**Examining NeroLinux Version 2.0.0.2** 

# BURNING ASPIRATIONS

Does Nero meet the challenge of native Open Source Linux CD utilities, or does it just fiddle while it burns? BY HAGEN HÖPFNER



burning utility that is very popular in the Windows world.

Today, most burners come with an OEM version of Nero, and this has helped Nero become the standard Windows application for burning CDs and DVDs. At the beginning of this year, a Linux version of Nero became available. When NeroLinux first appeared, we concluded that the tool was not up to the level of the Windows version. We recently took a look at NeroLinux 2.0.0.2 to see if Nero had gained some ground on its Windows counterpart.

# **Buying Fuel**

You can now purchase NeroLINUX (Figure 1) without having a Windows license. For US\$ 19.99 you can buy a serial number that converts the downloadable demo version from [1] into a full version. The downloadable demo gives Linux users enough time to test the burning abilities of NeroLINUX before they decide.

Nero does not require much in the line of system resources. The program will run on RPM and Deb-based Linux systems with kernel version 2.4.x or later. Version 1.2 of the GTK library is required but included with all major Linux distributions. On the hardware side, you will need at least a 500 MHz CPU and 64MB RAM. The hard disk requirement depends on the size of the media you will be burning. The vendor specifies 9GB for DVD burning. The 50MB hard disk space the software occupies itself is negligible. Officially, Nero supports the 32-bit versions of the following Linux distributions for Intel architecture:

- Suse Linux Version 8.0 or newer
- Red Hat Linux Version 7.2 or newer

- Fedora Core 1 through 4
- Debian GNU/Linux Version 3.0 or newer with kernel version 2.4.x or 2.6.x (Debian Woody installs a 2.2.x kernel by default)

Although these distributions are not on the official list, Nero will also run on Mandriva Linux 10.1. Users of Debianbased distributions will find a Debformated package on the download page. And there is a RPM package for users of Suse Linux, Fedora, and other RPM-based distros.

Before you fire up your distribution's software installation tool to install Nero, you might like to validate the downloaded archive using the MD5 sum. To validate the archive, on Suse Linux for example, calculate the MD5 hash for the package by giving the *md5sum nerolinux-2.0.0.2-x86.rpm* command, and compare the results with the checksum shown on the Nero download page. If the two strings match, you are safe to install the package. The installation routine adds an entry for Nero to the KDE menu.

### Fire Devil

The first time you launch Nero, it starts looking for a burning device. Strangely, the application complained that it could not access some SCSI devices when we launched it on our non-SCSI test laptop with Suse Linux 9.3 (Figure 2). On the upside, this had no effect on the func-

tionality of the program, and highlighting the check box allowed us to tell Nero not to display the message in the future.

If the application indicates that there are other applications preventing the burning process, do not ignore the message. As Figure 3 shows, Nero is not happy with the *susewatcher* and

suseplugger on Suse. The former service provides security update messages, so it is not a good idea to disable it. And suseplugger monitors pluggable hardware and offers to perform specific actions on specific events, such as launching Konqueror when you plug a USB stick into your computer. In our tests, CD-ROM auto-mounting did not work when we tried to run Nero with suseplugger enabled.

# Re-Fueled

Recent changes to Nero include support for layer-jump recording of DVD-R-DL (Dual Layer). This feature gives users the ability to fill dual-layer DVD-Rs in multiple sessions – the burning program writes both layers of the disk alternately.



Figure 2: Nero complains about being unable to access the SCSI systems, although the laptop used for the test does not have any.

According to the vendor, this makes Nero the only program capable of supporting the still fairly uncommon duallayer DVDs.

Additionally, the new version of Nero gives users the ability to create DVD video and miniDVD disks, if the corresponding *VIDEO\_TS* and *AUDIO\_TS* directories are available. The Linux version does not have the ability to compose video media from video files, in contrast to the Windows version. However, you can now stipulate ISO-specific options, such as CD sector type Mode 1 or Mode 2/XA, as well as Joliet (for long filenames on Windows) and RockRidge (for long filenames on Linux). Click the *ISO Options* tab in the configuration dialog to enable these options.

Another new feature in the latest version of Nero is the ability to map audio signals to burning device events. This new feature is only useful to those who either use OSS or the legacy ESD sound daemon. If the KDE Arts sound system has control of your audio hardware, Nero is unable to use the device and just keeps quiet.

To toggle between OSS and ESD, and to disable acoustic signals, select *File* | *Preferences* in the *System Configuration* tab. The *Sounds* tab in the same dialog allows you to select sounds to play.

