

The Monthly GNU Column

Brave GNU World



Welcome to another issue of the Brave GNU World, written this month on the train from Zurich to Lausanne en route to the Prepcom 3a. More of that later, but to start this month's issue, let's look at a fascinating project for movie buffs.

Screenhack

Most free 3D modelling software, such as Ayam [6], or Moonlight Creator [7], are capable of creating standardized Renderman files [8], but cannot create animations, in contrast to commercial products. Screenhack [5] looks set to close the gap.

Michael Wouters started developing Screenhack back in 2000. He later passed on maintainership of the source code to Artur Skura, as this allowed him to start working on a GUI-based version. The program uses 3D scenes to create animations, typically working as a link between modelling and rendering tools. It is a command line tool that runs both on Unix and Windows systems.

Screenhack can parse Renderman fragments to create animations from them. The Renderman format is a standard format for realistic animations that is used professionally in high budget movie productions. A rendering program converts the files to the required movie format. By the way, in Artur's opinion, Aqsis [9] is the best free Renderman rendering program.

Screenhack is an extremely reliable and solid program. But until the GUI arrives, you do need good spatial sense and a 3D modelling program to use it.

Having said that, the command line does offer some advantages. You can script Screenhack, for example, to create whole fleets of spaceships swooping through space on different flight-paths, or of course herds of

This column looks into projects and current affairs in the world of free software from the perspective of the GNU Project and the FSF. In this issue, we will be focusing on Screenhack, IT projects in Bangladesh, the UNO summit on the information society and limited intellectual monopolies. **BY GEORG C.F. GREVE**

GNUs swarming across the Savanna.

Screenhack was written in C, originally for GNU/Linux and other Unix-style operating systems only, but a Windows port has been developed since. The program is free and released under the GPL.

According to Artur, the development process is more or less complete. Artur is against overloading Unix tools. But some Screenhack is still missing a few utilities, such as a tool that can insert a frame between two other frames. If you feel like helping the developers provide tools of this kind, or are interested in contributing to the ongoing development of Screenhack itself, feel free to join in!

A Plea for Help from Bangladesh

A message from Kim Neunert, who is currently out in Bangladesh, reached me

just a short while ago. Kim is currently on a three-month scholarship near the capital city, Dhaka. The scholarship was sponsored by ASA, a network for learning in the field of development policy, addressed to students and young professionals [10]. Kim is the first computer volunteer at the non-governmental "Center for the rehabilitation of the paralyzed" (CRP) [11], the only center of its kind in Bangladesh.

The scenario that Kim describes is alarming: In contrast to its Indian neighbors, Bangladesh still lags behind in the field of technical development. Only the capital city, Dhaka, has any technology of note, but it is hit by daily power outages. 99 percent of the computers in Dhaka run Windows 98.

On a more positive note, a Linux user group [12] was founded in 1999, and met in mid-December last year. The mailing list receives between five and 15 messages per day, mostly with questions on sourcing distributions.

The increasing amount of development work that benefits computer users in Bangladesh tends to take place in the Bengali speaking parts of India. There is a project for free Bengali character sets [13], and work on a Morphix-based Live CD with a Bengali Gnome desktop and manpages to match [14] (see Figure 1) is in progress.

There seems to be very little awareness of the political, strategic and economic aspects of

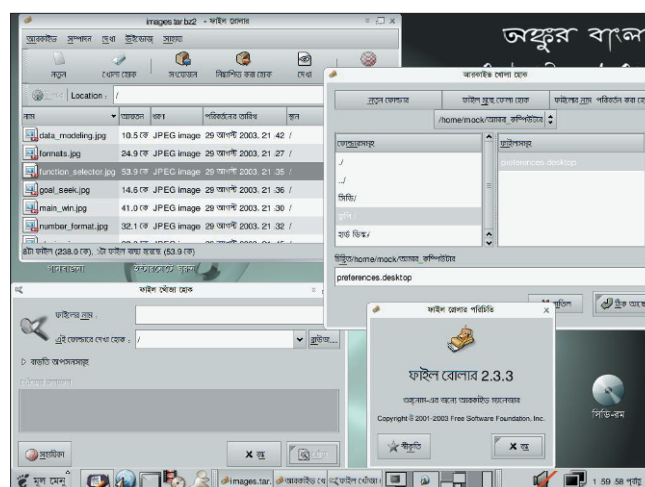


Figure 1: Linux has a lot to offer in comparison to proprietary solutions, especially for developing countries. In Bangladesh, the Bengalinux project has been working on localization

free software in Bangladesh. Kim tells me that most people can follow his arguments for free software, although no one is really interested in doing anything about it.

Having said that, some people have been taking steps in the right direction. In 2002, a Bengali newspaper published an article entitled "How Microsoft will kill Bangladesh (unless Linux saves us)". And there is evidence of a few politically motivated articles on the subject of Linux [15]. So people in Bangladesh are starting to think about free software.

