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Watch DVDs with Ubuntu

Add movie playback, delve into Firefox 1.5, and explore Evolution's groupware features

Over the past couple of months we've been concentrating on the Ubuntu Linux distribution (www.ubuntulinux.org). In the first part of our series, I explained how to install a fresh copy of Ubuntu and apply the latest updates. Last month I examined the software management system and added a couple of extra repositories to gain access to thousands of packages. I then showed you how to install some multimedia codecs to enable the playback of the most popular formats.

This month we'll start by setting up DVD and video playback. In order for this to work you will need the additional repositories as described last month; those being the Universe and Multiverse sets. If you don't have access to last month's issue, check the online FAQ in Ubuntu's documentation for more details.

The video player Ubuntu comes with is Totem (www.gnome.org/projects/totem). This is really just the front-end GUI: the controls and menus for playing back video or audio files. It requires a back-end 'engine' to decode these files for playback. The standard version supplied is the gstreamer engine. This is fine for most forms of audio, but fairly useless when it comes to video. The simplest and most effective way to make Totem work well with video is to switch to the Xine engine. If you're a regular reader, you will have seen Xine (http://xinehq.de) mentioned previously. The Xine library is capable of decoding almost all multimedia codecs and formats and can even make use of Windows codec DLLs for those not natively supported (see box below).

SCREEN 1

Use Synaptic to install the Xine engine with the Totem player

Replacing Totem with Xine

Replacing Totem's gstreamer engine with Xine is quick and easy to do. Load up Synaptic, the graphical package manager. Search for totem-xine and mark it for installation (see screen 1). Synaptic will tell you that it must remove the gstreamer package and will do this automatically. It may also require some dependencies to be installed. Thanks to the software management, all this is taken care of for you.

Once done, Totem will now use the new engine. Try opening a selection of audio and video files; you're likely to have no problems with files, including mpeg4 video (such as DivX) or wmv video. If you try to access a DVD, however, this still won't work. One more library is required for this step and unfortunately it's not part of any of the standard Ubuntu repositories. The library in question is libdvdcss. Rather than set up a repository for this one package, it's easier to download and install it manually it manually. You can get hold of it at http://developers.videolan.org/libdvdcss. Click on the 'releases' link

Set the launch icon for Firefox to use the newly installed version

SCREEN 2

Using Windows video codecs

Although the Xine library can play back almost all forms of video natively, there are a few types it doesn't support directly. The Xine library can use Windows codecs to support these formats without any performance penalty. You can download a set of these from the Mplayer home page (http://www.mplayerhq.hu). Click the download link from that page and download the 'essential codecs package'. Its name will be something like 'essential-20050412.tar.bz'.

Now open up a terminal and run the following:

```
$ cd /usr/lib
$ sudo tar xfvj ↙
/tmp/codecs.tar.bz
$ sudo mv codecs win32
```

(Key: ↙ code string continues)

Replace 'codecs' with the actual name of the downloaded package, and replace /tmp with whichever directory they are stored in (such as ~/Desktop). You should end up with a directory called /usr/lib/win32 with various DLL files inside. Xine is now ready to use these codecs if necessary.

to be taken to the latest version (1.2.9 at the time of writing), and descend into the 'deb' directory. Download the binary file libdvdcss2-version-i386.deb. Download the development version too, if you intend to compile any applications with libdvdcss. Next, open up a terminal and install the package (replace the name with the actual filename):

```
$ sudo dpkg -i libdvdcss2-↙
version-i386.deb
```

(Key: ↙ code string continues)

Nothing else needs to be done. The Xine library will dynamically find the new library when you next try to play a DVD. What's more, Xine will allow you to play any region DVD, regardless of what the drive is set to. Note that at the time of writing a small bug exists in that an audio CD must be inserted into the drive before a video DVD is recognised by the desktop correctly. This only needs to be done once.

If you want more advanced control over video and DVD playback, consider installing the standard Xine front end, xine-ui. You can install it from Synaptic as normal. Xine-ui uses the Xine library just as Totem does, but the front end isn't as integrated into the desktop and doesn't look quite as pretty, though extra skins are available to improve its look.

Using Firefox 1.5

Version 1.5 of Firefox was recently released, but came too late to be included in Hoary, the latest version of Ubuntu. The new version provides much faster forward and back browsing and tab switching, numerous security and bug fixes, faster rendering, and a redesigned preferences GUI. This new version will be included in the next release of Ubuntu, Dapper Drake, to be released in April 2006. In the meantime the easiest way to start using the new version is to download the binary release from the Firefox website. Head to www.mozilla.com/firefox to download the new version. If you're not doing it from Linux, or want a localised version (such as the British English version), go instead to www.mozilla.com/firefox/all.html and download it from there.

Now open a terminal window and extract the archive into the /opt directory:

```
$ cd /opt
$ sudo tar xfvz /tmp/firefox-↙
1.5.tar.gz
```

This binary version of Firefox uses an old version of the C++ library that is not installed by default in Ubuntu. Install it with this command:

```
$ apt-get install libstdc++5
```

Make sure the old version of Firefox is closed completely and you can run Firefox 1.5 from the new directory. However, if you try to run it by clicking on the top menu icon you'll still get the old version. To fix this right-click on the Firefox icon and select Properties. Now edit the Command box and insert /opt/firefox/ before the firefox command itself (see screen 2). Clicking the icon now will load the new version.

Top: The main window in Novell's Evolution

Bottom: Evolution can access many types of servers

Setting up Evolution

Owned and developed by Novell, Evolution is used by most as just a regular email program, but it can be a lot more – it's a free, open-source groupware client, enabling access to Microsoft Exchange and Novell Groupwise in addition to the usual email protocols such as Pop and Imap. Users of Microsoft Outlook will find its layout familiar (see screen 3), with tabs for email, contacts, calendars and tasks accessible from the left. A full description of Evolution can be found at Novell's website, under the Novell Linux Desktop section.

Setting up Evolution for straightforward Pop access is helped along by an assistant that pops up on its first run. Let's take an example by setting it up for Gmail, Google's free email service. First enter your name and email address, then decide on the type of connection (see screen 4). Gmail allows you to download email via Pop, so select that option. The window will expand to present you with the relevant options for Pop delivery, such as the server name and your user name. Enter the details requested. Next, the server for sending email must be configured for the account; enter the details shown in the next step of the wizard. Note that both the receiving and sending servers must be set as secure connections, via the relevant checkboxes. That's all there is to it.

You can have as many email accounts as you like in Evolution; enter the preferences and click to add a new account to reload the setup assistant. **PCW**

Enabling DMA access

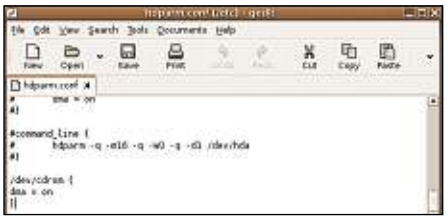
It's advisable to switch on DMA access to your DVD drive. By default Ubuntu leaves this off. Without DMA access, DVD playback can sometimes be choppy, and the drive may underperform. To switch on DMA access, run the following command:

```
$ sudo hdparm -d1 /dev/dvd
```

To enable DMA access automatically every time you boot, run the following command and enter the text shown in the screen on the right to the end of the file.

```
$ sudo gedit /etc/hdparm.conf
```

Changes to this file only affect the system on subsequent start-ups. Run the hdparm command above to set DMA on in the meantime. If you have more than one DVD drive, you'll need to set each drive.



Set DMA access for your DVD drive to improve the drive's performance