The PCLinuxOS magazine

Volume 51

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Plus More Inside!

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Welcome From The Chief Editor

Ah! Spring has arrived. The winter snows are melting. The foliage, plants and trees return from dormancy. Flowers bloom. The unmistakable C-R-A-C-K of a wood bat on the leather hide of a baseball permeates the crisp Spring air as America's favorite summer pastime, baseball, begins to get its season underway. In fact, this month's cover from Assistant Editor Meemaw celebrates, in grand Tux style, the annual beginning of the baseball season. Look closely. Of course, there is a PCLinuxOS touch added in. In case you couldn't tell, your Chief Editor is a big baseball fan. Go KC Royals! Hey ... at least all teams start off the season tied for first place. I just wonder how much fun the season will be come mid-September, as the division races are being decided.

With PCLinuxOS, there's another race, of sorts, being played out. Texstar and the rest of our dedicated developers have released the **2.6.37** Linux kernel to the repos. They are continuing to work on the **2.6.38** kernel, as we speak. Remember that kernel upgrades are *not* automatic. You have to specifically install them, and reboot to access them. If the new kernel doesn't work on your machine, don't despair. Your old kernel will still be used with the default Grub boot loader entry. You will have to scroll down in Grub to boot into the new kernel. Also remember that the first time you boot into a new kernel, all the kernel modules and drivers will have to be rebuilt against that new kernel, so the first boot into the new kernel may take as long as five to ten minutes (depending on the processor speed of your computer), as those modules and drivers are rebuilt. Once you've verified that the new kernel works well on your computer, you can go into the **PCLinuxOS Control Center** and change the boot options to make the new kernel the default, so you won't have to scroll down to select the new kernel each time you boot your computer. Your old kernel will remain available to you, until (and if) you decide to remove it, via **Synaptic**.

Also new in the repos is **KDE 4.6.1**. This upgrade __will__ reset your KDE desktop back to the default settings, so you will likely have to re-apply your favorite wallpaper and KDE widgets on your desktop. While you can save a copy of your old .KDE folder and re-apply your settings that way, it may not be a bad idea to start afresh with the default settings, and rebuild all of your preferences by hand. Think of it as a way of doing some Spring cleaning to your KDE desktop, and getting rid of unneeded "stuff."

If you've been following on Twitter and ident.ca, then you may have read that the new, long-awaited **Xfce 4.8** is nearing realization under PCLinuxOS. The upgrade packages are currently being tested. They should be released very soon, and a new ISO of Phoenix and Phoenix-Mini (renamed Phinx, which I'm told is a baby Phoenix) with Xfce 4.8 should also be released fairly soon. Meanwhile, Gnome users are waiting with abated breath for the forthcoming release of **Gnome 3.0**, which we talked a bit about last month. Already, there are rumblings among Gnome users, praising some of the design decisions the Gnome developers made, while lamenting yet others. The Gnome 3.0 "drama" is definitely going to be interesting to watch as it plays out.

Since we've mentioned Gnome 3, **Slax** has put out a call to any packagers who might be willing to help package the new Gnome 3.0. If you have RPM packaging skills and are willing or able to help, get in contact with Slax by sending him a private message on the PCLinuxOS forum. It's unsure how soon the new Gnome 3.0 will be available to PCLinuxOS users. There is some wisdom in holding back a bit and seeing how the fallout settles, much as was done when KDE 4.0 hit the scene. Since the Gnome 3.0 developers didn't seem to learn anything by watching the KDE 4.0 release fiasco, I would look for history to repeat itself with the Gnome 3.0 release. That's what is going to make the Gnome 3.0 release fun to watch; it's where KDE users were at roughly a year and a half to two years ago when KDE 4.0 was rolled out.

Well, enough from me. I hope you enjoy yet another issue of The PCLinuxOS Magazine. We've tried, as usual, to deliver as many articles as we can, that appeal to as many different tastes and user levels as we can. So until next month, I wish each and every one of you peace, tranquility, serenity, and prosperity.

# e17: Running Ecomorph, Part 2 - Settings

by Darrel Johnston (djohnston)

An entire magazine could be written on the possibilities for the Ecomorph settings. I'm only going to cover some of them here. I'll only delve into some which smurfslover and Agust have not already covered in the forum.

In the Ecomorph Window Move/Resize section, the only option is the window opacity level. Use the slider to set the level. NOTE: To anyone who may notice that my two CPUs are running at close to 100%, as indicated in the gkrellm panel, it is not due to running Ecomorph. Ecomorph uses very little system memory or CPU cycles. The reason for the high CPU usage is that I am running folding@home in the background. That task basically utilizes all unused CPU cycles.

As mentioned in the previous article, the e17 Dropshadow module is not activated if you want to run Ecomorph. Ecomorph's Drop Shadow settings are in the section shown below.
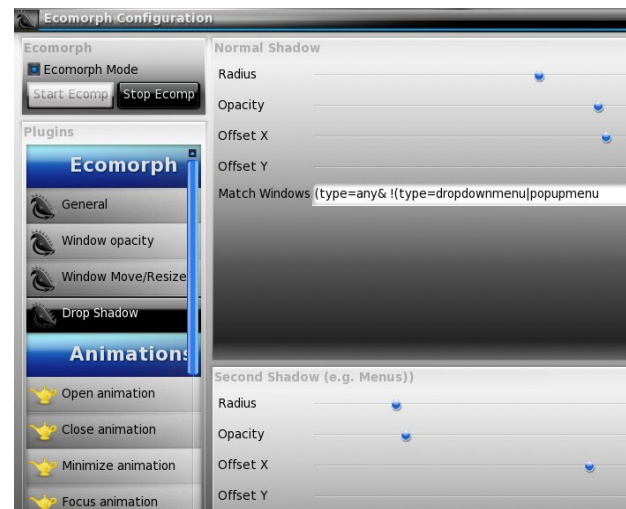

The Open, Close and Minimize window animations have a lot of options. Shown below are the settings for the animation done when opening the main menu window. The burn effect is enabled by default. You can change the duration, or length, of the animation by using the slider.


Shown below are the animation settings chosen for closing the main menu, a popup or dropdown menu. Explode is enabled by default. To enable a random effect, set the "Animation for selected match" area to Random. In the "Animation random pool" area, select which effects you want included, then change the option from "None" to "Random".


Effect settings (1) (2) (3) and (4) each have a different set of options. In the Effect settings (3) section, I have "Enable smoke" checked. It adds a smoke after-effect to the "Burn" Open (main menu) animation settings shown previously.
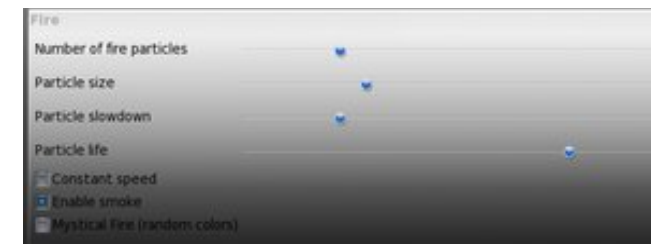
The Switchers section shows the different window switchers' options. Shown are default options for the Ring switcher.
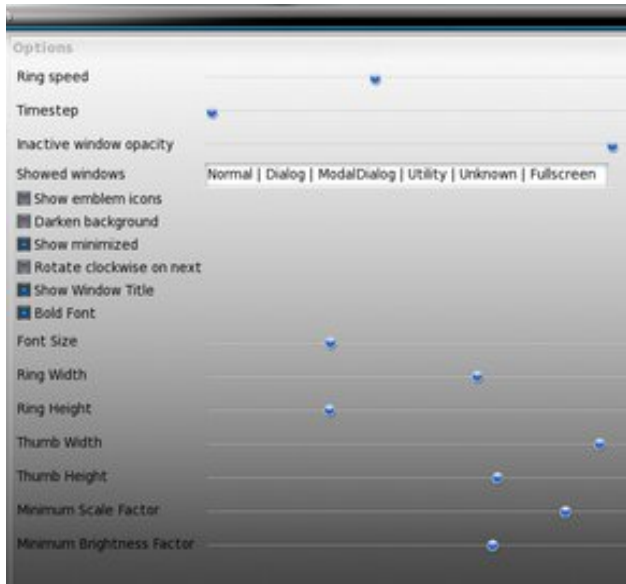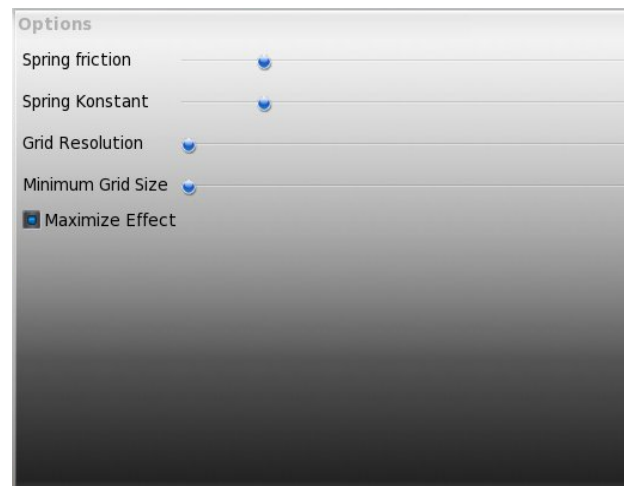

In the Desktop section, there are two Cube categories. In the first, there is an option to show the rotated cube as an "Inside Cube".
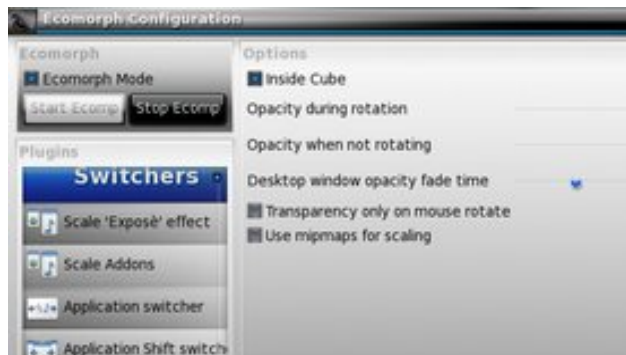
Looking at the rotated cube as if from the inside.

Almost everyone is familiar with the Compiz wobbly windows effect. Shown below are the Ecomorph wobbly window options.

Shown below is the wobbly window effect during closing a window.

One could spend hours or days experimenting with all the Ecomorph special effects. As mentioned at the beginning of the article, Ecomorph consumes very little memory or CPU cycles. I don't see much difference, if any, between running it or the standard e17 desktop. Ecomorph has been very stable and has not crashed once, despite using the purportedly unstable cube effect. However, for me, Ecomorph is a lot of bling, and simply offers a chance to show off the possibilities of a Linux desktop to onlookers. I have not yet found a reason that Ecomorph makes using the desktop any easier. As always, your mileage may vary.

Using Scribus, Part 4: Layers

by Meemaw

We have learned to set up our document and insert text and images. We have also made an eye-catching header for our newsletter and talked more about text frames and text flow. Now we're going to see what can be done with layers.

One of the side windows I have open all the time is the Layers window. Layers make the design of your document easier. If your text is on one layer and your graphics are on a different layer, you can manipulate the graphics all you want and not have to worry about moving your text frame somewhere it shouldn't be or deleting it by accident.
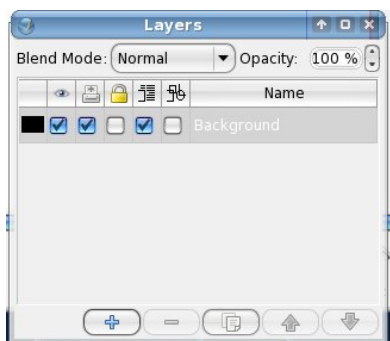
I haven't added any layers to my document yet, so I only have one, the background. For the magazine, I generally put the text and headings on one layer and the graphics on a second layer, OR the text on one, the graphics on one and the headings on a third. To add a layer, simply click the plus sign at the bottom of the layers window. Another layer will appear in your list, probably named New Layer 1. You can rename the layer, if you wish, by double-clicking the layer name and typing in a new one. I will rename mine 'Graphics.'
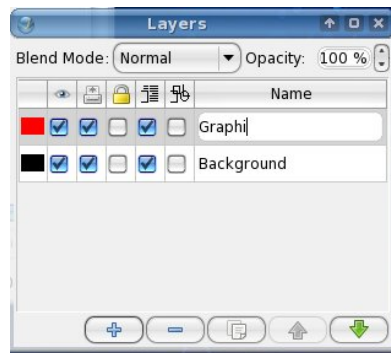
Don't worry, because your text on the bottom layer can still flow around any image you place on this layer. In the line above the layers you'll see some icons corresponding to checkboxes below. These are settings for individual layers that you can choose. From left to right, the eye icon is for visibilty - checking the box allows each layer to be visible; the printer icon - checking it allows you to only print certain layers; and the lock icon is for locking a layer - if checked, it can't be changed. The next icon is for text flow - you can completely turn off text flow on any layer. The last icon at right is for 'wire frame' - loading a graphic's frame rather than the big graphic will let it load faster. The default for the checkboxes is shown, as I very rarely change any of them.

The Scribus wiki talks about creating a single-page flyer in more than one language. If you have text for each language on its own layer, you could activate the layer you wanted to see and deactivate the others with the 'eye' or activate the print feature on the layers you want printed. The company I work for has created a brochure that they have done in English and Spanish: the two languages would be on two different layers.

When you are working with layers, you have to be careful that you know what layer is active so things go where you want. I keep the layers window open all the time and switch back & forth between them. Generally, I will put in the text on its layer, then switch to the graphics layer and start putting in the images. As you're placing images, you can go to the Properties window and click **Shape** to choose how you want your text to wrap around your picture. Make sure you wrap it using one of the methods shown, or your text will be invisible under your image.
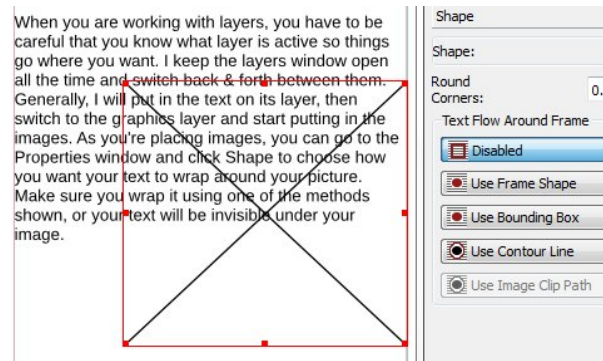
Above; No text flow.   Below; Using text flow.
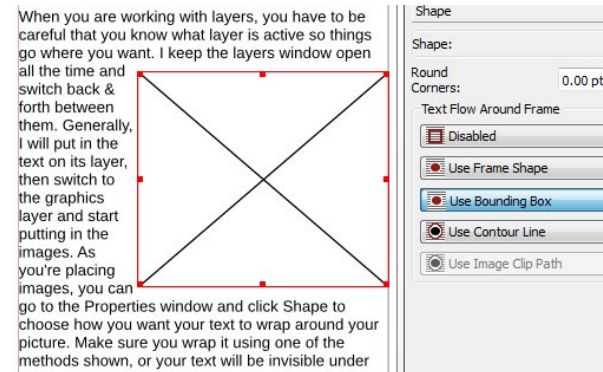
With the choice **Frame Shape**, the text will follow the shape of the item you put in. If it is a circle or heart, you may have some interesting text flow! Using **Bounding Box**, which is what I use the most, Scribus will 'draw' a box around your item and flow the text around that. Since nearly all of my graphics are rectangular anyway, this works well. The next choice, **Contour Line**, does the same thing but puts a dotted line border around your graphic.

Once you get your text and graphics inserted and arranged, you can always add another layer for your titles, captions and hyperlinks, if any.

On a side note, a recently introduced bug in Scribus prevents text flow around grouped objects. Once working up through Scribus 1.3.5, the Scribus developers have told us in their IRC channel that the new bug won't be fixed until Scribus 1.5, which is literally 11 releases away, with no further explanation. Fortunately, you do have a couple of "work-arounds" to this problem, if you find the need to have text flow around grouped objects. First, you can ungroup the grouped object, and set the text to flow around the largest element of the group. The second way is to place an "invisible" polygon shape (one that has no fill or border color) around the grouped object, and have the text wrap around that invisible polygon.

After you use Scribus for a while, you will undoubtedly develop your own way of using layers. Depending on the complexity of your document, you could have as many layers as you can comfortably handle. Experiment all you want!

Next month we'll catch up with a few other important features.

Screenshot Showcase

Posted by Dragynn, March 6, 2011, running Gnome-Zen.

Video: Part 3 - Converting Files With MyMencoder

by Paul Arnote (parnote)

Once you have recorded and edited your video file, you may want to convert the video file to a format that is better suited to sharing or posting to video sharing sites. Fortunately, Leiche has created MyMencoder, which allows you to save your video file as an Xvid or DivX AVI file, an MP4 file, or an FLV file. MyMencoder is an "in-house" PCLinuxOS application, available for installation through Synaptic. It provides a GUI front end to working with the command line tool, mencoder.

The top text entry box allows you to specify the input file that you want to convert. To be certain that you have the path correct, it's probably best to click on the "File Open" button at the far right of the text entry box, find and select your input file, then click OK.

Under the "Encoder Settings" portion of the MyMencoder window, you can make all of the settings for your converted video. None of these settings will affect your original file. In fact, your original file remains untouched. These settings are for your converted output file. The first setting allows you to specify the video bitrate of your converted file. You may have recorded your video at 2000 kbps, but for sharing (and to keep the file size down), you may only want a video bitrate of 800 kbps, for example. Just keep in mind that larger video bitrates offer better quality at the expense of a larger file size, while smaller video bitrates offer a smaller file size at the expense of quality. It is a personal determination that you will have to choose, depending on your needs.

