

An up-to-date look at free software and its makers

PROJECTS ON THE MOVE

This month we examine the Democracy Player and Gshare file sharing. We also round up the latest Debian News.

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TV has achieved enormous audience penetration because it makes no demands on the user. Turning on a TV set is unlikely to be a challenge for most viewers. The problem is that broadcasting a TV program is well beyond the technical, financial, and legal means of a private person; in other words, the medium relies on a heavily biased hierarchy.

The good news is that today's broadband Internet connections give private persons and small organizations the ability to deliver their own television-style content to private households.

Getting Involved

The non-profit organization Participatory Culture Foundation [1] has developed a program suite dubbed the Democracy Internet TV Platform [2] that is designed to help amateurs download, play, and broadcast privately made video clips. Independent camera artists and journalists no longer need to find a TV station willing to broadcast their work; instead, they can find viewers through the web.

The Democracy suite comprises four components: if you just want to watch a program, you need the Democracy Player, which includes a video player and a channel guide. The channel guide gives you access to the more than 300 programs. The process is similar to a podcast. Users first grab a list of pro-

grams for the current channel via RSS, and then they choose the program they want to watch.

The video file is then automatically downloaded in the background. The download process does not use a central server but relies on the Bittorrent protocol: users who have downloaded files can pass downloads on to other viewers, thus placing a freely configurable part of their upload capacity at the disposal of other viewers.

After completing a download, the video appears in the channel guide's *New Videos* category. Viewers can then launch the integrated player in the main player window. The file will be available for downloading via Bittorrent, but the upload bandwidth can be restricted as needed.

After showing a downloaded video, Democracy Player will keep the video for five days by default and then automatically delete the video. Alternatively, users can delete videos manually in the GUI or store videos in a permanent archive. Clicking on the letter icon opens the default mail client to send a message recommending the video.

Video Bombers

The player has a direct interface to another Democracy TV platform component: Video Bomb, a typical Social Software application. If you really appreci-

ated a video, you can press the bomb button in Democracy Player to send your recommendation to the Video Bomb web service.

Video fans can visit the Video Bomb homepage at [3] to discover the most popular clips. You have to register to "bomb" a video, although the results are public domain. To register, simply enter a username and a valid email address – you are not required to reveal personal data.

Video Bomb also uses a tagging system. Register users can add one or multiple tags to a video. If you are interested in videos on a specific topic, you just search the videos with the matching tag. And movie tagging allows for interesting cross-references to other areas.

The Democracy platform provides a fourth component, Broadcast Machine. Broadcast Machine is a PHP website you can install on any server. Visitors to the site can use the web interface to upload videos or add links to video files. Broadcast Machine generates an RSS feed that users can access via the channel guide. The *Direct URLs* option even supports access via Apple's iTunes.

Issues in Democracy

Techies have no trouble downloading and publishing videos without the Democracy Internet TV platform, but the channel guide makes it easier for new-

comers to view and share work. The platform has entries from a variety of fields, and the quality of some entries is amazingly professional.

The disadvantage for Linux users is that the Linux port is still young: various bugs in versions 0.8.2 and 0.8.3test, the most recent versions when this issue went to press, cause continuous crashes, whereas the Windows and Mac versions are more stable.

Give and Take

File and directory shares in Windows give users the ability to exchange files over a local network. There is no need for a user to change their network configuration; you just choose to share the directory. Of course, Linux has equivalent or better technical options in this field. Samba introduced multi-platform file sharing many years ago.

If you just need to swap files between computers on a small to medium-sized network, you might find the effort of installing and configuring a Samba server daunting. Many desktop users are unfa-

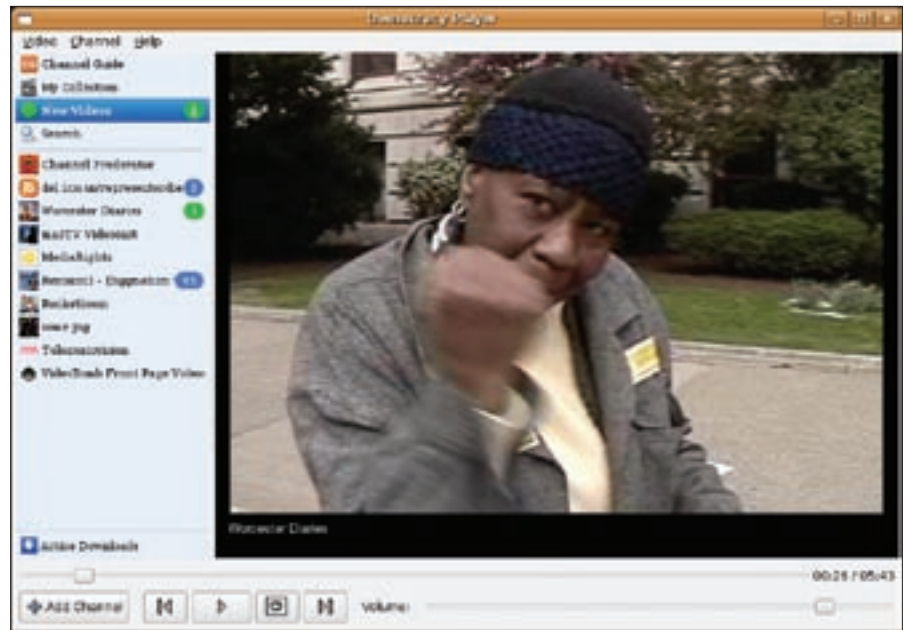


Figure 1: Democracy Player lets anyone be a TV producer. If you have something to contribute, you can just feed in your video. The channel guide gives the audience an overview of more than 300 channels.

miliar with legacy approaches such as SCP, and these tools are not entirely easy for non-techies to come to grips with.

