G-tools

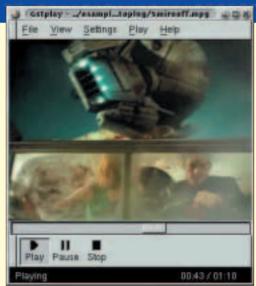
COVERING THE BASE

This month GNOME tools looks at Moleskine to help you code and Procman to watch your system

Gstreamer

GStreamer allows the construction of graphs of media-handling components, ranging from simple MP3 playback to complex audio (mixing) and video (non-linear editing) processing. Applications can take advantage of advances in codec and filter technology transparently. Developers can add new codecs and filters by writing a simple plug-in with a clean, generic interface.

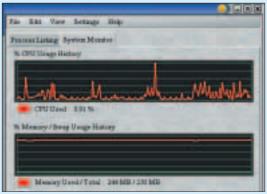
GStreamer is released under the LGPL, with many of the included plug-ins retaining the license of the code they were derived from, usually GPL or BSD. Version 0.3.2 is now released from http://gstreamer.net/. Applications that so far have fair status for GStreamer include mjukplay, gstmediaplay and ZStreamCaster for icecast streams.



gstmediaplayer in action with the Gstreamer library

Procman

Procman is a GNOME process viewer and system monitor. This allows you to see what is happening on your system and notice any anomalies. The unstable version is 1.1.1 but the stable version is 1.0. Hurrah! It requires libtop 1.0.6 and gal 0.19.0 or greater. Available from http://www.personal.psu.edu/users/k/f/kfv101/procman/ and GPL licensed.&



Monitoring usage

Moleskine

Moleskine by Michele Campeotto is a source code editor for the GNOME desktop. Moleskine is developed in Python and uses Scintilla as its text-rendering engine. Moleskine takes its name from the artists' notebook of the same name, which so many of the world's favourite books started out on.

The latest version, 0.7.7, has been released which now accepts word wrapping and multiple files can be dragged from the file manager. It has a GUI configuration tool and auto-completion for words, capable of matching braces and syntax highlighting. Because it uses Scintilla, many programming languages are fully supported in the default configuration. As long as Scintilla supports a language you want then you can also add your own. Three modules are required – Moleskine, PyGtkScintilla and GtkScintilla. Available from http://www.sourceforge.net/ projects/moleskine.

G-tools

In this column we feature a monthly round-up of some of the best tools available from the *gnome.org* Web site. Whether they be essential tools for everyday GNOME users or interesting curiosities, you're sure to find them here.

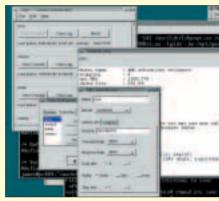
Conc

Conc is a console concentrator for Linux and GNOME. It features remote maintenance of systems over IP, and concurrent connections to consoles. Serial lines on multiple machines may be pooled into one system allowing a virtually unlimited number of consoles to be managed – ideal for large server farms, clusters or off-site server rooms.

The systems consist of three components. The first is concserv - the central daemon that keeps logs from all the consoles and co-ordinates the rest of the system. When it starts, concserv spawns a number of termserv processes that control the serial lines to which the console lines are connected. The link between a termsery and concsery is encrypted and termservs may run on separate machines to concserv, communicated over TCP/IP.

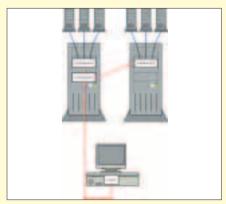
The final component, conc, is the user interface. It connects to concserv over an

encrypted TCP/IP link, and allows the system administrator to view the logs of a particular machine, connect to its console, add and remove consoles etc. There is also a small, text-based interface called console that allows connection to a single console. Any number of user interface programs may run concurrently and multiple connections to the same are possible,



Configuring Conc

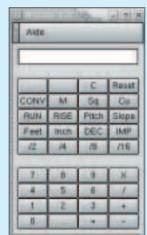
allowing groups to work on one system. Having all the components communicate by TCP/IP allows administration of machines from off site or unifying management of co-located and local equipment. Tested with Comtrol's Rockpot card to give a reliable 16 channel serial card. Available from http://www.jfc.org.uk/ software/conc.html



Conc overview

Aricalc

Yet another project that has made it to version 1.0 this year. Aricalc is a simple calculator for people who have to work with imperial values – dimensions given in feet, inches and fractions of inch. It can do all the standard math functions with those kinds of values. It can also work with square or cubic



Designed for construction

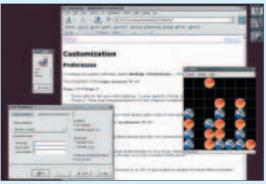
values (for area or volume dimensions). It can also calculate all the parameters of a slope (pitch, run, rise and diagonal). All the people working in the construction industry will appreciate Aricalc plus a few others.

Available from http://www.total.net/~harrych/ aricalc/aricalc.htm and as usual under the GPL. There is also a link for the online help pages, which also give the keyboard shortcuts and simple examples of using the calculator.

Gnect

Gnect is a four in a row board game for GNOME. The object is to build a line of four of your counters while trying to stop your opponent (human or computer) building a line of his or her own. A line can be horizontal, vertical or diagonal. Gnect has two computer-driven players. One's very simple – it's included to provide a fun opponent for young children. The other is Giuliano Bertoletti's Velena Engine. The Velena Engine takes a much more sophisticated approach – its strongest level is unbeatable if it makes the first move.

Velena is "A Shannon C-type program which plays connect 4 perfectly". A beautiful SVGA DOS version is available, as is the Velena Engine source. It has now reached version 1.4.3. Available from http://homepages.ihug.co.nz/~trmusson/gnect.html



Velena Engine at work