At the far top right of the "Encoder Settings" portion of the window, choose the frames per second that is appropriate for video in your area of the world. Remember, North America and Japan use NTSC as the broadcast standard, which uses 29.97 fps as the frame rate. Europe and most of the rest of the world use PAL, which uses a 25.0 fps frame rate. Kino is for film, which is shot at a 24 fps frame rate.

Next, choose the codec you want to use to re-encode your video with. Mostly, this sets the ffourcc flag of the video file, which tells some video players which format to use when playing back the video. I am unsure of exactly what is going on here, but it
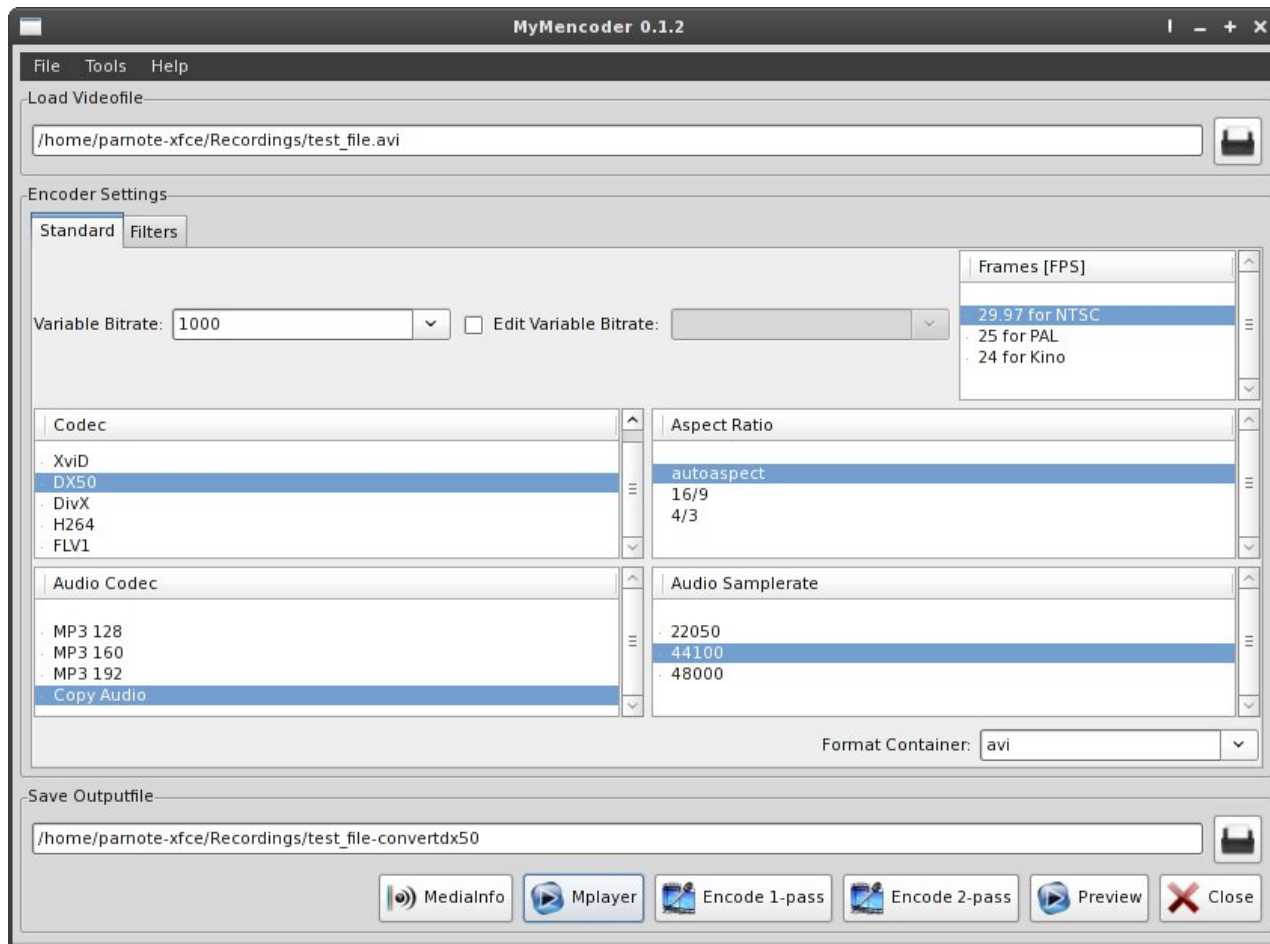
appears that H264 and FLV1 do not work as intended, so restrict your use to either XviD, DivX or DX50. When I was working with MyMencoder, I kept getting error messages whenever I chose either the H264 or FLV1 ffourcc flag.

The next thing you will want to choose is the "Aspect Ratio." It is best to choose "autoaspect" for this setting. I've not found either the 16/9 or 4/3 settings to work. In fact, I'm not so sure that this setting even has any bearing on the video image recorded by mencoder. Typically, mencoder will use the aspect ratio of the recorded video as the default. If your source has an aspect ratio of 4:3, then mencoder will record the video using a 4:3 aspect ratio. Rather, I get the impression from looking at the mplayer/mencoder documentation that the aspect ratio setting is used for playback by mplayer.

Under "Audio Codec," choose the MP3 bitrate that you want to use for the audio portion of you file, or simply choose to copy the audio portion of the file without reprocessing. Just as with the video portion of your file, choosing a larger MP3 bitrate will result in a larger file, albeit a small increase. The audio portion of a video file adds very little to the overall size of a video file, so this may be one area where you might want to "splurge" with higher sound fidelity.

Select an "Audio Samplerate" to match your needs. Typical MP3 audio is at 44100 bps. Reducing that to 22050 will, effectively, cut the size of the audio portion of the video file in half, but at the same time sacrifice audio quality. If you intend to later record your video to a DVD for viewing on a home DVD player, then you may want to upsample the audio

samplerate to 48000 bps, which is required under the DVD standard.

Next, choose the "Format Container" for your file. Your choices here are AVI, MP4 or FLV. Your chosen format container will become the format that mencoder uses to record your video, and it will become the default file extension for your video.

Finally, under the "Save Outputfile" section, enter the path and filename you want to use to save your converted video as. There's no need to worry about adding on the file extension, since MyMencoder will automatically append the appropriate file extension onto your chosen file name.


Once you have made all of your settings for the conversion, you can use the buttons at the bottom to perform the tasks you want on the video.
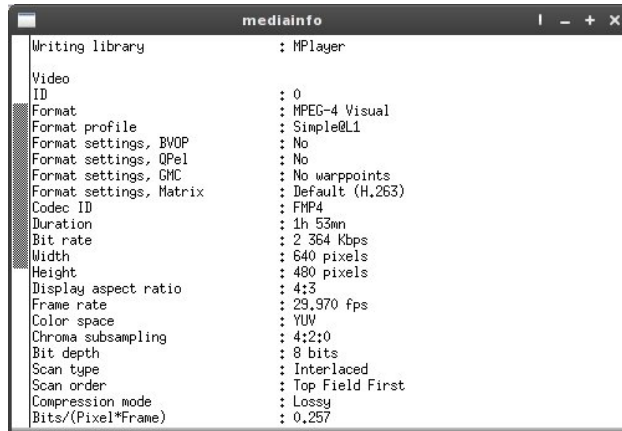
Pressing the "MediaInfo" button launches an Xterm window with every bit of information you could possibly want about the input video file. Listed will be such things as the aspect ratio, the video and audio bitrates, the codecs used for encoding the audio and video portions of the file, and a whole host of other important data. Meanwhile, the "Mplayer" button will play the input file in a popup window.

MyMencoder gives you two options for encoding your video files: a 1-Pass Encoding, and a 2-Pass Encoding. While 1-Pass Encoding will get the job done, 2-pass encoding will give you MUCH greater quality, for any given video bitrate. With 2-pass encoding, mencoder essentially goes through the input video the first time, taking a look at the job ahead of it and making notes along the way on how to optimize the video. On the second pass, mencoder uses the "notes" that it took on the first pass to apply those optimizations to the output file. Thus, while 2-pass encoding takes twice as long to produce the output file, the improvement in quality of the output file is worth it.
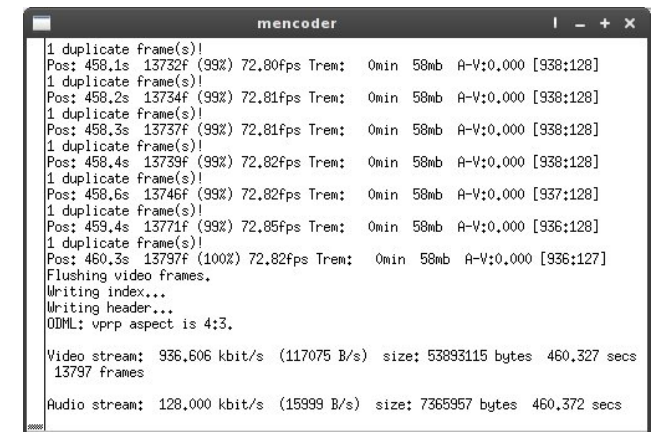
Once you select either the "Encode 1-pass" or "Encode 2-pass" buttons, an Xterm window will open to update the status of the conversion.


There's a lot of information that flies past in the Xterm window, but it's not hard to decipher. Using the screen capture above, the "Pos:" data lists the current position in the input video that is being converted. In the case of the our screen capture, that is 11.2 seconds into the input file. The "343f" indicates the precise frame number of the input file that is being converted. The "(1%)" indicates, percentage-wise, how far into the conversion process of the input file you currently are. The "60.57fps" entry tells us how many frames per second are being processed. This number may go down when converting to a video format that uses complex compression algorithms. With the "Trem:" entry, mencoder gives us an approximation of how much longer the conversion process will take. The "82mb" is the estimation of the file size of the output file. The "A-V:" gives us an indication of the audio-video synchronization. With "[725:127]," we get an

indication of the video bitrate and the audio bitrate in the output file. Finally, the "1 duplicate frame(s)!" statement always appears, and can be ignored without concern.

Pressing the "Preview" button in MyMencoder will open an MPlayer preview window, showing the output file. The "Preview" button will not work, however, until *after* the file has been converted. Of course, the "Close" button exits MyMencoder when you are finished working with your video files.
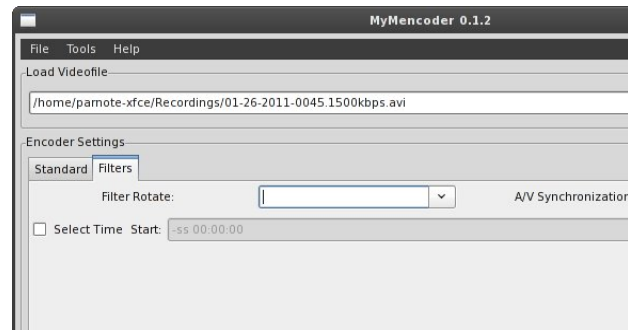
Under the "Filters" tab, there are a few additional settings that may interest you. First, "Filter Rotate" does exactly as it's name states: it rotates the video. The options are rotate 0, rotate 1, rotate 2, and rotate 3. Rotate 0 is normal, while rotate 1 is 90 degrees clockwise, rotate 2 is 180 degrees clockwise, and rotate 3 is 270 degrees clockwise. A/V Synchronization may help improve synchronization between the video and the sound. Perhaps the most useful of these built in filters is the "Select Time" setting. This will begin the conversion of the video at a particular time in the input file. The format is hh:mm:ss. So, if you want to start converting the video at the 10 second mark, you would check the check box and set the time to 00:00:10.
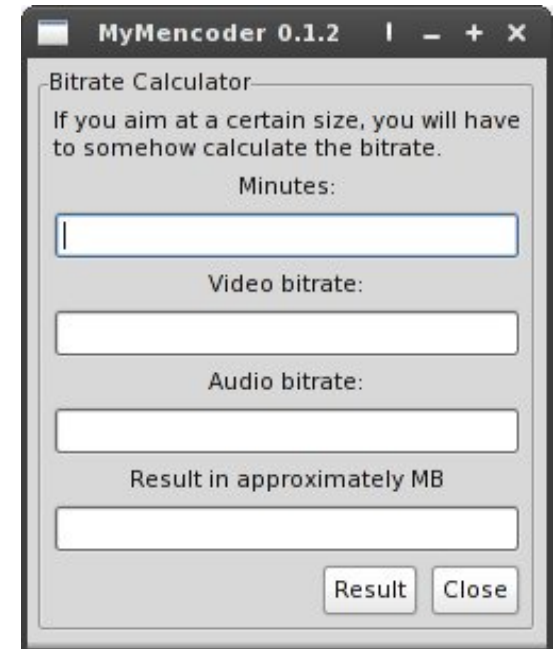
Under the "Tools" menu (top left of the window), you can apply a ffourcc flag to an input video file. There is also a bitrate calculator, to assist with determining which audio and video bitrates to use to make a video fit onto the optical media that you want to burn it to (or to keep it under a specific size limit).

Selecting "About" from the "Help" menu will display the About dialog box, as shown above.

Summary

Leiche has done a very good job with MyMencoder. I did experience a small problem when I installed both MyMencoder and MyMencoderDVD. Due to the similarities in the names of the programs (I presume), MyMencoder did not show up in my Phoenix Xfce Menu. I edited the MyMencoder .desktop file to make the "Name=" field to become "MyMencoder Convertor." Once I did that, both MyMencoder (now renamed as MyMencoder Converter) and MyMencoderDVD showed up properly in the menu.

As you can see, Leiche's MyMencoder is a great starting point for those looking for an easy way to convert between different video formats. Since it's a bash script that uses gtkdialog to provide a GUI, it would be relatively easy to extend the functionality of MyMencoder to encompass even more video settings. Certainly, there are other applications that also perform similar tasks, but Leiche's application makes the entire process simple and uncomplicated. I plan to take a look at some of the other applications later on, in a separate article. Plus, it was Leiche's work on MyMencoder that inspired me to create PCLinuxOS PVR, which I wrote about in the March 2011 issue of The PCLinuxOS Magazine.

Visit Us On IRC

• Launch your favorite IRC Chat Client software (xchat, pidgin, kopete, etc.)

• Go to freenode.net

• Type "/join #pclinuxos-mag" (without the quotes)

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Denmark

Czechoslovakia
PCLinuxOS
síla jednoduchosti

PCLinuxOS.it
Italy

PCLinuxOS **Polskie Centrum**
Poland

ms_meme's Nook: Top Of My Desktop

Such a feeling's coming over me
There is wonder in the desktop that I see
Not a virus in sight everything is so right
And I want all my friends to feel it too

My PC is the world to me
It is everything I want it to be
And the reason is clear PCLOS is here
It's the nearest thing to heaven that I see
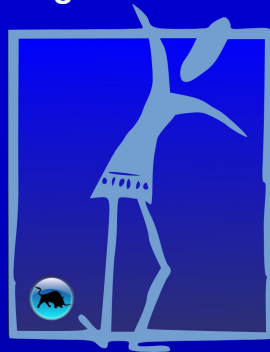
MP3

I'm on the top of my desktop
Looking down on my files
And my face is full of smiles all the time
For I have finally found the best OS around
Thanks to my hero Texstar

Things for me will never be the same
PCLOS I sing of your fame
Tex is aiming to please I use his OS with ease
It's a pleasing sense of happiness for me

There is only one wish on my mind
When my song is through I hope that I will find
PCLOS you're downloading and with joy you're exploding
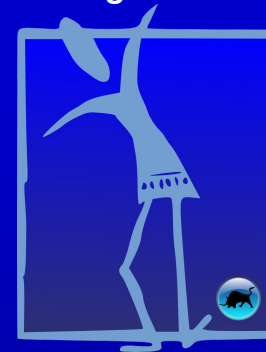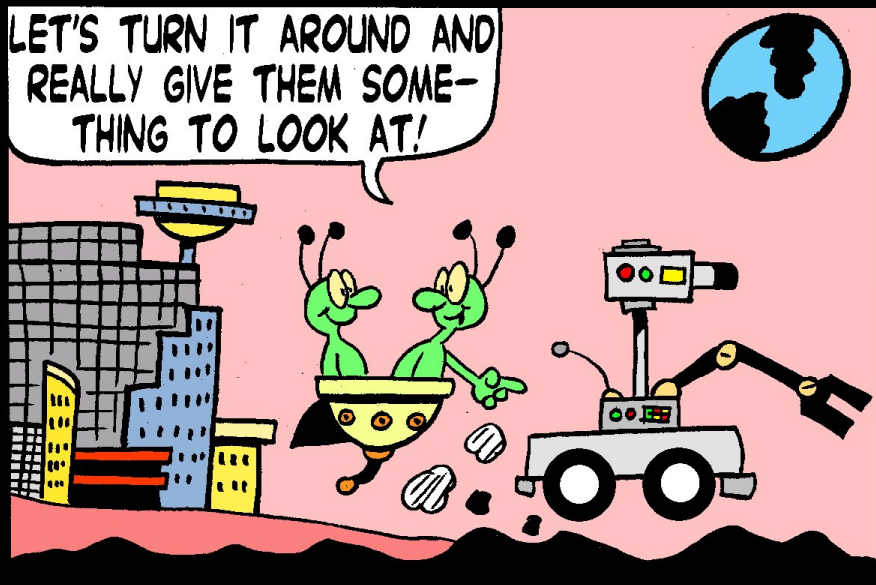And together we will sing loud and clear

OGG

We're on the top of our desktop
Looking down on our files
With our faces full of smiles all the time
For we have finally found the best OS around
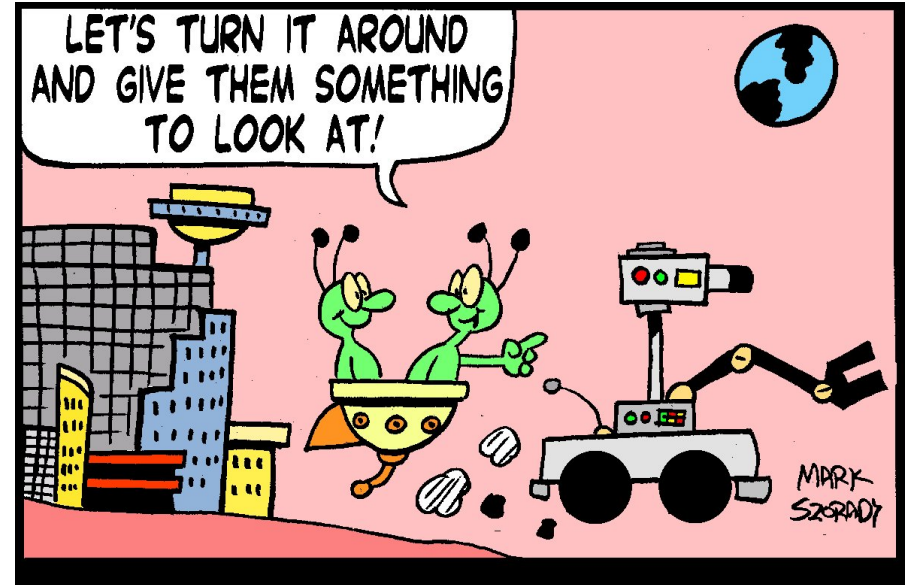Thanks to our hero Texstar

Double Take & Mark's Quick Gimp Tip

LET'S TURN IT AROUND AND REALLY GIVE THEM SOME-THING TO LOOK AT!