Celso Pinto wanted to make file transfers on Linux as simple as on Windows. However, a configuration and operative

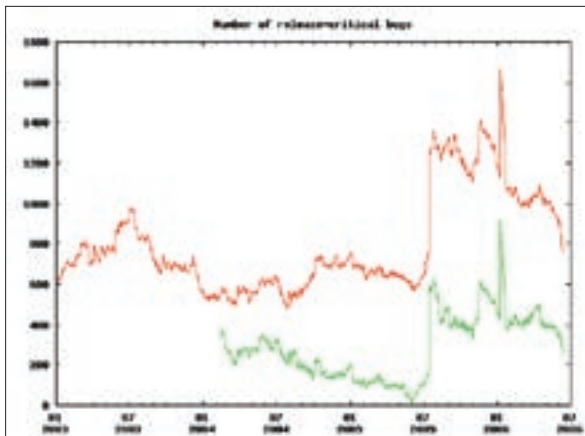


Figure 2: Lots of work done, and still more to do - the graph of Etch critical errors is still somewhere in the clouds.

front-end for Samba was not his idea of an elegant approach. Instead, Pinto based his design on Avahi, which uses Apple's Zeroconf.

The Mono program Gshare includes a *gshared* daemon, which launches an FTP server and then uses Avahi to let other computers on the network know that it exists. Thanks to D-Bus, other users with an Avahi-capable file manager, such as Nautilus or Konqueror for example, can see shared files below *Network* and copy them to their own machines using drag & drop. The fact that the transfer uses a legacy FTP connection is transparent to the user, and there is no need to worry about IP addresses or other details.

The Gshare FTP server runs on a non-privileged account; the server's root directory is the *Shared Files* directory below the home directory of the user who launched *gshared*. The *gshare-manager* program provides a configuration front-end that lets users enable and disable the FTP server. *gshare-manager* gives you the option of requiring an account name and password. You can also use *gshare-manager* to grant write access to trusted users.

Gshare offers just minimal configuration options, but it certainly does the job it sets out to do: supporting file exchanges over the local network without asking more than minimal configuration of the user. The program is not designed for Internet use. Avahi announcements only work on LANs.

Although Gshare is a Linux-only program, users with other platforms can access Gshare shares. Of course, Mac OS will display the announced service, as you might expect from the inventor of

the Zeroconf system. Windows users can install the Apple Bonjour tool.

Gshare is not ready for production use. Some functions still need implementing, whereas others are buggy; Avahi announcements are not completely reliable, for example. But in most cases, it should still be possible to put the program to work, assuming you have current versions of Mono, Gtk, Gnome,

D-Bus, and Avahi.

Debian News

Anthony Towns quietly donned the mantle of the Debian Project Leader in April, but he caused a big stir just a short time later. All the Debian Project Leaders (DPLs) prior to Towns had delegated individual DPL tasks to working groups that took care of running things. But not Towns, who in his first official mail, named Steve McIntyre as his deputy. Towns beat McIntyre in the DPL election by a short head. Choosing a deputy is absolutely in line with the Debian Constitution, which states that the DPL can freely choose "delegates" and assign tasks to them.

Most developers welcomed Towns' approach; what the developers liked in particular was the idea of having a direct liaison officer to talk to in case of problems. Compare this with the previous setup, where developers had to talk things over with a group and watch as the buck passed from one member to another when the going got hot.

A message from the Debian Release Team probably thrilled administrators and users alike. Representing the team mainly responsible for the new Debian release, "Etch," Andreas Barth posted a statement on the official Debian developer announcements mailing list [6] saying that Etch is still on schedule. Although Barth emphasized the fact that there was still a lot of work to do, especially with regard to removing release-critical errors, with enough dedication, he said, the developers should achieve the target of releasing Etch in December 2006.

The large numbers of fundamental changes still taking place in the *unstable* distribution are causing the release team some worries. Andreas Barth complained that many of these changes are not coordinated with the release team in advance. In particular, X11R7 and the removal of GFDL-licensed works are the major headaches. This will take more than just the normal amounts of work from volunteers.

Last month, we reported on Andres Salomon's move to expel Sven Luther. There seems to be no end to the tribal factionalism surrounding Luther, who sees himself as a kind of "main porter" for the PowerPC architecture. Since the Debian Installer team revoked Luther's access privileges for the Debian Installer SVN Repository, and after he quit his post, Luther has been complaining non-stop on mailing lists and IRC. His self-confidence is evidenced by claims that the Debian PowerPC port would be "practically dead" without his support. Speaking for the Release Team, Andreas Barth quickly refuted these claims stating that the PowerPC port was in no danger.

Many developers have criticized Luther because of his tendency to sling mud on mailing lists rather than contribute patches. In response, Luther stated that he does not relish the idea of being a second-class developer. But he also categorically denied that he will be quitting completely. Sadly, this probably won't be the last we hear of "Luther vs. Debian." ■

INFO

- [1] Participatory Culture Foundation:
<http://participatoryculture.org>
- [2] Democracy:
<http://www.getdemocracy.com>
- [3] Video Bomb:
<http://www.videobomb.com>
- [4] Gshare: <http://yimports.com/~cpinto/projects/gnome/gshare>
- [5] Bonjour for Windows:
<http://www.apple.com/support/downloads/bonjourforwindows103.html>
- [6] Email from Andreas Barth:
<http://lists.debian.org/debian-devel-announce/2006/05/msg00000.html>
- [7] Debian Installer homepage:
<http://www.debian.org/devel/debian-installer/>