Financial Database in Bangladesh

When Kim arrived, he discovered a totally buggy financial database based on a single-user installation of a proprietary product, where the installation disks are missing. The software manufacturer went to the wall a long time ago. The people responsible for the database did not appreciate the problem they had until Kim explained that he could not modify the database to suit their requirements.

Obviously, proactive steps were needed, so Kim decided to help the Bangladeshi users avoid committing to a specific proprietary technology. He set out to migrate the database by creating documentation for the proprietary solution, and implementing the existing structure on LAMP basis. As Kim has just begun this task, he is looking for volunteers to help him with this work.

The project is still in the pre-alpha phase at present and uses the GCDB [16] codebase. The structure of the financial database was dictated by the previous system. Kim intends to release the source code under the GPL and needs some help reviewing the code, the reports and the complex forms used by the interface.

One large-scale project that came to Kim's attention in Bangladesh is database for medical research. Although the company that was given the contract for this job mentioned MySQL in its tender, a proprietary database was used. One

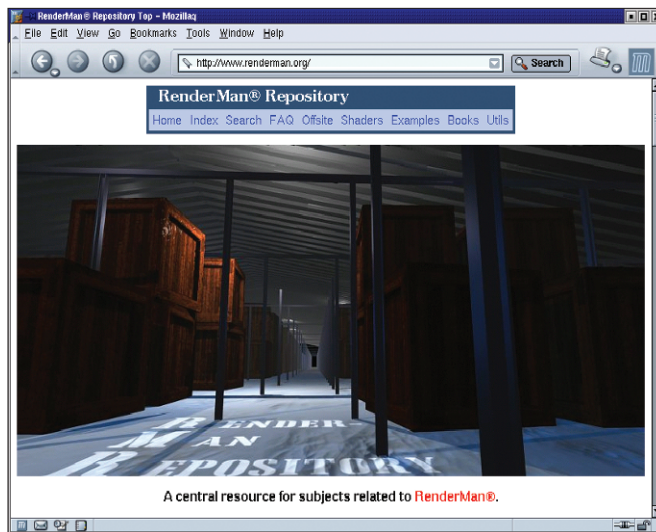


Figure 2: Many free programs use the Renderman format to output 3D scenes. Screenhack uses these static objects to create animations and can also output Renderman files

possible explanation for this is the fact that the systems analyst had been abroad for Microsoft training on various occasions.

Unfortunately, Kim was unable to convince the people in charge of the project that the expenditure would have been better placed in a future-oriented project. However, it is quite obvious that the TCO will continue to increase if the current solution is kept.

The activities in Bangladesh are a good example of how we can help people on the wrong side of the "digital divide" with minimal expense and effort. If you would like to contribute, you should get in touch with the ASA [10] or "Digital Bridges" [17], an offshoot of "Ganesha's Project" [18], which was introduced in Brave GNU World 32 [19].

UNO Summit on the Information Society

The UNO Summit on the Information Society took place in Geneva, December 10 to 12 (see [20]). And a lot of things have happened since the Intersessional Meeting in Paris.

The third preparatory conference, Prep Com 3, took place between September 8 and 26 in Geneva. Hundreds of representatives of industry and civil societies met to prepare the documentation for the summit, but unfortunately, this was not entirely successful.

Towards the end of the Prep Com constructive discussion was impossible,

with delegates entrenched in opposing positions rather than approaching a consensus. One reason could be that the delegates that attended Prep Com were not empowered to negotiate, and continually had to contact their governments, thus slowing down the whole process. This was not the only reason.

Countries in the northern and southern hemispheres adopted more or less diametrically opposite positions. The USA suddenly found itself in the same boat as China during a discussion on security. However, when China refers to "information security", this is typically a euphemism

for censorship. In contrast, the civil societies referred to "network security", which is assured by the security and reliability of the underlying networks.

Most governments agree when it comes to supporting open standards, however, the documentation seems to lose sight of this due to regulations that again support proprietary pseudo-standards. In this context, the civil societies' working committee on "Patents, Copyrights and Trademarks" (PCT) [21] stated that standards can only truly be free, if they are freely implementable and publicly documented.

In a similar vein, the discussion on free software is highly volatile. Delegates tend to coin phrases such as "technological neutrality" to suggest that the decision between proprietary and free software should be driven by technology rather than politics. Governmental delegates tend to use phrases like this without realizing that this is tantamount to selling out their democratically assigned offices with respect to the economy, science and society.

"Freedom of choice" was again quoted as a pseudo-argument against the advantages of free software, as if politics were not responsible for cultivating activities that benefit, or at least not rewarding activities that are detrimental to, society.