The latest version of Nero includes some new features, but the vendors have also taken the new release as an opportunity for some serious bug hunting. There is a detailed changelog at [2].

#### **Burn Resistance**

It is no big secret that Nero for Linux is less advanced than the Nero Windows

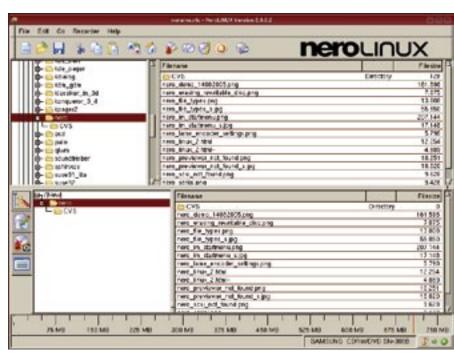


Figure 1: Collecting files for burning in the main Nero window.

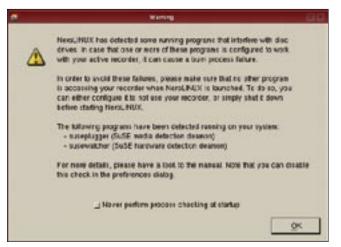


Figure 3: Nero will not cooperate with some of the features of modern Linux distributions.

version. But compared with Linux applications such as K3b [3], Nero also leaves a lot to be desired. The program does not have a project wizard, and although drag & drop works within Nero and from and to Konqueror, you have to make sure you select the right target. The filesystem tree area at the bottom left of Figure 1 just ignores any attempts to drop files and directories, forcing users to use the file list to its right.

### **Extra Tools**

One of Nero's more interesting functions is its ability to convert audio formats. This said, for Suse 9.3 you will need to add the four multimedia option packs (available via online update) to use this feature.

You will also need the option packs if you want to play audio files by doubleclicking the icon or dragging it to the button on the lower right of the Nero window. As an alternative, you can manually install the required tools: mpg123 bzw. ogg123.

Nero needs a few other tools to convert between formats, for example lame to create MP3 files. sox for WAV format. and oggenc to convert audio files to OggVorbis.

The File Types tab in the configuration dialog (Figure 4) has an option for adding more tools, and thus helping Nero handle other formats

When we tried to convert from MP3 to WAV, Nero created a number of files that contained

just noise on our lab system. The incorrect setting for the internal byte order was to blame.

Unfortunately, Nero crashed sporadically when we tried to enforce little-Endian order in the WAV file encoding dialog. After multiple attempts, we did finally manage to convert a file, and the resulting file was fine, but the function is so unstable that productive use can be ruled out.

#### Track Editor

You can use the track editor to burn audio CDs with Nero. The quickest way to access the track editor is to press [F4]. You can then drag & drop the required audio files to the track list. In our test, Nero could only handle MP3 files; in fact, it complained that the WAV files we created were too long.

Nero was unable to determine the length of the OggVorbis files because it didn't have access to the Oggtst program. Unfortunately, the OggVorbis tool developers have now replaced Oggtst with Ogginfo. To set up Nero to use the Ogginfo alternative, you need to replace

the oggtst "\$file" entry with ogginfo "\$file" in the .ogg line Detect Size field of the dialog shown in Figure 4. Then replace the following in the Add File Type

 $strval(regexp("^length=([0-9]2$ \*)"))\*44100\*4

with

strval(regexp("Total data 2 length: ([0-9]\*)"))\*12.9

to tell Nero to create audio CDs from OggVorbis files.

## Conclusions

The bug fixes in version 2.0.0.2 and the fact that Nero continues to provide Linux support are both steps in the right direction. This said, the Linux version of the Nero program is still at an early stage of development, and the tool has far to go before it is competitive.

If you believe the vendor, Nero's unique selling point is its ability to use DVD-R-DL media. On the downside, the controls are more or less unusable, and you would not expect a commercial product to be so buggy. Assuming you can do without the DVD-R-DL feature, you might like to put your US\$ 19.99 to better use.

#### **INFO**

- [1] NeroLINUX: http://ww2.nero.com/ enu/NeroLINUX.html
- [2] NeroLINUX 2.0.0.2 Changelog: http://club.cdfreaks.com/showthread. php?t=142046
- [3] K3b Homepage: http://www.k3b.org/

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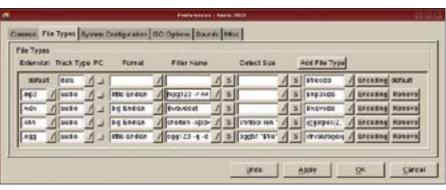


Figure 4: This untidy dialog lets users introduce the Nero audio converter to other formats.