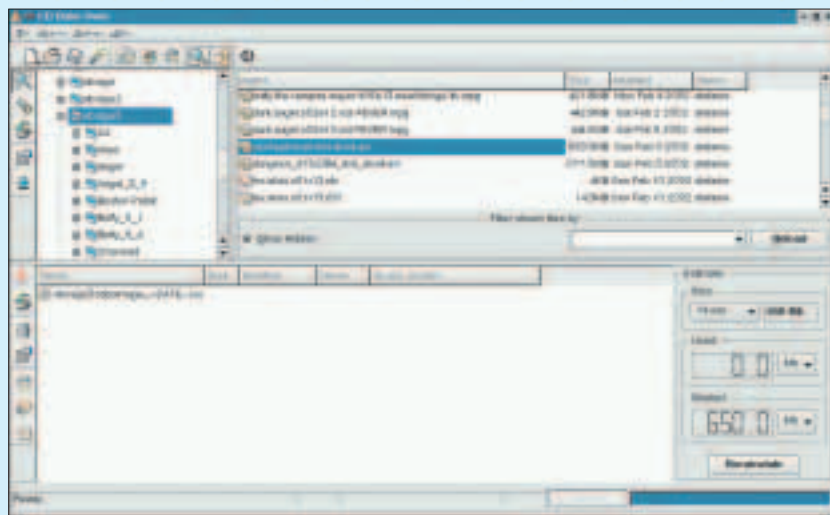


Figure 5: The opening window of CD Bake Oven

CDs à la carte

Once CD Bake Oven has recognised your burner the program has got all the angles pretty much covered: not only can you copy or burn audio CDs with it, you can also master CDs, create multi-session and bootable CDs, burn on the fly or erase CD-RWs. Even overburning in order to utilise a slightly larger part of the blank CD is possible at a click of the mouse.

A particularly nice feature of CD Bake Oven is the option of compiling your own data or music CDs using drag and drop. For this you need to familiarise yourself with the window in Figure 5, which you encounter at the start of the program. In the upper window on the left you first of all select the directory containing the data you want to copy. Its contents will appear in the window on the right. Now you just need to highlight the required files with the mouse and drag and drop them into the window below and you have everything you need for creating your CD.

CD Bake Oven supports the addition of individual files as well as entire directories. Your selection is only limited by the size of the blank. If

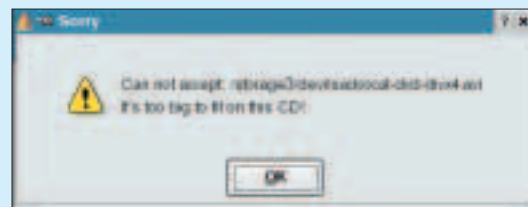


Figure 6: Too much for the blank

your choices are too large for the CD then an error message like the one in Figure 6 will prevent you from doing any damage.

Occasionally this error message can also be caused by CD Bake Oven assuming the wrong size for the blank CD. The tool gives you a choice between blank sizes of 650Mb, 700Mb and 875Mb. It is therefore important that you set the relevant size in the Size pull-down menu before each burning session. You can also use 875Mb for the increasingly popular 800Mb blanks, as long as you ensure that your desired data quantity does not exceed the capacity of the blank. Do not be distracted by the values displayed as Used and Wasted: the latter is based on the assumption that you're using an 875Mb disc.

You start the actual burning process by right-clicking in the lower window. Select Create CD from the context menu and you should see a window that resembles the one in Figure 7. Use the Recording Details section to specify how you would like CD Bake Oven to proceed. You have the choice of simply producing an ISO image, going straight to burning the disc or of putting your data directly onto the CD on the fly. The last option can be tested in dummy mode before you actually burn anything.

As soon as you are happy with your settings you can kick off the actual burning process by clicking on the Create! button. If you like you can also monitor the progress in the Process Output section (Figure 8). The program additionally uses this window to inform you once the process has been successfully completed.

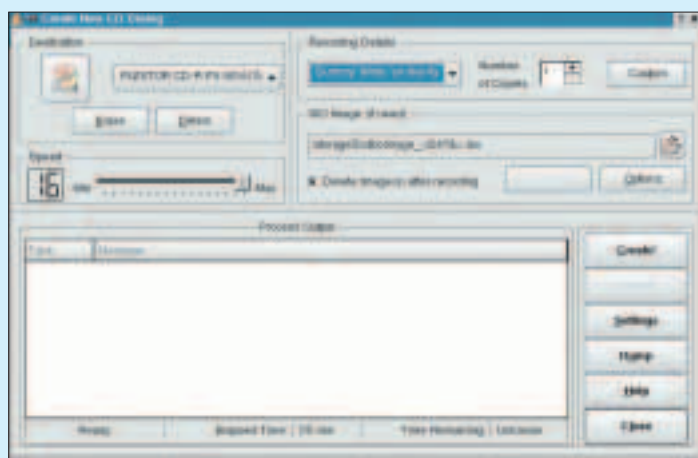


Figure 7: The last burning details

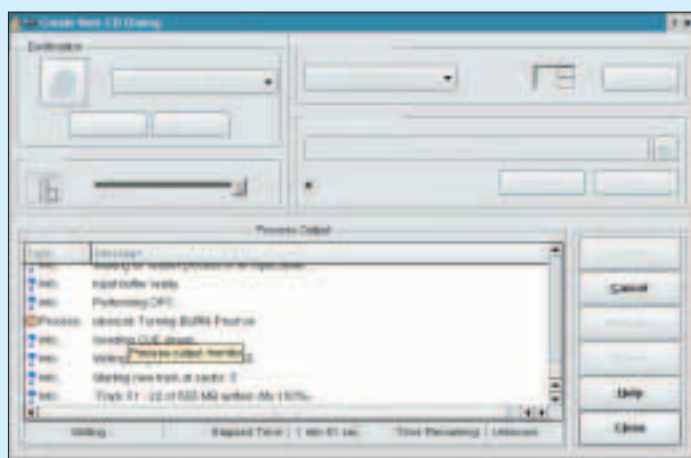


Figure 8: Making progress