LET'S TURN IT AROUND AND GIVE THEM SOMETHING TO LOOK AT!

©2011 Mark Szorady. Distributed by georgetoon.com

Find at least seven differences between cartoons.

Mark's Quick Gimp Tip

When I'm drawing one of my cartoon features, there are times when I need to digitally create a specific shape. Well, The Gimp can draw these different shapes. It only takes a couple of clicks. You use any of the selection tools and a command called Stroke Selection. You can use any color line or paintbrush in the toolbox and brush options. Step one is to make a selection. In the example at right, I used the circle selection tool. Then, right click on the selection's marching ants outline and

select **Edit > Stroke Selection.** When the dialog box pops up, you have options that allow you to draw a solid line or select a specific paintbrush (use the toolbox and brush options). Using paintbrush/pencil line sizes, you can vary the thickness of the outline being painted. In this example, I've used the sunburst paintbrush to draw around the selection outline.
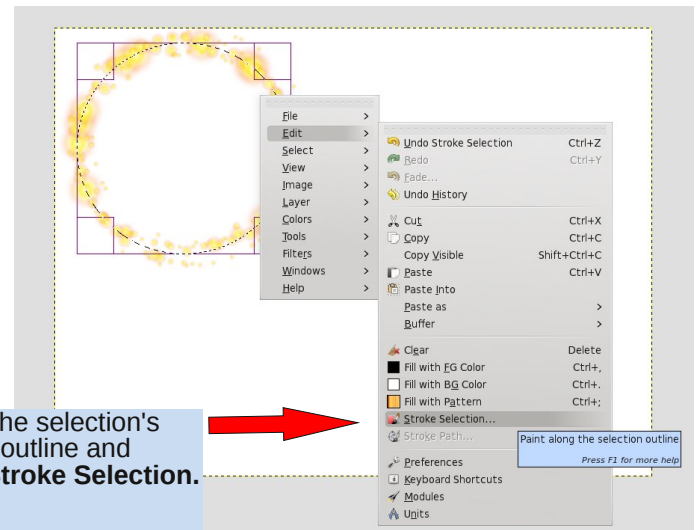
Right click on the selection's marching ants outline and select **Edit > Stroke Selection.**

-Mark Szorady is a nationally syndicated cartoonist with georgetoon.com. He blogs at georgetoon.com/blog. Email Mark at georgetoon@gmail.com.

by Agustin J. Verdegal T (Agust)

I will attempt to explain the simple way of creating an e17 theme, using the theme that I have created, called "The Night."

The first thing to do is to make a copy of the theme, and then open the copy to start our work.

To open a theme, we use the following command:

```
edje_decc (filename.edj)
```

Personally, I divide the theme work into three parts: the wallpaper in the .edj format, images in the .png format, and the .edc file.

So, let's get started. When you open the theme, find the default.edc file, and edit it to modify the wallpaper file.

The wallpaper I have formatted as an .edj file is more realistic because it scales well in all resolutions. The wallpaper consists of seven images, and they must look like they do here.

```
/*** DEFAULT WALLPAPER ***/
images {
    image: "pclos-logo.png" COMP;
    image: "pclos-logo-effect.png"
COMP;
    image: "pclos-effect.png" COMP;
    image: "topleft.png" COMP;
    image: "topright.png" COMP;
    image: "bottomleft.png" COMP;
    image: "bottomright.png" COMP;
    }
    group { name:
```

```
"e/desktop/background";
        data { item: "style" "2";
        }
parts {
    part {
        name: "base";
        type: RECT;
        description {
        state: "default" 0.0;
        min: 800 600;
        color: 0 0 0 255;
            }
        }
    part {
        name: "effect";
        description {
        state: "default" 0.0;
        min: 230 800;
        max: 230 800;
        align:    0.5 0.0;
        rel1 {
            to: "cause";
            offset:   -40      179;
        }
        rel2 {
            to: "cause";
            offset:    0      140;
        }
        image {
        normal: "pclos-logo-
effect.png";
            }
        }
    }
    part {
        name: "cause";
        description {
        state: "default" 0.0;
```

```
        min: 400 400;
        max: 400 400;
        image {
        normal: "pclos-logo.png";
            }
        }
    }
    part {
        name: "baseeffect";
        description {
        state: "default" 0.0;
        min: 1680 1050;
        image {
        normal: "pclos-effect.png";
            }
        }
    }
    part {
        name: "topleft";
        description {
        state: "default" 0.0;
        max: 150 150;
        align: 0.0 0.0;
        rel1 {
            relative: 0.0  0.0;
            offset:    0      -1;
        }
        rel2 {
            relative: 1.0  1.0;
            offset:    0      -1;
        }
        image {
        normal: "topleft.png";
            }
        }
    }
    part {
        name: "topright";
```

```
        description {
        state: "default" 0.0;
        max: 150 150;
        align: 1.0 0.0;
        rel1 {
           relative: 0.0  0.0;
           offset:  -0      -1;
        }
        rel2 {
           relative: 1.0  1.0;
           offset:  -0      -1;
        }
        image {
        normal: "topright.png";
           }
        }
     }
part {
     name: "bottomleft";
     description {
     state: "default" 0.0;
     max: 150 150;
     align: 0.0 1.0;
     rel1 {
        relative: 0.0  0.0;
        offset:   0      0;
     }
     rel2 {
        relative: 1.0  1.0;
        offset:   0      0;
     }
     image {
     normal: "bottomleft.png";
        }
        }
     }
part {
     name: "bottomright";
```

```
        description {
        state: "default" 0.0;
        max: 150 150;
        align: 1.0 1.0;
        rel1 {
           relative: 0.0  0.0;
           offset:  -0      0;
        }
        rel2 {
           relative: 1.0  1.0;
           offset:  -0      0;
        }
        image {
        normal: "bottomright.png";
           }
           }
        }
     }
  }
```

If, instead of using a wallpaper in the .edj format, we want to use a simple wallpaper, we need to modify the .edc file like this:

```
/*** DEFAULT WALLPAPER ***/
/*
 *wallpaper original realizado por
Agust gracias */
     images {
    image:
"grill_dark_tiny_pattern.png" COMP;
}
group {
   name: "e/desktop/background";
   max: 1680 1050;
   parts {
      part {
```

```
        name: "background_image";
        description {
           state: "default" 0.0;
           image {
              normal:
"grill_dark_tiny_pattern.png";
           }
        }
     }
  }
}
```

If you want the wallpaper that we created to be the wallpaper, then choose it. In this example it is scaled to the resolution of 1680 x 1050. Rename it to grill_dark_tiny_pattern.png and keep it in the theme folder that we created. In this way we have our wallpaper for the theme.

Part 2: Images and their meanings

As we can see in the screen capture (next page, top left), we have the images in .png format of the example that we are creating. I will try to explain the most important ones.

The first three images are about_bot.png, about_mid.png and about_top.png. They are the images that create the bottom of the image about-theme, available in the menu Enlightenment > About. Close to the Arrows are the images

that are indicated in the subject above, down, right or left.

The images that follow belong to the computer's battery icon as it appears on your screen in various states of change.
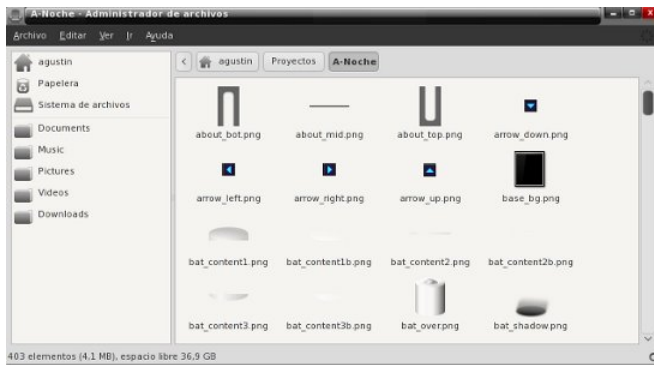

Now comes one of the most important parts of the example, the image base_bg.png. It is the one that we will use for the main menu. As you can see, the image will be a very dark color. Therefore, we will have to change the color of the menu letters to a clear or white color, so that the letters contrast with the black color. We will edit the file default.edc and change the color of the letters in this manner:

```
color_class {
    name: "menu_item";
    color: 221 221 221 255;
    color3: 0 0 0 64;
}
color_class {
    name: "menu_item_active";
    color: 221 221 221 255;
    color3: 0 0 0 64;
```


As you can see, I have used white, but you can use the color you want (top center).
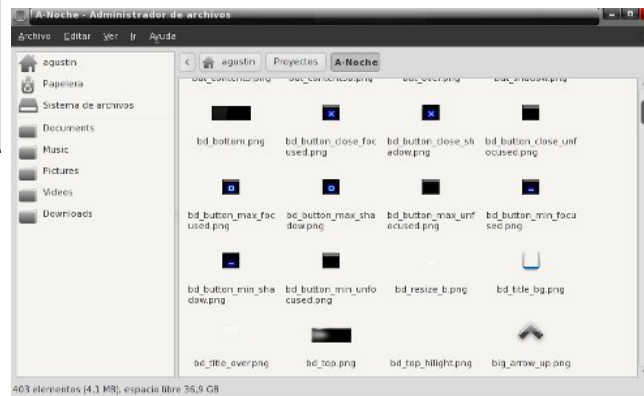
Window Decorations

bd_bottom.png is the image for the bottom flange of the window and bd_top.png is for the top flange of the window. bd_title_bg.png is going to use the edge of the window when it is active. I've made it using a transparent glass effect (below).

Bd_bottom images are those used when windows are minimized or expanded.
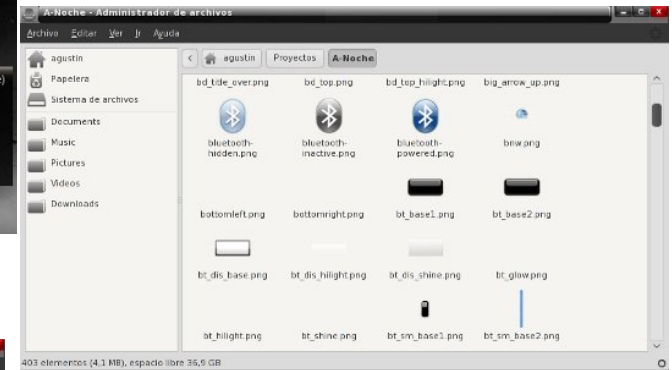
Here we see the icons to be used for bluetooth. We can use what we like as long as we respect the sizes, to avoid having to modify the default.edc. bnw.png image is the image which shows the information on the theme, who has contributed, credits etc ....(above)

The tabs are going to use the images bt-base.png, base2.png and dis_base.png. bt_sm_base1.png tab is the image used when we click a button. bt_sm_base2.png is used when the slider is selected.
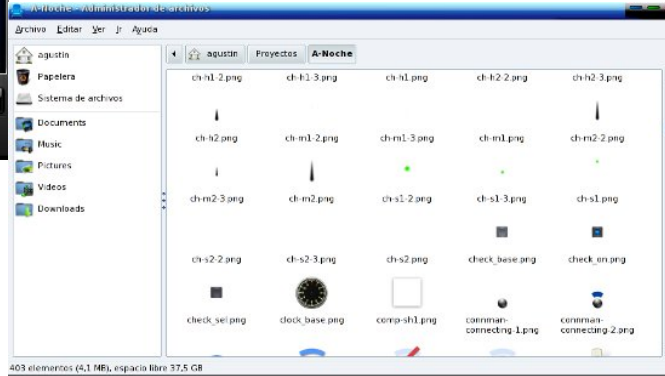
Here is our example (next page):

Part 3

In the following image we see one of the components which is most important to creating the theme. Along with the file .edc, that component is build.sh. The script is:

```
#! /bin/sh
edje_cc $@ - id . - fd. default.edc
```

Or, (A-Noche.edj), which is the script that created the theme we are examining. Along with the build,

the theme consists of 10 images and working windows (below left).

One of the parts of the theme that I particularly like is the clock. We are going to use it as an example. I designed the seconds indicator as only a green point without hands, such as those used for minutes and hours (below).
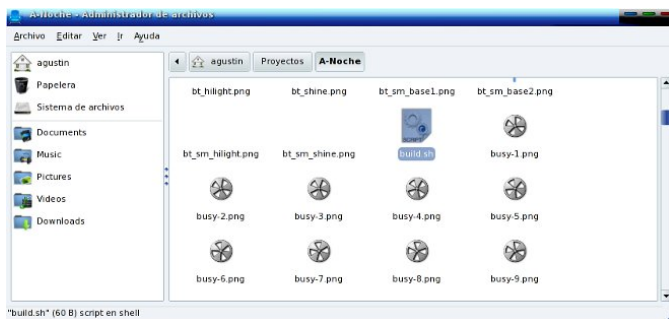

We see more images contained in the theme, but the most important file is default.edc, the file that contains all of our theme elements, and from which we can customize almost anything.

An example is the element calendar. I have added it to the theme and modified the file default.edc to use the calendar that you are seeing (e17_calendar.png). It is necessary to add or to modify it this way.

```
/*** MOD: CALENDAR ***/

images
 {
   image: "e17_calendar.png" COMP;
 }

fonts
 {
   font: "VeraMono.ttf" "VeraMono";
   font: "VeraBd.ttf" "VeraBold";
 }

group
 {
   name: "modules/calendar/main";
   parts
    {
      part
      {
        name: "calendar";
        description
        {
          state: "default" 0.0;
          aspect: 1.0 1.0;
          aspect_preference: BOTH;
          rel1 { relative: 0.0 0.0; }
          rel2 { relative: 1.0 1.0; }
          image { normal:
"e17_calendar.png"; }
        }
      }
      part
      {
        name: "monthday";
        type: TEXT;
        mouse_events: 0;
        description
```

```
{
  state: "default" 0.0;
  rel1
  {
    relative: 0.1 0.2;
    offset: 0 0;
    to: "calendar";
  }
  rel2
  {
    relative: 1.0 0.7;
    offset: -1 -1;
    to: "calendar";
  }
  color: 46 52 54 255;
  color_class: "module_label";
  text
  {
    text: "??";
    font: "VeraBold";
    size: 13;
    min: 1 1;
    fit: 1 1;
    text_class: "module_large";
  }
}
}
}
part
{
  name: "weekday";
  type: TEXT;
  mouse_events: 0;
  description
  {
    state: "default" 0.0;
    rel1
    {
      relative: 0.4 0.7;
```

```
      offset: 0 0;
      to: "calendar";
    }
    rel2
    {
      relative: 0.7 0.9;
      offset: -1 -1;
      to: "calendar";
    }
    color: 46 52 54 255;
    color_class: "module_label";
    text
    {
      text: "??";
      font: "VeraMono";
      size: 9;
      min: 1 1;
      fit: 1 1;
      text_class: "module_large";
    }
  }
}
}
}
```

As part of the modification of this theme, we also must add the image e17_calendar.png, and the sources VeraBd.ttf and VeraMono.ttf. Then we have our calendar.

Also, we can see the image dia_grad.png, which is the base of the theme.

Now we will see the images that the theme uses for entrance (login manager), which are exq-bglight.png, exq-dot-glow.png, exq-dot.png and exq-logo.png. We also see the image grill_dark_tiny_pattern.png, which we explained

previously, is the image that we would normally use like the wallpaper for the theme. But we do not use it as the wallpaper for the theme itself, as the theme has its own wallpaper.

The following images are the icons of the theme. You can always exchange them for the ones you like most, using the same sizes and names (below).

Now we will look at the images of the logo in the theme, as well as the highlight color of the items selected in the main menu.

