


Master of Formats

PRETTY



PICTURES

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Out of the box takes a look at the best Linux tools around and recommends programs that we feel are either indispensable or unduly ignored. This issue, we focus on XnView.

Yet another image viewer? But there's already *xv*, *gtksee*, *display* and many more. And yet it's worth taking a look at *XnView* by Pierre Gougelet, as this program can handle more image file formats (currently 214 of them) than any other under Linux. Since a few of these formats are not Open Source (CorelDRAW Preview for example), XnView is unfortunately not under the **GPL**, but is only freeware for non-commercial use.

What's new

Although XnView has been in existence for a long time for a whole range of other operating systems – including such exotica as TOS (Atari) and the slowly dying OS/2 – it is a newcomer to the Linux domain. To list all the options of the program would burst the seams of this column, so we'll just concentrate on the highlights.

But before XnView graces our screens, we must first install it. The author offers the program for download as an **RPM** package and as **tar** archive at <http://perso.wanadoo.fr/pierre.g/>. Regardless of the package format, the **lesstif** library in version 0.91.4 or higher must be installed. The XnView-RPM packet can be installed (as *root*) with the command `rpm -Uvh XnView-lesstif.i386.rpm`. If you are not using an RPM-based distribution, it will be slightly more trouble:

```
tar xzf XnView-x86-unknown-linux2.x-lesstif.tgz
cd XnView-1.17-x86-unknown-linux2.x-lesstif
su
(enter root password)
csh install
exit
```

If *csh* is not installed on your computer, there is still

the option of installing the program with the Bash script *instxnv.sh* included on the cover CD. Copy this script into the *XnView-1.17-x86-unknown-linux2.x-lesstif* directory and start it with `sh instxnv.sh`.

Perspectives

Using an *xterm*, KDE or Gnome terminal, start the program with `xnview &`. At first there is nothing to see but a little menu bar. After selecting *File/Browse...* from the menu, things start to look a little different. An interface based on the file manager of a Redmonder software manufacturer emerges, the browser.

Figure 1 shows the overview of the */home/chris/pics* directory. How directory contents are presented can be adjusted in the *View/View As* menu. Additional options such as sorting, size of icons and arrangement of the browser elements are also found in the *View* menu. All program settings are stored in the file `~/.xnviewrc`.

Not just reading

The program can also write most of the image

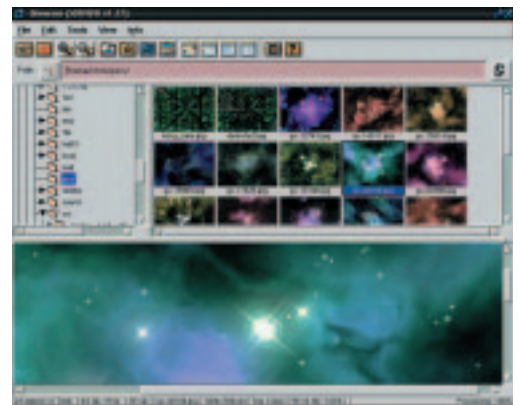


Figure 1: Galaxies at a glance

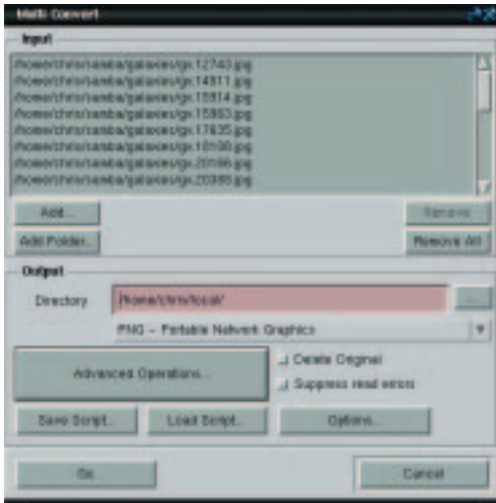


Figure 2: Automatic conversion



Figure 3: Left, the original and right with gamma correction

formats known to XnView. When you hold down the right mouse button over an image file icon, a context menu appears, from which you select *Convert...* Alternatively, you can press [Ctrl+U]. In the following dialog window (Figure 2) you can define destination format and optional processing steps (*Advanced Operations...* button) such as gamma correction, blurring or colour reduction.

Gamma correction (*Change Gamma*) serves to adapt the brightness distribution in the image for different monitors or other output media. The brightest and darkest colours remain the same – only the variation between them changes, depending on the gamma value. If a value of less than 1 is selected, the result is darker than the original, and with value of more than 1 it becomes brighter. In Figure 3 the image has been brightened with a gamma value of 1.8.

For blurring (*Blur*) you can specify a value between 0 and 100. Figure 4 shows an enlarged section after blurring. The edges of the text have been rounded off as a result. An example of reduction to 16 colours (*Convert to Colors*) is shown in Figure 5, again as an enlarged section. The conversion function is not restricted to individual images. As can be seen in Figure 2, you can turn whole directories of image files into another format at a single stroke. So in the example, all files in the directory `/home/chris/samba/galaxies` are converted into the **PNG** format and saved to the directory `/home/chris/local`.

Automatic for the Web

Another function of XnView worth mentioning is the automatic creation of Web pages with image



Figure 6: Automatic thumbnails for the Web



Figure 7: Result on the Web page



Figure 4: Blurring with *Blur* factor 100



Figure 5: Atari ST says hi: 16 colours

overviews (thumbnails) as HTML tables. This function is reached via *Tools/Web Page...* on the menu or the key combination [Ctrl+G]. In Figure 6 can be seen setting options such as number of lines and columns in the table, size and format of the thumbnails and page title.

Sections from a complete Web page are shown in Figure 7 (Netscape has been used) The file names under the thumbnails are links to the original files. If one table is not enough, XnView spreads the overview over several pages, which are connected to each other by links. ■

GPL: The GNU General Public License. This is a software licence, allowing the program to be passed on, on condition that the source text always remains available. It is also permissible, and expressly desired, that users make their own improvements to the software and publish it again. Linux itself is under the GPL.

RPM: Using the Red Hat Packet Manager software packets can be neatly installed and uninstalled.

tar: The tape archiver is the standard archiving program in the UNIX world. *tar* archives are also called *tarballs* and are usually compressed using *gzip* – hence the file ending *.tar.gz* or *.tgz*.

Lesstif: A free (under the GPL) copy of the *Motif* library, which provides menu and dialog elements for X-window programming.

~: The tilde is a shortening symbol for the home directory of the current user. And *~user* designates the home directory of the user *user*.

PNG: Portable Network Graphics, a graphics format which mainly owes its existences to the licence problems of the compression procedure used in the popular *GIF* format. Instead, *PNG* uses the unpatented compression of *gzip*.