At the Prep Com 3, some representatives of civil societies did not seem to appreciate the significance of free software to the summit. This prompted me

to start writing an article, which is now available on the Web [22]. I was helped by Karen Banks from the Association for Progressive Communications (APC), one of the most active civil societies at the periphery of the summit.

More Prep Coms

When it became apparent that Prep Com 3 was unlikely to produce the envisaged results, the organizers quickly set dates for two additional Prep Coms. They were dubbed Prep Com 3a and 3b, as officially they were sequels to Prep Com 3, and this allowed the organizers to re-apply the formalities and rules that applied to Prep Com 3.

Prep Com 3a took place from November 10 to 14 and Prep Com 3b was planned for immediately prior to the summit itself (December 7 through 9). As German Chancellor, Gerhard Schröder, had confirmed he would be attending the summit, there was a lot of work to be done to prepare the required documentation.

And now for the Good News

On a more positive note, the cooperation between civil societies is improving constantly, although the UNO could have achieved this with less effort and with less government intervention. In Europe in particular there is a noticeable trend towards a new form of dialog between government and civil societies. The European Caucus (the European Congress) of civil societies cooperated more closely with the EU during Prep Com 3

than ever before, and there is good reason to hope that this trend will continue throughout the upcoming conferences.

The FSF Europe project page [23] regularly publishes news on this topic, including the European Caucus mailing lists, the PCT working group and a link to the excellent Böll-Stiftung homepage. There are also numerous links to documents such as a statement to the UN plenary assembly by the PCT group.

Limited Intellectual Monopolies

The concept of “intellectual property” is continually bandied about by the media, although the concept itself is extremely dubious, and should really be avoided. More critically-minded readers will immediately ask themselves what “owning” a thought actually means. This problem is similar to Schrödingers cat or the question of whether a tree falling down in the forest actually makes a noise, if no-one is there to hear it.

This concept obviously does not make sense, even more so as it contradicts the non-alienable rights of the originator anchored in continental European legal systems. Despite this, very few people actually question these concepts, and most tend to use them without thought. Unfortunately, the concept purveys an understanding of thoughts and ideas that suggests they can belong to a person, and puts the propagation of knowledge on the same level as criminal violence (“piracy”, “bootlegging”).

It appears we need a new generic term. One thing that areas traditionally referred to as “intellectual property” have in common is that their purpose is to create a limited intellectual monopoly.

In future, I suggest that we refer to “intellectual monopolies”, or “limited intellectual monopolies” (LIM), rather than “intellectual property rights” (IPR). These terms define what the concepts are and do, are no longer or more complicated than the traditional terms, and do not include dubious ideologies.



Figure 3: The World Summit on the Information Society will be taking place December 10 2003. Prep Com 3 recently closed on a sour note. Two additional Prep Coms were planned to finalize the documentation for the summit

INFO

- [1] Send ideas, comments and questions to: column@brave-gnu-world.org
- [2] GNU Project homepage: <http://www.gnu.org/>
- [3] Free Software Foundation Europe: <http://www.germany.fsf.eu.org>
- [4] “We run GNU” initiative: <http://www.gnu.org/brave-gnu-world/rungnu/rungnu.de.html>
- [5] Screenhack homepage: <http://www.ies.waw.pl/~arturs/screenhack/>
- [6] Ayam 3D modeller: <http://ayam.sourceforge.net>
- [7] Moonlight Creator Homepage: <http://linux.maruhn.com/sec/moonlight.html>
- [8] Renderman file format: <http://www.renderman.org>
- [9] Aqsis Rendering software: <http://www.aqsis.com>
- [10] ASA homepage: <http://www.asa-programm.de>
- [11] CRP homepage: <http://www.crp-bangladesh.org>
- [12] Bangladesh LUG Website: <http://www.bdlug.org>
- [13] Free Bengali character sets: <http://www.nongnu.org/freebanglafont>
- [14] Bengali GNU/Linux translations: <http://www.bengalinux.org>
- [15] Articles on free software: <http://www.liberalislam.net/linux.html>
- [16] GCDB homepage: <http://sourceforge.net/projects/gcdb>
- [17] Digital Bridges: <http://www.dbev.de>
- [18] Ganesha’s Project: <http://www.ganeshas-project.org/>
- [19] Georg C.F. Greve, “Brave GNU World”: Linux-Magazine, Issue 15, December 2001 <http://www.linux-magazine.com/issue/15/BGW.pdf>
- [20] Georg C.F. Greve, “Brave GNU World”: Linux-Magazine, Issue 36, November 2003, p91
- [21] Civil societies PCT working group: <http://www.wsis-pct.org>
- [22] Free software reference <http://fsfeurope.org/projects/wsis/fs.html>
- [23] WSIS Project page: <http://fsfeurope.org/projects/wsis/>