The image used for the theme as a logo default is logo_white_128.png. When we select an item in the main menu, the first item in the sub-menu will change to logo_black_128.png. It would be this way:
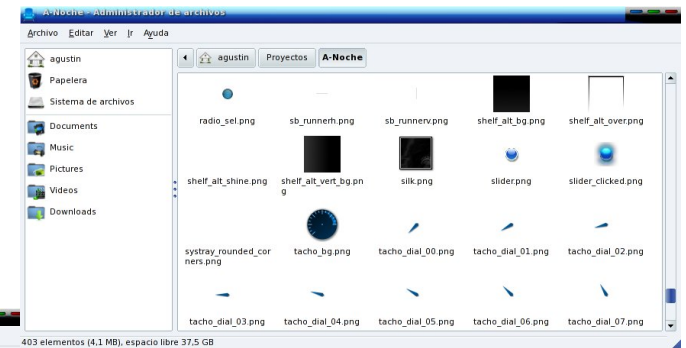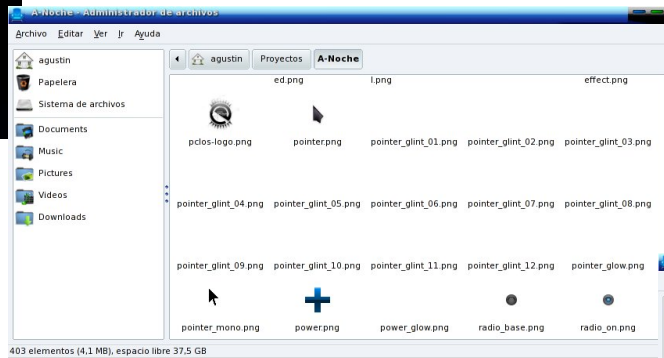

Part 4

In this section of images, we see the icon that we are going to use as the volume control. Also, we see the images for the pager. They are transparent with a rim of dark color (below).
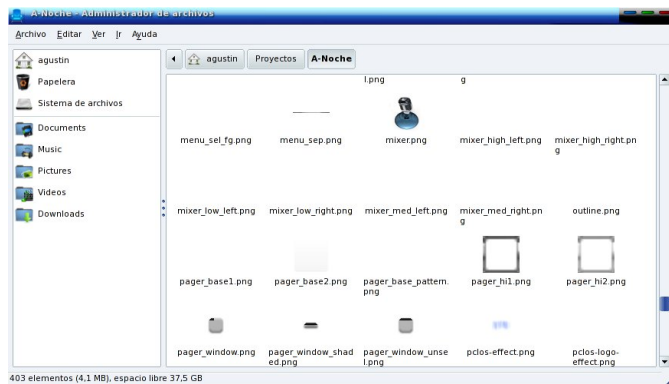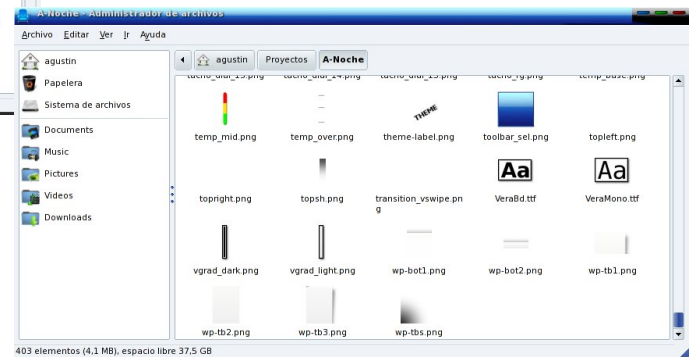

We follow with the transitory effects of the theme:

We see the images of the cursor and its effects are the same, which produces an effect very beautiful to the eyes.

The power icon pertains to the battery. When visible, it indicates that the battery is charging. It will disappear when the battery is totally charged.

Now we will look at the color of the shelf that is going to be used in this theme. Note that the predetermined color of the shelf is the same color we have used for the main menu. E17 gives us the options to change the color of the shelf to one more transparent. (That is what I used.) In this example we see that I have put the color black as an option for the color of the shelf.

Looking further, you will see the slider and slider_clicked images. I have added a brightness effect so that when we use the slider, it has a light effect. The icons tacho_bg and tacho_dial_xx belong to Cpufreq e17 module.

Finishing up, we see the images used for the temperature icon (below). The vgrad images are used in the theme for the e17 module everything. Notice also that the ttf fonts used are the same ones used by the calendar.

When our theme is ready, we only need to compile it. If you use this theme as your base, compiling it is very easy:

Double click on build.sh.

If everything has gone well, an .edj theme file will be created. In this case, the resulting file will be

A-Noche.edj. Keep in mind that if there is a creation error, it is because there is some error in the theme's contents.

There are some themes that use enlightenment_remote. For those themes, it is necessary to compile them differently. Open a terminal, and enter the following:

```
./build.sh
./build.sh && enlightenment_remote -
restart
```

I wish to give thanks to all those who have donated their time teaching me what I know. They are:

Toma (Tom Haste) , Team Enlightenment
Rui Pais , Team Enlightenment and Leader OzOS
Aubrey , Artist OzOS
Luca di Marini (Darkmaster) , Artist and Leader OPen GEU and
Roxville Prince AMD (Team Elive) on which I have based many of my works.

I am also thankful to Parnote for his interest and for helping me to write this article. I hope that it serves him as an aid to creating themes, but mainly in understanding the operation of E. This is dedicated especially to Texstar, and to Smurfslover for his great work and the interest he has demonstrated in Enlightenment.

Editor's Note: Special thanks to Agust for sharing his technique for creating e17 Themes. Extra special thanks go out to my mother-in-law, Lupe Warnock, for translating Agust's instructions and tutorial from Spanish to English for The PCLinuxOS Magazine.

Screenshot Showcase

Posted by Ramchu, March 1, 2011, running KDE 4.

Video: Part 4 - MyMencoderDVD

by Paul Arnote (parnote)

Somewhere along the way, while creating MyMencoder, Leiche realized he needed to take a slightly different approach to convert videos to a format that can be used to create a video DVD that can be played on a typical consumer set-top DVD player attached to a television set. As a result, MyMencoderDVD was born.

In the process, MyMencoderDVD was set up to allow you to create not only video DVDs, but also VCDs (Video Compact Discs) and SVCDs (Super Video Compact Discs). VCDs and SVCDs are excellent choices when you want to present shorter videos, with SVCDs having a potentially higher quality video output and providing greater flexibility to create non-standard, yet playable, optical discs. (**Note:** contrary to popular belief, DVD does NOT stand for "Digital Video Disc." Rather, it stands for "Digital Versatile Disc," to reflect the many different formats that it can be used for.)

At the top of the MyMencoderDVD window, select the video that you want to convert. Either enter the full path to the video, or click on the "File Open" icon to the right of the entry box to select the file from the typical file selection dialog.

Next, select the "Format" that you want to use to store your video on. You can select from DVD, SVCD or VCD. Depending on what you select here will dictate your selection under the "Scale" section. Be careful here to select the appropriate broadcast standard for your area. Computers really don't care much about this setting, and will play either standard without difficulty. Unless you have one of the relatively rare set-top DVD players that is capable of reading discs made for either broadcast standard, you may find yourself unable to watch the disc on your set-top DVD player. If you select DVD, you can choose between two pre-defined PAL sizes and one NTSC size. These would be the 720 x 576, 704 x 576 for PAL, and 720 x 480 for NTSC. If you select SVCD, you will need to select either PAL 480 x 576 or NTSC 480 x 480. For VCD, you will need to select either PAL 352 x 288 or NTSC 352 x 240.

To be able to choose the appropriate format (besides which optical media you choose to use), it's a good idea to have a basic understanding of the different formats. Click on the links for the formats
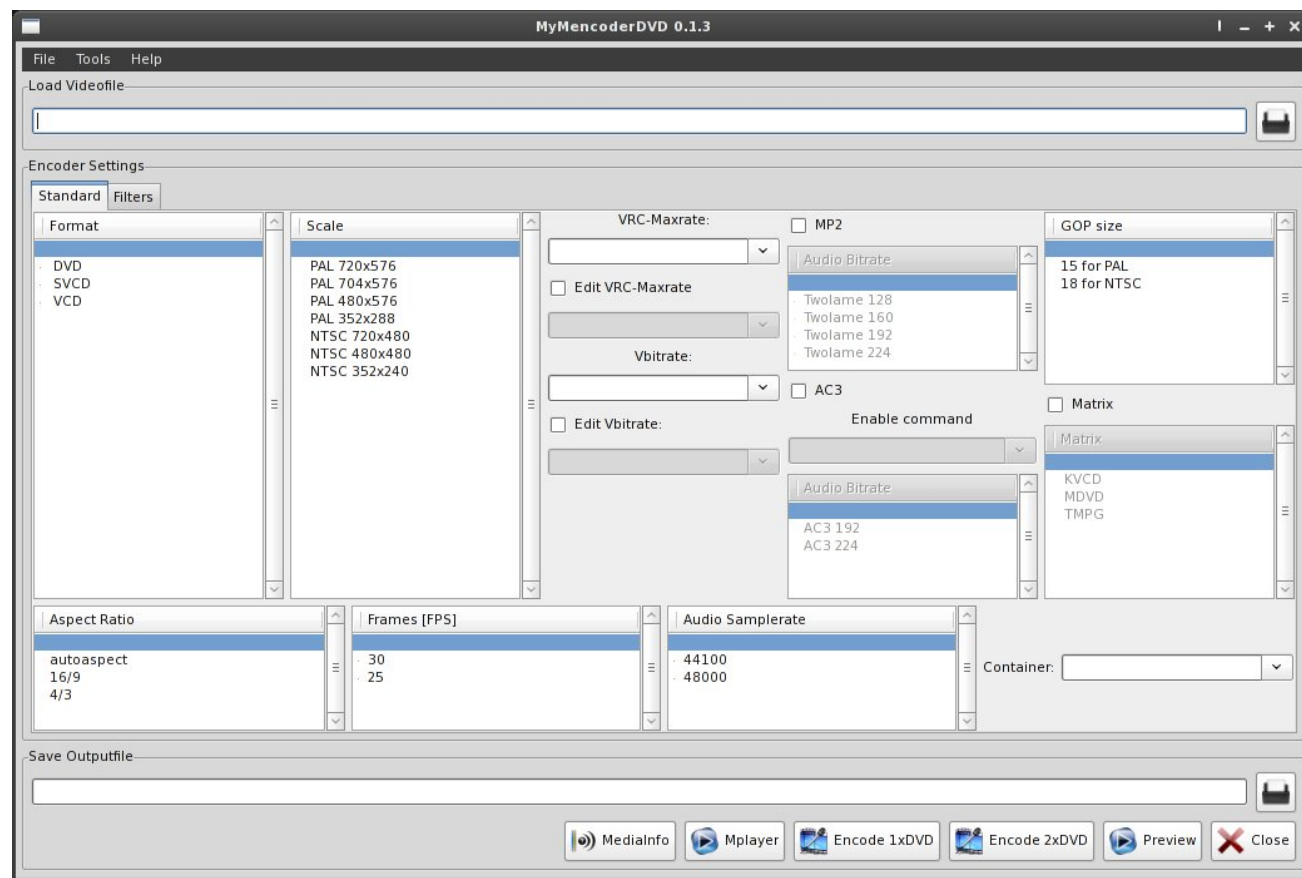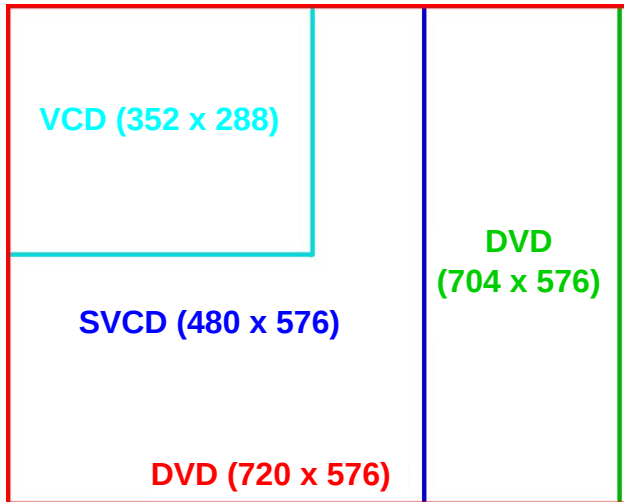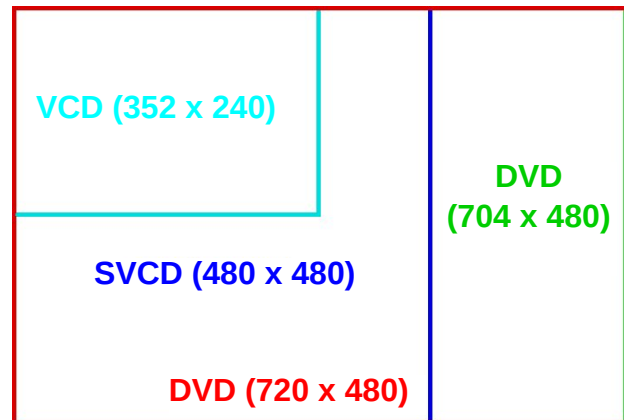
Pal video image sizes.

that follow for a complete discussion of the format specifications. VCDs hold to a very rigid set of specifications. The video must be 1,152 kbps and in MPEG 1 format at a video size of 352 x 240 NTSC (352 x 288 for PAL), and audio is MP2 at 224 kbps with a 44,100 Hz sample rate. VCDs should be playable on the vast majority of set-top DVD players. VCDs can typically hold up to 80 minutes of video on a 700 MiB compact disc.

SVCDs came about to address some shortcomings of the VCD 2.0 specifications, namely image quality. SVCDs can provide much greater image quality, thanks to its ability to support higher video bitrates (up to 2,600 kbps). Video is encoded as MPEG 2, at a size of 480 x 480 for NTSC (480 x 576 for PAL). Don't worry – the image will be "un-squashed" on playback. SVCDs will also support audio bitrates from 32 kbps to 384 kbps at a 44,100 Hz sample

rate. You can record up to 60 minutes of higher quality video on a SVCD, depending on a combination of the video bitrate and audio bitrate you select.

SVCDs are not, as you can see, held to "as rigid" of standards as VCDs. As a result, you can create custom SVCDs that use a lower video bitrate, to squeeze more data onto a CD than you normally would be able to otherwise record. I have personally created custom SVCDs that hold over 90 minutes of video. The video quality isn't perfect, but then I used this "trick" when maintaining video quality wasn't necessarily my primary objective.


NTSC video image sizes.

DVDs offer even better image quality, again mostly due to the ability to support higher video bitrates (up to 9,800 kbps) and larger video image size, coupled with their massively larger storage capacity. DVDs also support AC3 audio (Dolby Digital, etc.), along with MP2 audio, from 32 kbps to 1536 kbps, but that audio must be at a 48,000 Hz sampling rate to be

DVD compliant. How much you can fit onto a DVD depends on several factors. First, it depends on the capacity of the DVD disc you have. Most blank DVDs that you purchase at your local retailer are commonly referred to as DVD5, and they hold approximately 4.7 GiB of data. A dual sided version of that disc is known as a DVD10. The dual layer DVDs are known as DVD9, and are what you most commonly get when you purchase a prerecorded DVD at the store. A dual sided version of a DVD9 is known as a DVD18, and they are not all that common.

Secondly, it depends on the video size and resolution you use to make your DVD. A video made with a video size of 720 x 480 is going to take up approximately four times the space of video that is sized at 352 x 240 (the same size used to record MPEG 1 video for VCDs). Similarly, video with a resolution of 5,000 kbps will take up roughly twice as much storage room as the same video recorded at 2,500 kbps.

DVDs support all the video sizes we've mentioned, except SVCD. The SVCD sizes are not part of the DVD specification, although many set-top DVD players will play them back appropriately. Thus, you can put 450 minutes of video (or 5.5 hours of video) onto a DVD5, using MPEG 1 VCD video. Or, if you use high video bitrates, you could limit yourself to only one hour of video on a DVD5 disc.

The next setting you need to make in MyMencoderDVD is the maximum video bitrate. Leiche has provided the defaults of 1152 kbps for VCD, 2500 kbps for SVCD and 9800 kbps for DVD. Place a check mark in the "Edit VRC-Maxrate" box if
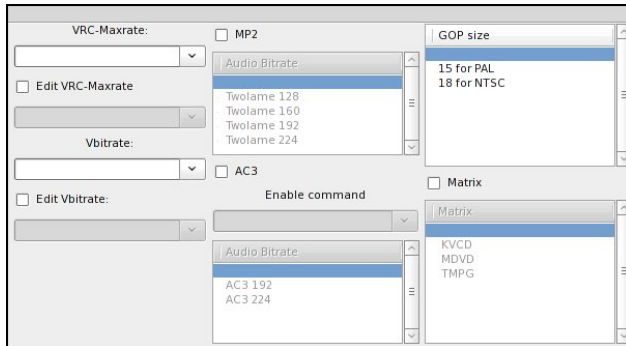
you want to provide a different maximum video bitrate, and enter the value in the entry box below.

Under the "Vbitrate" entry, select the video bitrate that you want MyMencoderDVD to use to encode your video. Again, Leiche has provided defaults of 1152 kbps for VCD, 1800 kbps for SVCD and 5000 kbps for DVD. If you want to use a different video bitrate, check the box labeled "Edit Vbitrate:" and enter your video bitrate in the entry box below.

Next, select the MP2 check box, followed by the audio bitrate that you want to use. You can also select to include an AC3 soundtrack, if you want. Simply select the AC3 check box, select the command from the "Enable command" drop down list, and select the audio bitrate you want to use.

For GOP size, select the setting that is appropriate for your broadcast standard. If you want to apply a matrix (commonly used to help give better image results), select the "Matrix" check box, and then one of the three matrix settings below. Feel free to play with these to find which one gives you the best results for your videos. I find this to be a rather

subjective topic, so I won't make any recommend-ations here.
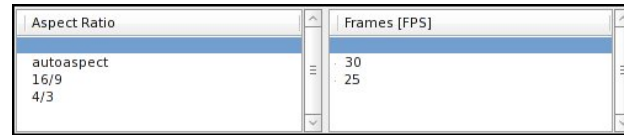

For the next setting, "Aspect Ratio," I recommend simply selecting the "autoaspect" setting. From what I can tell by reading the mplayer/mencoder documentation, the aspect ratio setting is for mplayer to use on playback, and has no use when using mencoder to record or transcode video. Under the next setting, "Frames [FPS]," select 25 fps for PAL recordings and 30 fps for NTSC recordings.
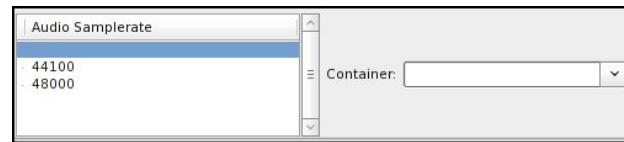
The next section, "Audio Samplerate," allows you to select either a 44,100 Hz sample rate for VCDs and SVCDs, or a 48,000 Hz sample rate for DVDs. In the "Container" section, select either MPG or VOB as the container for your transcoded video. I recommend selecting MPG for a few reasons. First, most DVD authoring applications (such as DeVeDe) will automatically create appropriate VOB files, along with the proper DVD file system, for your DVDs. Secondly, some set-top boxes are quite picky about the size of the VOB files. Typically, VOB files are designed to be no more than 1 GiB in size, to insure maximum compatibility among set-top players and the various file systems that have to read them. Third, since you will be working with MPG files for

both VCDs and SVCDs, and since your DVD authoring program will create your DVD file system for you, it only makes sense to simplify things and work only with MPG files.

In the bottom entry box, enter the path and filename you want to save your transcoded video as. You do not need to specify a file extension, since it will automatically be appended to your filename, depending on which container you choose.
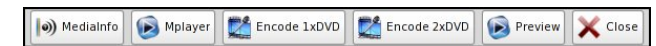
The button bar at the bottom of the MyMencoderDVD window functions pretty much exactly like the one we talked about for MyMencoder. Pressing the "MediaInfo" button will display all the data you will ever want or need to know about the source video in a Xterm window. The "Mplayer" button will display a pop up Mplayer window, playing the input file. "Encode 1xDVD" will transcode your video in one pass, while the "Encode 2xDVD" button will transcode your video in two passes, giving you a higher quality image. The "Preview" button will show you the finished results of your transcoded video, and will only work after you have completed the transcoding of your video. The "Close" button will exit MyMencoderDVD.

Tools & Menus

Under the "Tools" menu on the menu bar, you have some additional tools for working with your video files.
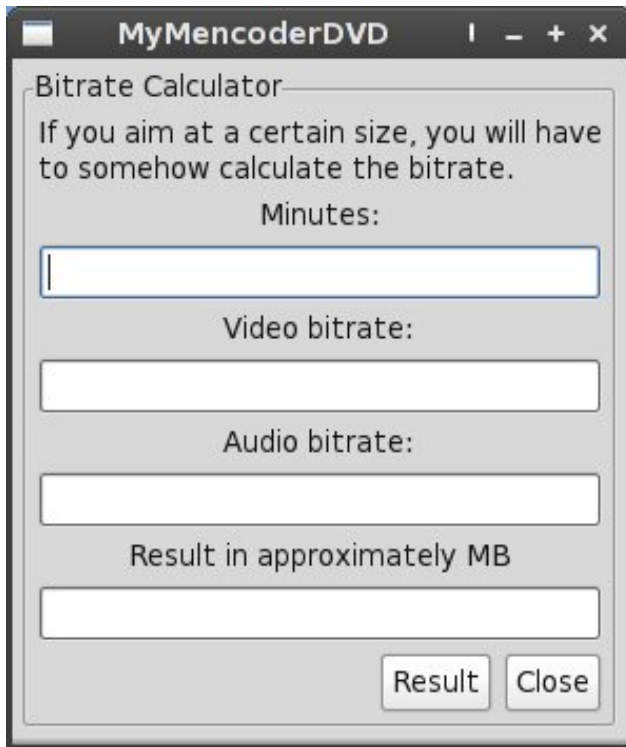
Selecting "Calculator" from the Tools menu will bring up the bitrate calculator. If you don't immediately see the benefit of this, let me explain it to you. Let's say you have 2.5 hours (or 150 minutes) of old home movies that you just converted to digital video, and you would like to place all of them on one DVD. Or, let's say that you have recorded a miniseries from your TV tuner card, and would like to place all 177 minutes of edited video on one DVD. Enter the length of the video, in minutes, on the top line. On the second line, enter the video bitrate you want to use to transcode your video to. On the third line,

enter the audio bitrate you want to use to encode your audio track as. Then select the "Result" button. The approximate file size, in MB, will appear on the bottom line.

If you are planning on burning your videos to a DVD5 disc, you will want to insure that the resulting size is less than the capacity of that DVD5 disc, or 4.7 GiB. Since the bitrate calculator is only an estimate, I would strongly recommend that you leave yourself some "breathing room," and use 4 GiB as your upper limit – just in case the estimate is a bit on the low side of what is actually produced.

By using the bitrate calculator, you can get maximum image quality for the videos that you do put onto your optical discs. Just remember that if you are burning an SVCD, most CDs are 700 MiB. Also, remember that VCDs have a very strict set of specifications for audio and video bitrates and video size, so you cannot deviate from those specifications (otherwise, you risk not being able to play the disc on anything but a computer, which really doesn't care all that much about whether you meet the "standard" or not).

Selecting "MPEG Tools" from the Tools menu will allow you to demultiplex any MPEG video file (sorry, but it won't work with AVI files) into a separate *.m2v video stream and *.mp2 audio stream. These two streams can subsequently be re-multiplexed back into one contiguous MPEG file. You may want to do this if you find the need to work exclusively with only the video or audio portions of a video file, or if you want to completely replace the audio stream. For example, you may want to eliminate the uninspiring, monotonous background noise in your vacation video of you driving through the Donner Pass, replacing it with a musical soundtrack or a narration that you prepare after you return home. Selecting the "De-Multiplex" button will open a Xterm window, so you can follow the progress.

The last option under the Tool menu is "Audio Extract." It does exactly as its name says it does: it extracts the audio from a video file. Most any video file that you can play with MPlayer is fair game for audio extraction. Specify the video file that contains the audio you want to extract on the top line. Then,

select the audio bitrate and sample rate that you want to use. Next, select the "Container" for the audio, either MP2 or MP3. Then, in the "Save File" entry box, specify the path and filename that you want to save the file as. You do not need to specify a file extension, since either MP2 or MP3 will automatically be appended to the filename, depending on which file container you select. Finally, click the "Audio Encode" button. A Xterm window will open up to show the progress of the audio extraction. The audio extraction feature is very fast, since the audio portion of a video file actually makes up only a very small part of the overall video file.

Selecting "About" from the Help menu will display the dialog box pictured above.

Summary

Once again, Leiche has created a simple and effective tool for preparing your videos for recording to various optical media formats that can be played

back on your set-top DVD players attached to your television.

Next month, we'll take a look at some other video tools in the PCLinuxOS repository, along with a few other techniques that you may find useful when dealing with video files.

Screenshot Showcase

Posted by izto, March 11, 2011, running KDE 4.

Alternate OS: Icaros, Part 2

by Darrel Johnston (djohnston)

As stated before, Icaros is an enhanced set of features to the AROS operating system, which is a recreation of the AmigaOS. The AmigaOS is "married" to its hardware, even more so than a Macintosh. A large part of AmigaOS is embedded in ROM chips. Many of the multitasking capabilities are due to special chips, such as embedded audio and video processors. Because AROS is designed to run on commodity x86 hardware, these multitasking capabilities had to be built into the disk-based software. Note that AROS was coded "from the ground up" to have the same capabilities as the AmigaOS, without copying any of the original software. In this article, I will look at some of the special features of the AmigaOS that are duplicated in AROS.
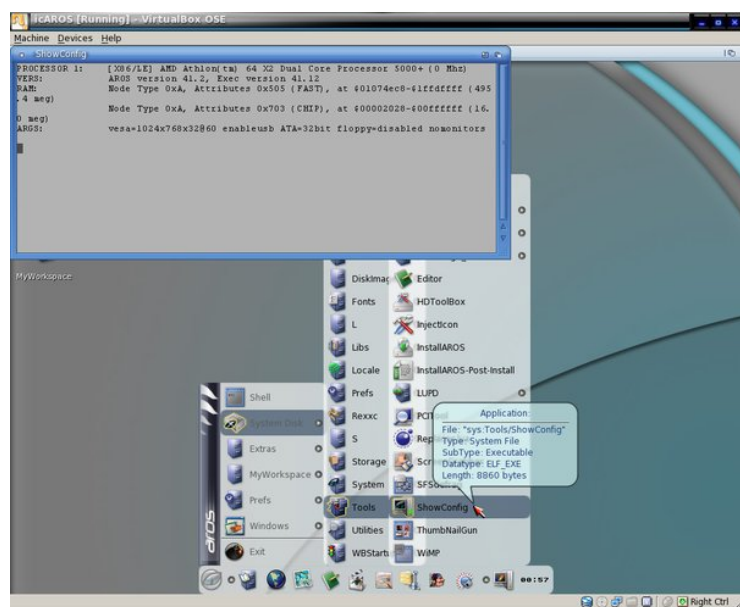
First of all, just like the Amiga, AROS has no provision for protected memory. The feature has been discussed among developers for future implementation. But, so far, it has not been implemented. This means that a single system or application program can crash the entire OS by overlaying the memory space of another program or process. Second, AmigaOS and AROS are single user desktop systems. Multiple users can be implemented on the AmigaOS using third-party software and filesystems. MuFS (MultiUser File System) is a filesystem on the Amiga capable of supporting multiple users.

The Amiga's true pre-emptive multitasking has had this ability from the day it was born, and it could achieve this within 512k of memory. AROS also has true pre-emptive multitasking and should run on almost any Pentium or higher CPU. Ideally, 700Mhz and above with 256MB of memory is recommended.

The messaging system of AmigaOS's Exec library is very fast and flexible, based originally on Tripos. You can have any number of tasks active, and each can send and receive messages on a number of ports. There is a simple efficient flag for each port to say that it has messages waiting, and the task can handle them in any way it wishes. Also, the ARexx version of Rexx provides an even higher level of messaging, at the level of inter-program communications, that enables one piece of software to control another. ARexx is available in AmigaOS and AROS as a system-wide macro language and a means of communication between programs. The Rexx language is also used on eComStation's version of OS/2, AROS and on IBM mainframes. Microsoft's NT4 OS for servers also had an implementation of Rexx.
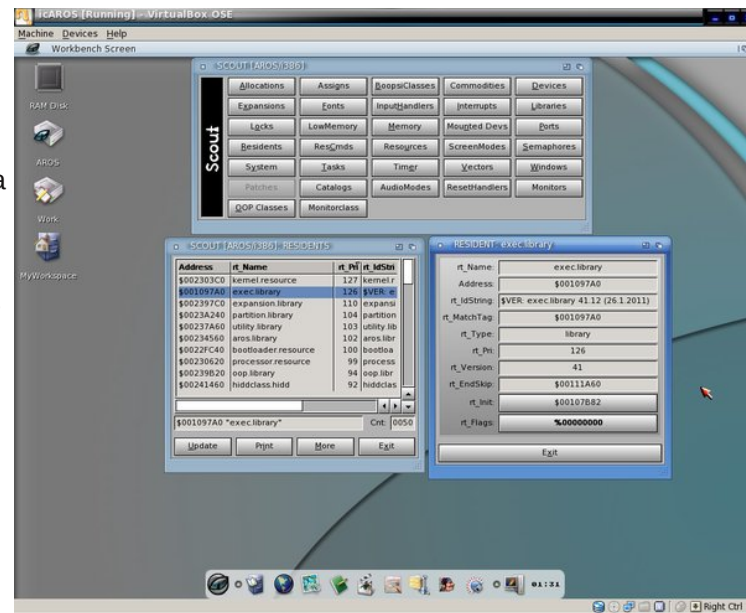

AmigaFFS (Fast File System) can handle long filenames up to 108 characters, has international settings, (it can use filenames with accented letters), and can also be cached if the user chooses to format the partition with the cache option. AROS filesystems have these capabilities. Filenames are allowed to start with '.' just like under UNIX, and they can also have multiple extensions, such as filename.tar.gz.

AmigaOS and AROS both have a graphical user interface and a commandline-oriented shell, which is comparable with UNIX Shells. Amiga's GUI Workbench is duplicated as AROS's Wanderer.
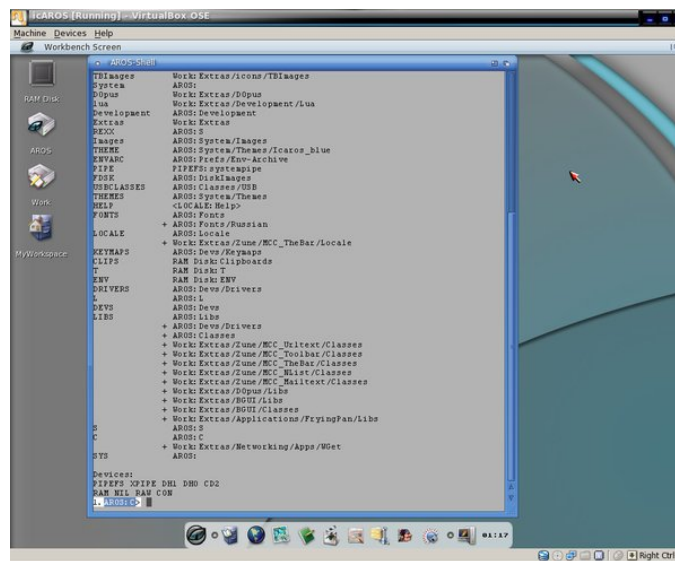

AmigaOS version 3.1 (and higher) or its graphical user interface can be switched among 10 different languages providing full localization through a preferences editor, and all this without re-installation of the operating system! Workbench offers this localization mechanism also for applications programs for these languages: Dansk, Deutsch, English, Español, Français, Italiano, Nederland, Norsk, Português, and Svenska. AROS has support for 23 languages and more than one language can be specified (top right).

The datatype system of AmigaOS is a centralized expandable modular system describing any kind of
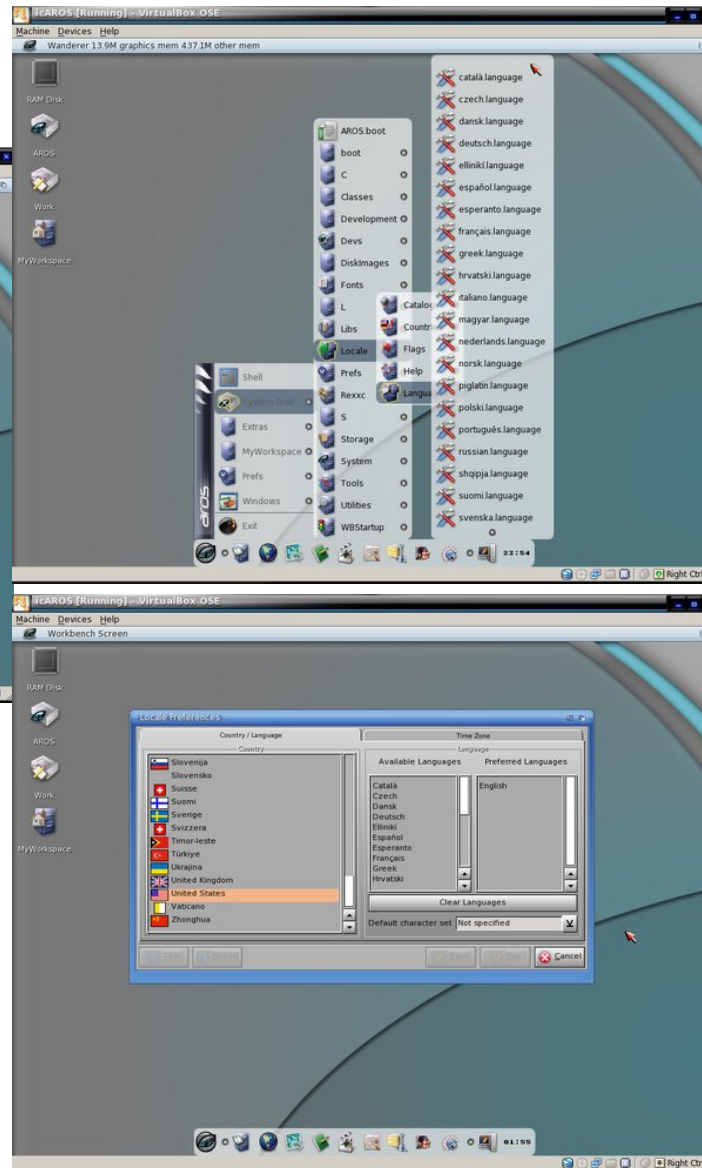
file, (text, music, image files, videos), each one with a standard load/save module of its own. Any experienced programmer, following the Amiga Datatype programming guidelines, can create a new standard datatype module for any kind of file required to be loaded or saved. Once created, the new datatype is visible to the entire Amiga system, including all programs, by simply copying the new datatype into the directory SYS:Classes/DataTypes/, and the descriptor, which is called to identify files, into DEVS:DataTypes/. This allows Amiga programs to load and save any kind of files for which there is a corresponding datatype, without the necessity of embedding file descriptors in its binary, and without the need for an independent system of file loaders. This implementation of mimetypes is unique to the Amiga, and is fully implemented in AROS.
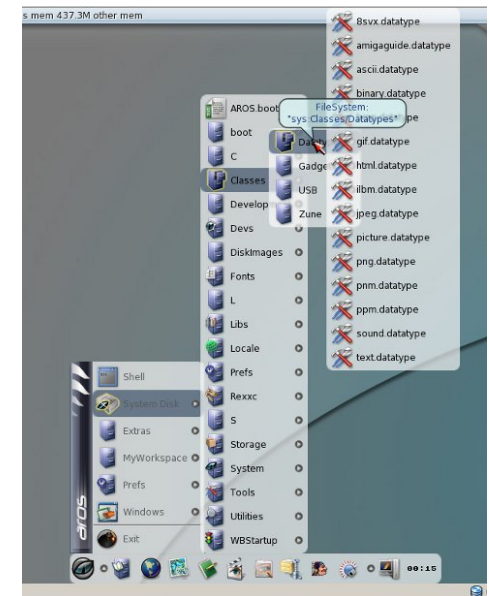
NOTE: The logical volumes SYS: and DEVS: are created during the AROS boot sequence with assigns, and will be covered in the next article.

One unique datatype is the iff, or Interchange File Format. An iff file can be either a sound file, an image file, or an animation file. The quickest way to determine its type is by opening the file. This datatype is also implemented in AROS.

Another datatype is the AmigaGuide, which is a type of help file display format. AmigaGuides are written in a version of HTML, and this datatype was in use before the world wide web existed. It was created so that help manuals could contain hypertext links to subsections of the manual, with each subsection containing hypertext links back to the table of contents. This datatype is also implemented in AROS.

In the third and last article on Icaros, we will look at some of the programs included on the CD.

Your Community Projects Forum

Screenshot Showcase

Posted by filolog, March 10, 2011, running e17.

Rudge's Rain: PCLinuxOS Makes Music

by Paul Arnote (parnote)

Every so often, uninformed computer users claim that Linux can't do this or Linux can't do that. As most of us already know, there's very little that Linux can't do. You can even use Linux to compose and create music. Just ask Rudge.

Rudge, a.k.a. Russell Galloway, has recently used PCLinuxOS and RoseGarden, a music composition application from the PCLinuxOS repository, to compose some music. Combining RoseGarden with JACK, along with some JACK plugins, such as JackBeat, GuitarX, QSynth and others, Rudge has managed to create his own music compositions.

"The main melody (the piano part intertwined with the guitar at the start of the piece) was inspired by an old Styx song called Aku-Aku. It comes right after Pieces Of Eight on the album of the same name," said Rudge.

"I recorded it just because I liked it. As I listened to my own version, the guitar sounds reminded me of a summer rain, starting out slow and picking up. As I listened, it reminded me of my grandmother's funeral for some reason. When we buried her, it was a gloomy afternoon and that sort of afternoon summer rain was falling. I just ran with it and put all of the emotions in and continued to add parts that I thought fit in.

"I came to a point where I needed to hit a climax of some sort, so what did I do? I recorded an actual thunder storm here in NC with a small four track

(Tascam) recorder. I had to place the thunder in strategic places, so the editing functions of RoseGarden came in real handy.

"The 'church bell' took a lot of tweaking, because it not only had to have the right sound, it had to be a pitch that would not clash with the music, and had to run the whole score once it started.

"At the end of the piece, you only hear the piano, because I used to play for my grandma on the piano and she loved it (or pretended to). The church bell and the rain are all that's left of her, as in the piece.

I call it "The Rain Song."

Rudge, & his familiar sidekick, Molly

Music is definitely familiar territory for Rudge.

"I started taking private piano lessons when I was very young, when I was in the first grade or so, and took them until I was well into high school," says Rudge.

"Meanwhile, I had taken up playing the drums in school in the fourth grade, and played in school marching bands all through high school. I liked playing the drums more than the piano, mostly because there was more opportunity to do it 'socially.' I was always the percussionist that every local garage band wanted as their drummer.

"My dad had taught me to play the guitar before I could walk, so I don't remember a time when I couldn't play it. Although, it is probably my weakest suit.

"I have had trumpet lessons, hand percussion lessons, and I even had a baritone lesson once.

"I have had three albums officially released with various bands, worked as a studio musician for about 6 months in the late 80's, and was once in a band that opened for Cinderella in the mid 90's.

"When I married JRex in 2000, I moved from Atlanta, Georgia, to Charlotte, North Carolina. I left my piano with my brother and stacked my drums in a cramped apartment for 3 years, until we bought a house.

"Now, I play my drums and guitar by myself in a bonus room that I have set up as a make shift music room. I also bought one of those electric keyboards,

of which I know nothing about. It's only slightly better than a toy one, but hey, the notes are all in the same place. LOL.

"I am planning to do some more up beat, happy, classic rock type stuff. But I have to get my guitar sounds "deaf." I have the music, but I just don't have the instruments figured out."

Creating music with RoseGarden is not for those without any musical talent, according to Rudge. There's a lot more to it, so don't just expect to be able to go in without any musical knowledge or talent and be able to create the next "Mr. Holland's Opus."

"With this software approach, you not only have to know how to write the music, you have to know what apps are capable of reproducing the sounds that you need, and how to get those apps to make those sounds. If I had been in possession of all the instruments in the recording (you more or less already have to know how to play them all in real life, anyway), I could have recorded the piece in one afternoon. But, after working with each instruments parameters for sound, volume, attack and sustain, not to mention every note's parameters, there was a whole bunch of stuff to set up there. This piece took me over 3 months to record. That is just for the one tune, 'The Rain Song,'" said Rudge.

"I did a whole album consisting of 6 songs total."

You can download Rudge's song, "The Rain Song," from the magazine's website. You can choose from an MP3 version (6.7 MB), or an OGG version (5.2 MB). Both files are decent quality, stereo files.

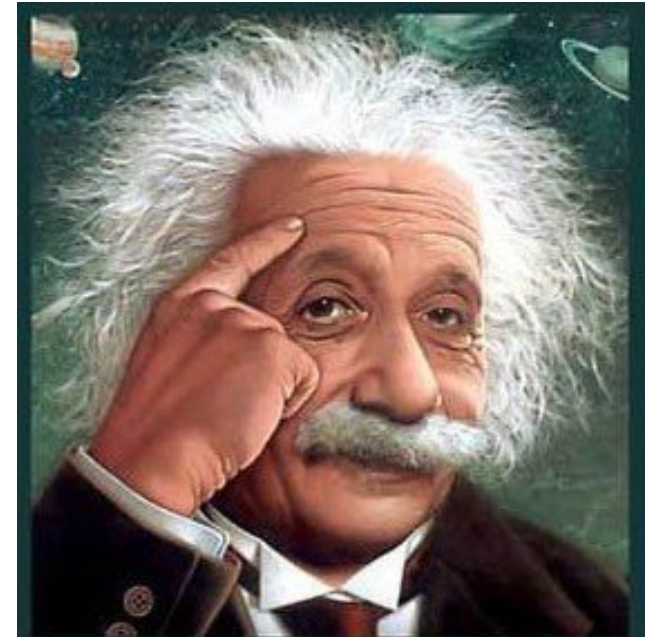# Burning CD's Over the Internet Without an ISO File

by Lubos Rendek

Originally appearing at linuxconfig.org
Reprinted with permission.

How many GUI CD/DVD burning applications do you know? Now, how many of them you can name that can burn an ISO image directly from ftp server or burn your remote directory over ssh? If you want to use a GUI burning software in such manner, you would need to mount your remote ftp or ssh directory as a part of a local system. However, this is possible without any extra effort by use of command line interface.

This article will illustrate some command line tricks on how to work with ISO images, and how burning a data from a command line can safe you time. It really highlights a power of Linux command line interface.

Let's start with creating an ISO image.

The following command will create an ISO image from your CD. Insert your CD into CD/DVD drive and execute:

```
# dd if=/dev/cdrom
of=/my/new/iso/image.iso
```

If you just need to create an ISO image from your local directory, the easiest way to do this is by a following command:

```
mkisofs -o /my/new/iso/image.iso
/path/to/your/files/
```

To see the content of your new ISO image, you can mount it to any directory within your local filesystem:

```
# mount -t iso9660
/my/new/iso/image.iso /mnt/iso/ -o
loop
```

Next we can try burn an ISO image with cdrecord. First, retrieve and base name of your burning device with wodim:

```
# wodim --devices
```

To burn an ISO image, use a block device's base name retrieved earlier, in combination with a location of your iso image:

```
# wodim -eject -tao speed=0
dev=/dev/scd0 -v -data
/my/new/iso/image.iso
```

That was easy! Did you know that you can burn your files without prior creation of an ISO image? Here is how to make a copy of your CD.

Note: This requires the separate devices, one for reading and one for burning.

```
# dd if=/dev/scd0 | cdrecord -v
speed=12 dev=/dev/scd1 fs=8 -data -
```

It is also possible to burn any local data without creating an ISO image first:

```
# mkisofs -r /path/to/my/files |
cdrecord -v speed=12 dev=/dev/scd1
fs=8 -data -
```

By now, it is clear that we only need to pipe any ISO data to a cdrecord, and therefore we can also burn ISO image directly from FTP source:

Note: High speed internet access is recommended.

```
# curl http://remote-ftp.rem/linux-
distro-image.iso | cdrecord -v
speed=12 dev=/dev/scd1 fs=8 -data -
```

It is also possible to burn your local data on a remote machine over the encrypted ssh tunnel:

```
# mkisofs -r /path/to/my/files | \
ssh user@remote.machine "cdrecord -v
speed=12 dev=/dev/scd1 fs=8 -data -"
```
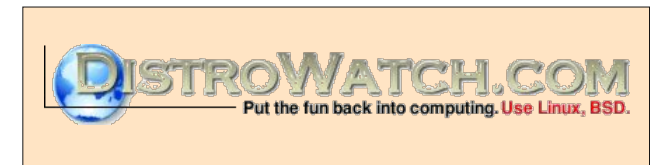
**by Paul Arnote (parnote)
and Darrel Johnston (djohnston)**

There are many things you can do to customize your e17 desktop. Here, we'll list some of those helpful tips and tricks. Most of these, while important, aren't long enough to warrant their own article. So, I've decided to collect them here, for your quick reference.

Changing Your Mouse Pointer

The tool in e17 to change your mouse pointer is quite barren and lacking, and doesn't give you full access to change your mouse cursor. Instead, it only allows you to choose between the e17 cursors and the X cursors. Often times, it's the X cursors that you want to control and alter.
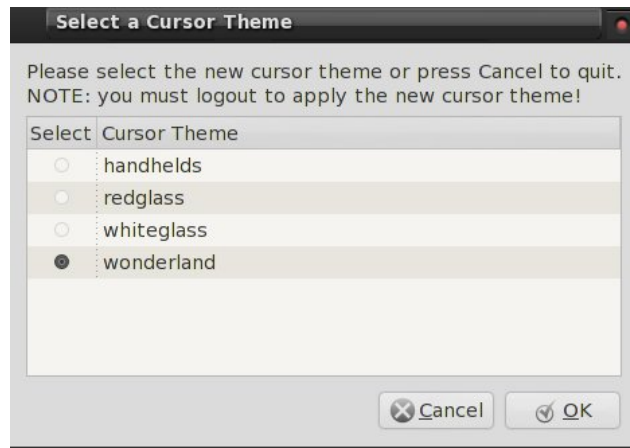
Instead, simply install LXCursor from Synaptic. This will give you full access to the X cursors installed on your system. Simply pick the cursor set that you would like to use. Note that you will have to log out, then back in, to apply your new cursor theme.

Change Your Keyboard Layout

There is a bug in the e17 keyboard module that does not allow you to switch your keyboard layout. But there is a work-around.

First, check in Synaptic to see if **setxkbmap** is installed. If it is not, install it.

Next, open up your favorite text editor, and create a file with the following contents:

```
[Desktop Entry]
Name=Keyboard-fix-e17
GenericName=Keyboard-fix-e17
Comment=Fix hanging keys on loading
e17 keyboard switcher
Encoding=UTF-8
Exec=setxkbmap -option
grp:switch,grp:alt_shift_toggle,grp_le
d:scroll us,ge
Icon=
Terminal=false
Type=Application
Categories=
StartupNotify=false
```

At the end of the **Exec=** line are the two character country codes for the keyboard layouts you want to use. The "us" designates the United States keyboard layout, and "ge" designates the Georgian keyboard layout. Replace these with the keyboard layouts you want to be able to switch between. You can find the two character country codes here.

I recommend saving a copy of the file somewhere in your /home directory, as keyboard-fix-e17.desktop. Next, copy the file to one of two locations. Where you choose will affect either an individual user, or all users on the same computer. If you want to allow only an individual user to change their keyboard layout, then copy the file to the user's /home/[user-name]/.local/share/applications. If you want to allow all the users on the computer to be able to change their keyboard layout, then you will need to copy the file to the /usr/share/applications directory. You will need to do this as the root user.

As a final step, open the e17 Settings Panel > Apps > Startup Applications, and add keyboard-fix-e17 to automatically start when you boot the computer. Now, whenever you press the Shift + Alt + ScrollLock key, you can switch between the two defined keyboard layouts.

Change Keyboard Shortcuts (a.k.a. Key Bindings)

Like many Linux users, I am a Windows refugee. Windows 3.1 came installed on my first true IBM-compatible PC many, many years ago, and I remained a Windows user until Vista came out. In fact, it was the Vista flop and its grossly increased hardware requirements that made me give a second

look at Linux. After all of those years using Windows, there are certain keyboard shortcuts that I have become accustomed to using, and those don't always agree with the keyboard shortcuts (or key bindings) of the various Linux desktop development teams.

Fortunately, there's an easy way to change your key bindings to more closely match the way you want to work with your computer. For example, I like being able to use the Alt + Spacebar key binding to access the window menu.
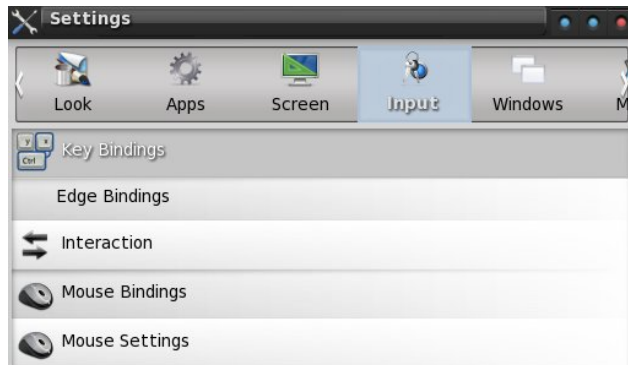
Launch the e17 Settings Panel and go to the "Input" tab. From there, select "Key Bindings" from the choices presented.

This brings up the Key Bindings Settings dialog box (top image, next column). You can search to see if the key binding you want to use is listed (and already in use), or you can click on the "Add Binding" button (lower left).
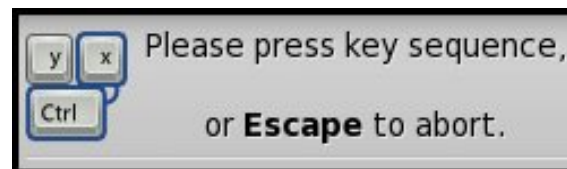

When you select "Add Binding," the window above appears, prompting you to enter the keystroke combination you want to use as your key binding. Once you've done that, you can select the action you want to attach to that key binding from the list along the right side of the window. Repeat this process for each key binding you want to define. Select "Apply" and then "Close" to finish.

Changing Desktop Icon Size

In one of our first e17 articles in this series, we described how easy it was to place icons on your desktop. Well, let's take that a step further, since e17 makes it just as easy to control the *size* of the icons on your desktop.
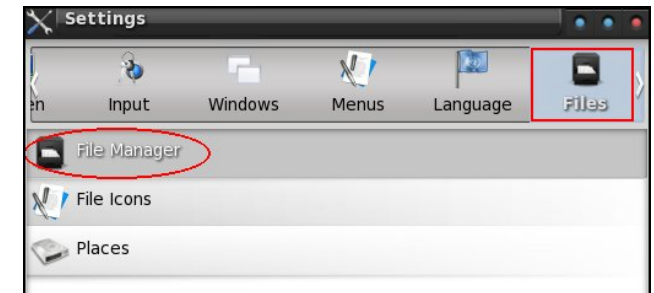

On the e17 Settings Panel, go to the "Files" tab, and select "File Manager" from the list.
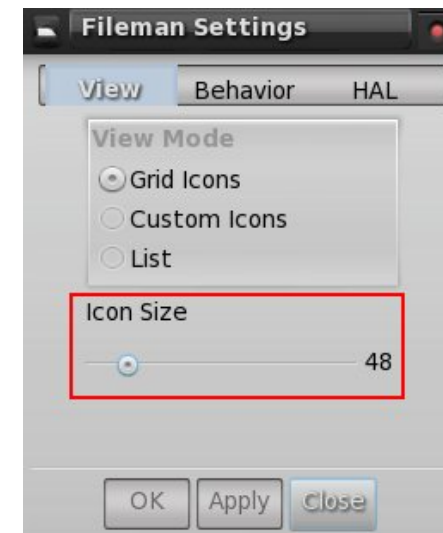
The dialog box (above) will appear. Simply slide the slider (outlined in red) to the size you want your icons on your desktop to appear as.

Add Application To Favorites Menu Made Easy

E17 has a uniquely easy way to add your favorite applications you frequently use to the "Favorite Applications" menu.
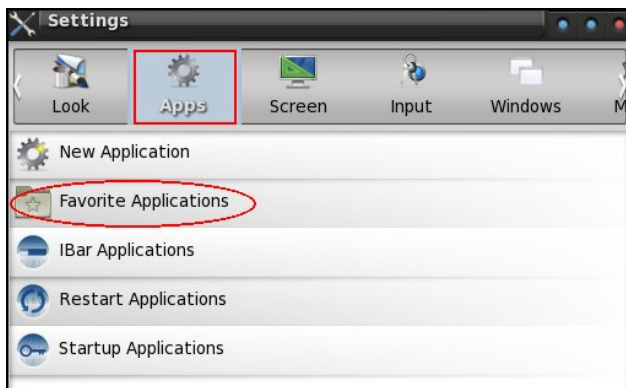
After launching the e17 Settings Panel, select the "Apps" tab, then click on the "Favorite Applications" entry.
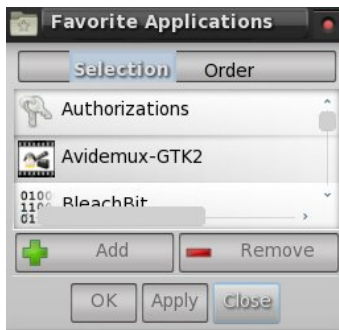
Select the applications you want to add to your "Favorite Applications" menu, one at a time, from the list presented, and click on the "Add" button. Once you have selected all of the

applications you want to add to your "Favorite Applications" menu, select the "Apply" button. Click on the "Order" tab to rearrange the order in which those applications appear on your "Favorite Applications" menu. Click on the "Apply" button, then the "Close" button.

Add Application To Favorites Menu (using a file editor)

Sometimes the items which show in the Selection window will not actually be added to the Favorites menu. The OpenOffice and LibreOffice suite of programs are an example. We see the items are listed in the Selection window, and we select Writer and click the Add button, then click the Apply button.

Next, we arrange the order of the item and click the Apply button. However, when we look at our Favorites menu, Writer has not been added.
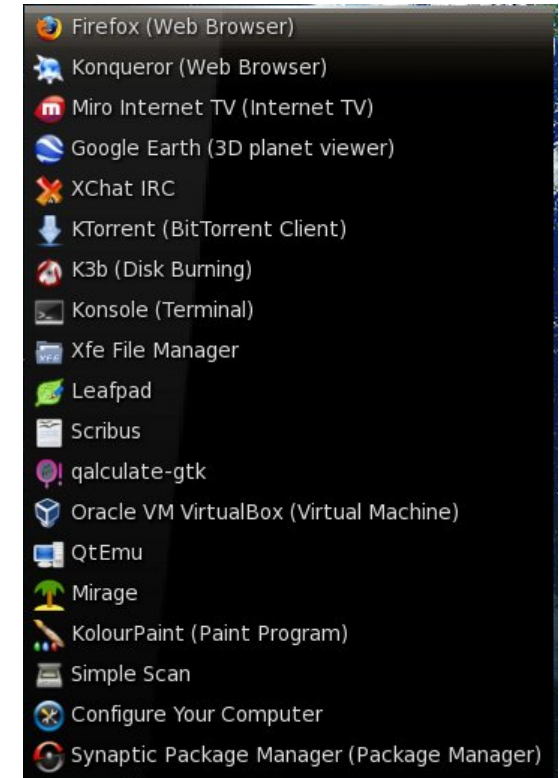
Fortunately, this is Linux, and many configuration files are in plain text. I have not been able to determine what the e17 Favorites menu editor has attempted to insert in the menu. However, I do know that all items in the Favorites menu must have a corresponding desktop file in the /usr/share/applications directory. Doing a search for a Writer desktop file, I get the following results.

```
bash-4.1$ locate writer.desktop
/opt/libreoffice/share/xdg/writer.desk
top
/usr/share/applications/libreoffice-
writer.desktop
bash-4.1$
```

The Favorites menu configuration file is ~/.e/e/applications/menu/favorite.menu (~ is the symbol for /home/yourusername). Opening the file in a text editor, we see it is an XML file in plain text. We know there is a libre-office.desktop file in the /usr/share/applications directory. It is now a simple matter of adding <u>two</u> line entries to the favorite.menu file. The edited file is shown below, with the new entries in red.

```
<?xml version="1.0"?>
<!DOCTYPE Menu PUBLIC "-//freedesktop//DTD Menu
1.0//EN" "http://standards.freedesktop.org/menu-
spec/menu-1.0.dtd">
<Menu>
  <Name>Favorites</Name>
  <DefaultAppDirs/>
  <DefaultDirectoryDirs/>
  <Layout>
    <Filename>firefox.desktop</Filename>
    <Filename>kde4-
konqbrowser.desktop</Filename>
    <Filename>miro.desktop</Filename>
    <Filename>Google-
googleearth.desktop</Filename>
    <Filename>xchat.desktop</Filename>
    <Filename>ktorrent.desktop</Filename>
    <Filename>kde4-k3b.desktop</Filename>
    <Filename>kde4-konsole.desktop</Filename>
    <Filename>xfe.desktop</Filename>
    <Filename>leafpad.desktop</Filename>
    <Filename>libreoffice-
writer.desktop</Filename>
    <Filename>scribus.desktop</Filename>
    <Filename>qalculate-gtk.desktop</Filename>
```

```
    <Filename>virtualbox.desktop</Filename>
    <Filename>qtemu.desktop</Filename>
    <Filename>mirage.desktop</Filename>
    <Filename>kde4-
kolourpaint.desktop</Filename>
    <Filename>simple-scan.desktop</Filename>
    <Filename>pclinuxos-
drakconf.desktop</Filename>
    <Filename>synaptic.desktop</Filename>
  </Layout>
  <Include>
    <Filename>firefox.desktop</Filename>
    <Filename>kde4-
konqbrowser.desktop</Filename>
    <Filename>miro.desktop</Filename>
    <Filename>Google-
googleearth.desktop</Filename>
    <Filename>xchat.desktop</Filename>
    <Filename>ktorrent.desktop</Filename>
    <Filename>kde4-k3b.desktop</Filename>
    <Filename>kde4-konsole.desktop</Filename>
    <Filename>xfe.desktop</Filename>
    <Filename>leafpad.desktop</Filename>
    <Filename>libreoffice-
writer.desktop</Filename>
    <Filename>scribus.desktop</Filename>
    <Filename>qalculate-gtk.desktop</Filename>
    <Filename>virtualbox.desktop</Filename>
    <Filename>qtemu.desktop</Filename>
    <Filename>mirage.desktop</Filename>
    <Filename>kde4-
kolourpaint.desktop</Filename>
    <Filename>simple-scan.desktop</Filename>
    <Filename>pclinuxos-
drakconf.desktop</Filename>
    <Filename>synaptic.desktop</Filename>
  </Include>
</Menu>
```

And we now have a clickable entry for Writer in our Favorites menu.
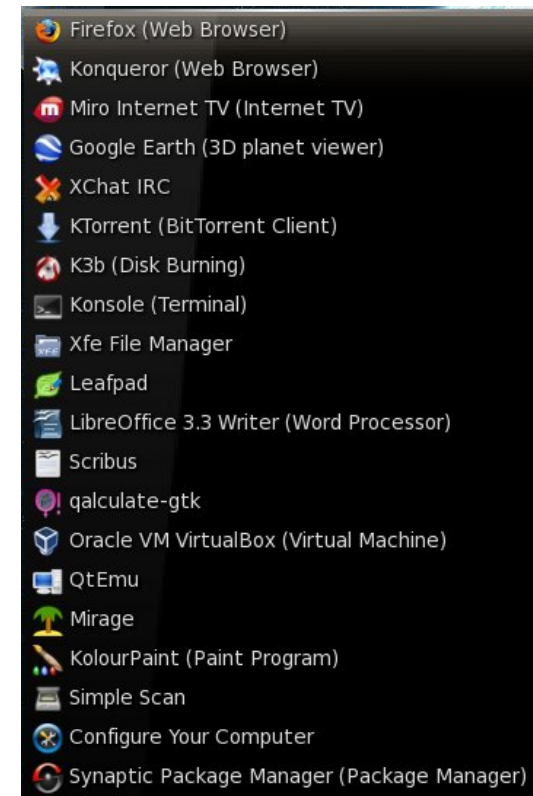
Convert Old e17 Themes To New Format

One of the really nice things about e17 is how easy it is to apply a wide variety of themes to the desktop. There is a large number of custom themes to choose from at e17-Stuff and Enlightenment Exchange. But what happens when you want to use an older, favorite e17 theme that isn't in the new format?

Never fear! Most e17 themes are a file that ends with the *.edj file extension. Open a terminal and go to the folder where you stored the "old style" theme, and enter `edje_convert name-of-old-style-theme.edj` on the command line, and press enter. Your "old style" theme will then be converted to the new format.

Put A Shutdown Button On A Shelf

Sometimes, it's convenient to have a shutdown button easily accessible on a shelf or Ibar. Fortunately, it's pretty easy to "roll your own" shutdown button.

To get started, right click your mouse on an icon in the Ibar or on a shelf, and select "Add New Icon" from the list. Select an icon from the list that's shown, click on "Add," and then "OK."

Next, right click your mouse on that new icon, and select "Change Icon Properties." Delete the name that is there, and rename it. Since we are placing a "shutdown" button, you may want to simply call it "Shut Down."

Now, we need to enter the command to execute. Just type "halt" (without the quotes) in the command line.

At the top, select the "Icon" tab, and fill in /usr/share/icons in the text entry box. This should give you access to most of the icons installed on your computer. Double click in the empty gray box above the text entry, and you will be able to explore through the icons stored on your computer. If you have a custom icon stored elsewhere on your computer, enter the location of that icon file (typically a *.png file) in the text entry box, and double click in the empty gray box. Select the icon you want to use, and select the "OK" button to apply it.

Now, a single click of your mouse on the icon will allow you to shut down your computer, without having to navigate through menus.

Summary

As you've seen as we've gone through the e17 desktop, e17 is different in a lot of ways from the other desktops that are available in Linux. E17 is highly customizable. Plus, it's also very lightweight and fast. This is what so many PCLinuxOS users find so attractive about e17. If you are trying to resurrect an older system, or breath new life into it, you would be hard pressed to find a better choice than e17 to provide a friendly, customizable, fast graphical desktop to use.

Remove Video Logos With Avidemux

by Daniel Meiß-Wilhelm (Leiche)
Translated from German by longtom

We can talk about some of the other Avidemux filters and what they do later. But probably one of the most sought after filters is one that helps remove unnecessary or unwanted logos from a video.

Start off by loading the video into Avidemux.
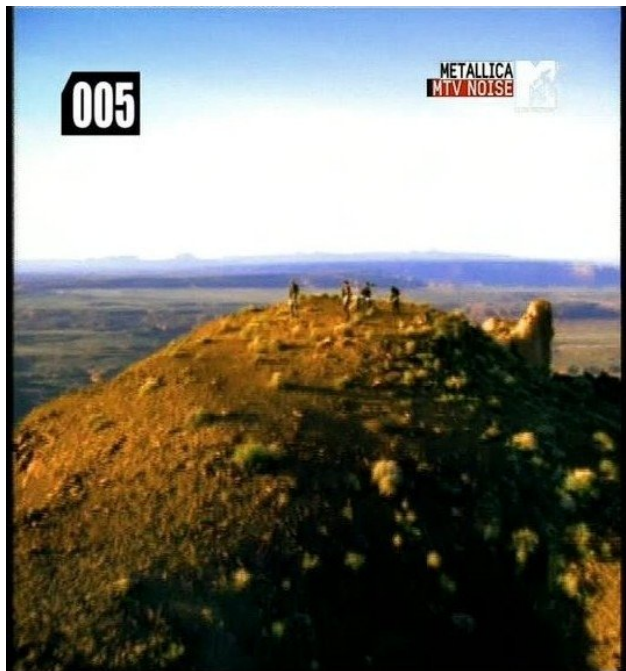
I don't mind the MTV logo, but this ugly counter certainly doesn't need to be there. So we need to go to "Video > Filter" and choose "Miscellaneous >

Mplayer delogo." Double click on the filter, and the following window opens up:

Use the slider to find a spot where you can see the logo well.

Change the values at the top of the screen to define the logo that you wish to remove. X moves the

selection to the left and right, Y moves the selection up and down, W zooms/unzooms the selection length wise, and H zooms/unzooms the selection height wise.

It is important to make sure that the selection is an even number to avoid high CPU activity. We click OK to confirm our selection. Close the Video Filter Manager. Now the counter has disappeared.
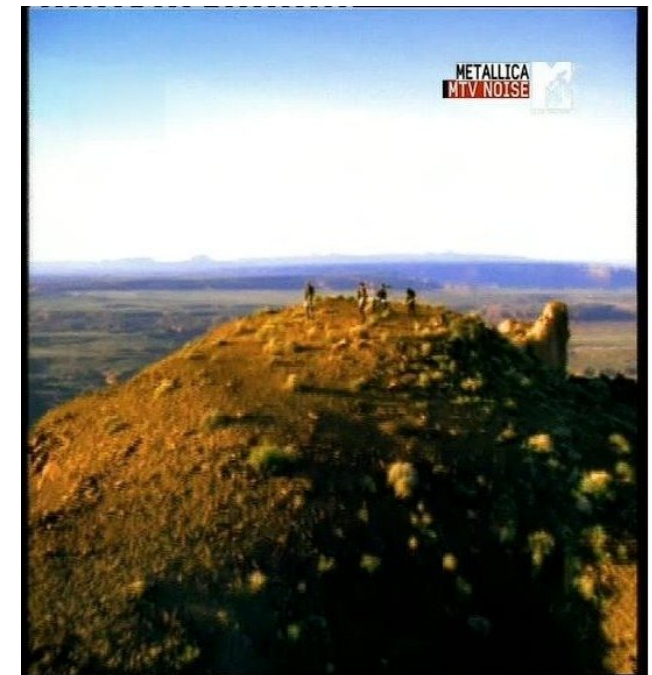
Needless to say, the filter does not let the logo disappear in its entirety (first image on next page).

But you can also add a logo of your own. Go to "Video > Filter" and choose "Miscellaneous > Logo."
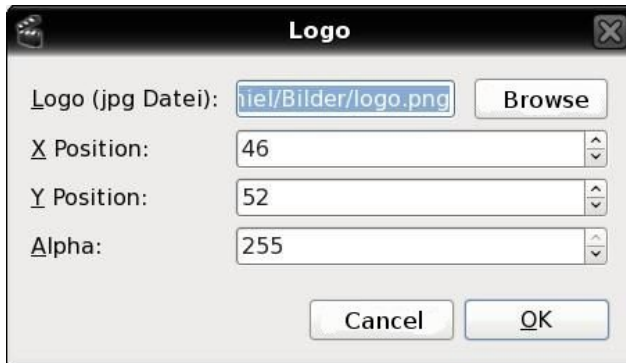
The new logo should be at the exact same place as the old one, in order to cover it. This filter only works with *.png files, which shouldn't be too big in order to display correctly.

With "Alpha" you regulate the opacity of the logo. 255 means full opacity, while 0 means full transparency.

Enjoy some experimenting with this. Remember – advertising is important!

Screenshot Showcase

Posted by She_Devil, March 19, 2011, running e17.

by Patrick G Horneker (phorneker)

Introduction

The icon has been one of the most important elements of the user interface (if not the most important) on the desktop.

The concept of the icon first came out back in 1968 as Xerox was developing a better way to manage documents at its Palo Alto research center. It was here where the first graphical interface was developed.

The public was introduced to the graphical interface and the concept of clicking (and double clicking) on icons with the introduction of the original Macintosh back in 1984.

Fast forward four years. The icons I am referring to in this article were introduced with the original NeXT system, and the same concepts introduced with NeXT have been implemented in WindowMaker.

Each icon on the WindowMaker desktop is a 64 x 64 pixel tile. The default size of these icons are the same as those implemented with the NeXT system. (This can be changed to as small as 24 x 24 pixels in the PCLinuxOS configuration through the WindowMaker Configuration Manager to save screen space.)

Configuration

Unlike other desktops for PCLinuxOS, each icon in WindowMaker has its own background. Application and other icons normally displayed in desktops such as KDE, GNOME, XFCE, LXDE, and Enlightenment are displayed centered and inside the WindowMaker icons.

You can change the icon displayed by right clicking on the desired icon. When the menu is displayed, click on Settings... to open a dialog that allows you to select the icon you want.

Note:You can launch the application associated with the icon by selecting Launch from this menu. (IMO, it is easier to simply double click on the icon to launch applications.)

Keep on Top makes sure that no window can be displayed where the effected icon is located.

Application Icon Settings

As we can see here (image, next column), there are plenty of settings that you can associate with most any WindowMaker icon. The settings that show up here depends on where the icon is. This is what you see when the icon is in either the Clip or the Dock.
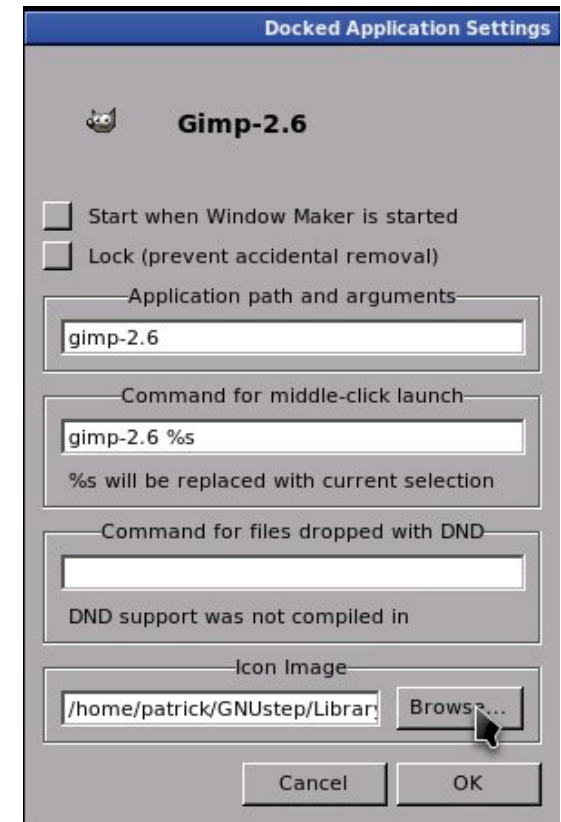
When the icon is on the lower left hand corner of the screen, the menu that you see differs, and the only setting you may change is the application icon that appears in the WindowMaker icon.

Clicking on "Start when WindowMaker is started " allows the associated application to launch when WindowMaker is launched. This is useful when you want an application to automatically start when you start your desktop.

Icons can be removed from the Clip and/or the Dock by simply dragging the icon away from the Clip and/or the Dock. To prevent accidental removal of icons, click on Lock.

The fields for Application path and arguments and Command for middle click launch should already have been filled in, so you do not need to change anything here.

The term "middle click" refers to the middle button found on three button mice of yesteryear. Mice for UNIX systems (BSD, AT&T System V, AIX, HP-IX, Solaris, etc.) in the 1980s typically came with three buttons. Mice for PCs in the day had only two buttons. To compensate for the missing middle button, double clicking on an icon was the same as middle clicking. This is true for other desktops in PCLinuxOS as well as for Windows or OS/2 (for those who remember what that was).

Do not worry about the Command for Files dropped with DND field. WindowMaker was compiled without drag and drop capability in the version for PCLinuxOS (and for Mandriva). NeXT systems allowed files to be opened with the application where the icon was associated by simply dragging and dropping file icons on the application icon.

The last field is where we assign application icons to the WindowMaker icon. Click on Browse. . . to open a dialog box where you will see a list of directories from which applications are stored.
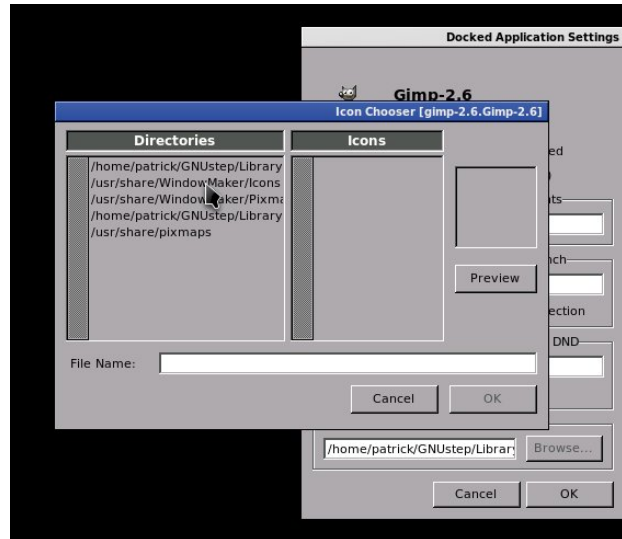
Click on a directory first, then click on the name of the icon you wish to use. A preview will be shown for you to look at if the icon file is in a supported format.

Supported Formats are: PNG, TIFF, XBM, and XPM.

If the icon is larger than 64 x 64, the icon will be centered and cropped so that it fits into a 64 x 64 space.

You can add or delete directories in the listing by editing Paths in WindowMaker Configuration Manager, or with the Preferences utility (double click on the top icon on the Dock to open Preferences).

For PCLinuxOS, icons that come with WindowMaker are stored in /usr/share/WindowMaker/Icons and in /usr/share/WindowMaker/Pixmaps.

PCLinuxOS has WindowMaker configured to use /usr/share/pixmaps as well as ~/GNUstep/Library/WindowMaker/IconSets and ~/GNUstep/Library/WindowMaker/Pixmaps in addition to the aforementioned directories in the previous paragraph.

Sources for icons can be found at the WindowMaker website:

http://www.windowmaker.org

Creating Your Own Icons

You can use a graphics program such as GIMP, GNU Paint, Kolourpaint, gnome icon editor, MTPaint, or whatever you have that can edit bitmap files. Be sure to save it in a supported file. I recommend PNG as it supports 24-bit color, and is of the best quality when it comes to graphic reproduction. My second choice would be TIFF (or Transfer Image File Format), a lossless format intended for storage of photographs. XBM and XPM are among the oldest formats for graphics. These older formats were designed for X Window System displays and are intended for 8-bit color icons.

There is another way to get icons for use with WindowMaker. If you are using any Windows based software on PCLinuxOS (through Wine), you can install icoutils from Synaptic. icoutils contains utilities that extract icons from Windows DLL (libraries) and EXE (executable) files and store them in PNG format.

This is useful if you want to run a Windows application (on Wine) inside WindowMaker.

NeXT time

For my next article, I will show you how to install and use wallpapers in WindowMaker.

Screenshot Showcase

Posted by slurry, March 11, 2011, running KDE 4.

Greetings from Belfast, Northern Ireland
parkamatic

Hello from the California desert
jpsimm

New convert from the Philippines
erville

Newbie from Asia Hong Kong
bahcl

Hello from Norway
LinuxGnu

Hello from Great White North
rippedcb

Another New user From The Philippines
etsapiandante

Hello from Thessalonki, Greece
diamond_gr

hey from the united kingdom
Escaped INK

Greetings from northern Sweden
I_can_see_the_light

Hi From Las Vegas
CodeDog

Hello from sunny Cebu
JayMot

Hi from Budapest
6ofTen

Greetings from Ohio
LuxFan83

Hi from Quebec
Jschall

G'day from Aus
AussieLinuxman

Around the world we searched for you

We clicked and clicked until we picked an OS oh so true

We knew somewhere somehow sometime

We'd find a clue and download you

While we were on the line

Around the world many users have found

PCLOS is full of zest it is oh so sound

Our search for an OS is finally through

For we have found the best is you

MP3   OGG

Hello from Belgium
rubentje1991

Greetings from Panama City, FL
ilbts58

Hello froom sunny Mallorca, Spain
WHO IS THIS????????

Hi from Cheltenham UK
cristelinux

Gidday from Switzerland
Glacier

New guy from Illinois
Howard75

G'day from Perth, Western Australia
Luck Blue

Saludos desde Mexico DF
zamed

Hi from Cambridge, England
anthony2010

Greetings from Venezuela
nelson2006

Warm greeting from Viet Nam
quanghuyjm

Hi from the Canadian east coast
rolanaj

Hi from Luxembourg
cgilson

Greetings from Ohio!
Itelmo

Around the World
With PCLinuxOS

Hello there from Minnesota, USA
Jeremy.Bailey

hello from spain!!!
pclxd3os

Hiya from Va!
FoWL

Hello from Colorado!
jjAjoshua

Hello from Spain
Wulfie

Hi from Ohio!!
buzz263

Hello from Indy
Retired_Man

Hello from sunny (lol) south UK
schtufbox

Hello from Mississippi,USA
jay

Hi from Kentucky
Rusty.Sullivan

I am from Mexico and I say to all "Hooola"
xul

Hello from France!
coolraoul

New ZenMini user from Toronto, Canada
Hiya!

Hello from India
joy55

Billy29 from Bavaria introduction
billy29

Hello from Argentina
Fero31

Hi from Nebraska
Zyal

Greetings from Finland
Oneakim

Hi from UK
doomdragon

Hi from NZ
gazza-nz

Hello from Florida
wiilo

G'Day From the Land downunder
mepisdork

Hello from Canada
chilcotin

Another newbie here from PA, USA.
neftv

Greeting from Austin, Texas
michael.conner

Slaxer from spain comes here!
Slaxer

Greetings from Norway
hanspb

Hi from Italy
frankifol

Hello from Denver
collins601

helo all just joined from south wales"uk"
anbraca

another penguin from malaysia
powerw00t

Hello from Finland! (Again)
jasn

Hello from St. Louis!
fredbird67

Hello from Bonnie Scotland
pow2k10

Hello from alberta, Canada
RonHD

Hi from Kentucky
Rusty.Sullivan

Hi from Egypt!
imageraw

Greetings from down under
popeye

greetings from Belgium
ErwinC

Hello from Newbie in Indianapolis
bcat23

Hello from Oregon
kensum71

Hi from Italy
frankifol

Game Zone: PipeWalker

by Meemaw

When I switched to Linux six years ago, I got interested in the game KNetwalk. I really liked it because it was the same type of game as Pipes, which I discovered in Yahoo Widgets. I still play Pipes occasionally when I'm at work, but I have converted both my computers over to using only XFCE, and have gotten rid of all the KDE libraries. It's my personal preference only. There is nothing wrong with KDE. I love it as a desktop environment, but as my machines get older, I want something a little lighter.

KNetwalk is a KDE game, and since I use XFCE, I didn't want to reinstall all the KDE libraries for just one game. Luckily, I don't have to. PipeWalker is


the very same game! It can be installed from Synaptic.

The object is to attach all the pipes to the water supply (without any empty pipes left over). You click your mouse on a pipe and it will rotate 90* counterclockwise. If you need to rotate it more, you simply click on it again. When you have all the pipes attached correctly, the faucets will bubble to show you that you have won.

If you REALLY liked KNetwalk, you can choose that board instead. When a terminal is connected, a picture of our favorite penguin appears on the screen and the connecting cables are light blue.
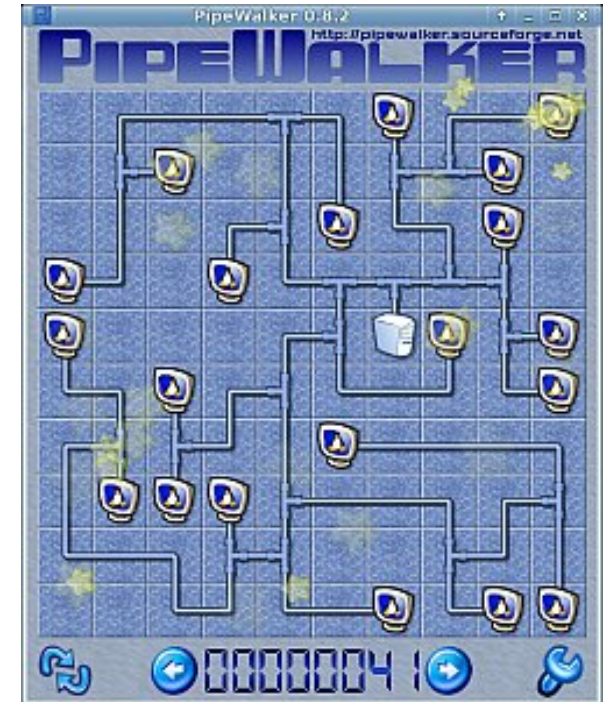
The right and left arrows allow you to go to the next game or back to a previous one. The 'circling' arrows in the bottom left corner re-start the present game.

While it is a fairly simple game, it can be frustrating when you are trying to connect each faucet/terminal and can't seem to find the right combination. I tried the Wrap Mode, and that increases the challenge a lot! Wrap mode extends the pipe arrangement off one side of the board and back onto the other side (or top to bottom). In the board below, the top left tile wraps around to the top right tile and also to the bottom left tile to attach faucets in those locations.

If that board is too easy, your options (the wrench) can make it harder with a larger board (more squares in the grid) or even a 'wrap-around' to make things tricky! I have started using the 14 x 14 grid, but you can choose three other sizes. Click the check mark when you are finished choosing your options. (The easiest configuration is shown above.)

If you like KNetwalk, you'll like PipeWalker as well. Have fun!!!!

Want To Help?

Would you like to help with the PCLinuxOS Magazine? Opportunities abound. So get involved!

You can write articles, help edit articles, serve as a "technical advisor" to insure articles are correct, create artwork, or help with the magazine's layout.

Join us on our **Google Group mailing list.**

A magazine just isn't a magazine without articles to fill the pages.

If you have article ideas, or if you would like to contribute articles to the PCLinuxOS Magazine, send an email to: **pclinuxos.mag@gmail.com**

We are interested in general articles about Linux, and (of course), articles specific to PCLinuxOS.

Firefox Add-ons: Video DownloadHelper

by Paul Arnote (parnote)

It's doubtful that there is anyone on the planet who uses the internet that doesn't know about video sharing sites, such as YouTube and Vimeo, to only name two. Currently, the most prevalent video format used to present those videos is the *.flv format, which requires Adobe Flash Player to render the content. A newer, better way is on the horizon, with embedded video being a part of the HTML5 specification. However, its widespread adoption may be a few years out yet, since the powers-that-be are still hammering out and jockeying for position over which video format to use and the "rights" to use certain video codecs.

One of the "drawbacks" to the use of Flash for playback, for the common user, is that it doesn't allow users to save copies of the videos, without some assistance from another application. Presumably, this is an attempt to impose some form of DRM (Digital Rights Management) on the videos, to prevent users from pilfering the video content. Fortunately, this limitation is easily circumvented by a number of solutions.

One of those solutions is Video DownloadHelper. Originally started in 2007 and currently available as version 4.8.4, it is a Firefox-only extension that also works for other forms of media, and not just video. If there are video, audio or (sometimes) image files on a web site, chances are good that Video DownloadHelper will be able to provide download access to those files. You can go to the previous link at the beginning of this paragraph, or to the official Firefox Add-ons page to download and install this handy tool. From the appearances on their website, they may be in the process of changing their name to only DownloadHelper, with references to the add-on eliminating the reference to the "video" part of the name.
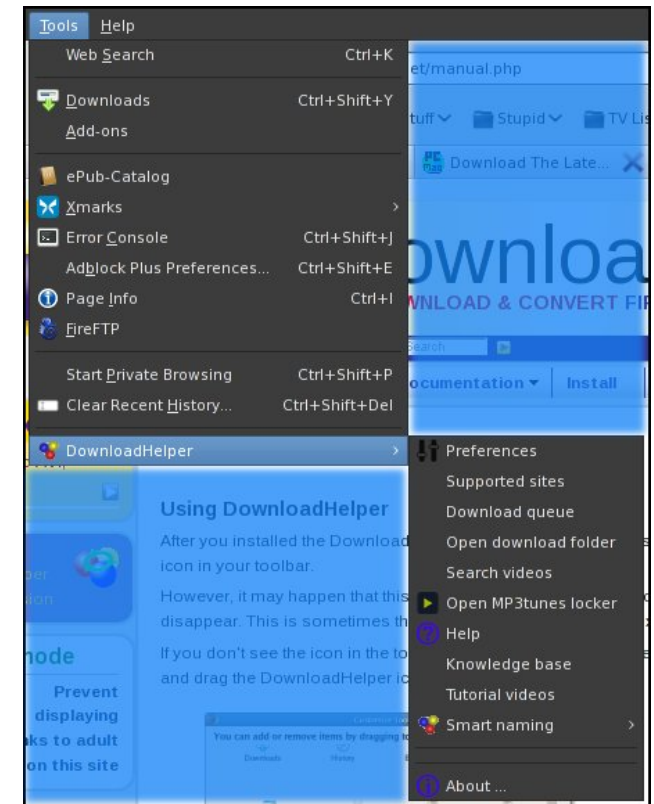
Toolbar icon

When you come to a web page that has elements that Video DownloadHelper can help you download, the three floating yellow, red and blue balls will start rotating on your Firefox toolbar. If you have the option set for it to also appear on your Firefox status bar, you will see the same thing there, as well. Clicking on the "down arrow" next to the animated icon in either location will show you the file names of the elements it has detected that it can help you download.

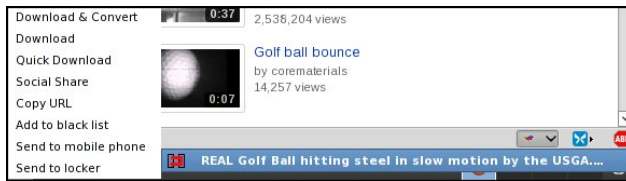*DownloadHelper menu added to the Firefox Tools menu*

After installation, you will also find a new menu entry, called DownloadHelper, on your Firefox Tools menu. A right click of your mouse on the toolbar or status bar icon will display the same menu as a context menu.

Filename of video element, displaying choices in the context menu

As you can see from the above screen shot that I took while visiting the YouTube site, clicking on the "down arrow" next to the animated icon in my status bar highlights the video file I just played, along with a context menu that pops up providing choices for what to do with the video. "Download & Convert," the first menu item is supposed to download and then convert the video file into a format that you have predefined. I've found this function, which relies on ffmpeg to do the conversion, to behave erratically at times. I've found that I get better and more consistent results loading the video into Avidemux, and performing the conversion there. The "Download" entry will download the video, without converting, to a directory of your choice, as an *.flv video file. If you choose "Quick Download," the video will be downloaded, without conversion, to the "dwhelper" directory that Video DownloadHelper created in your /home directory.

Since I don't belong to any social networking sites, I could not test the "Social Share" menu entry. Nor could I find anything mentioning it in the official documentation. The "Copy URL" option copies the URL of the video file to your clipboard. "Add to black list" adds the video to the Video DownloadHelper's black list, so it will not offer to try to download the video again. "Send to mobile phone" allows you to

send it to your mobile phone, after supplying the phone number, and after creating a free account at MP3Tunes.com. "Send to locker" is similar to the mobile phone destination, in that you have to create a free account at MP3Tunes.com, but now the video is stored in your "locker" there, on the web.

One thing I'm not going to go over here are the configuration options, under Video DownloadHelper's "Preferences" menu. The Video DownloadHelper online documentation does a more than adequate job of covering all of the many options you have when configuring the Firefox add-on.
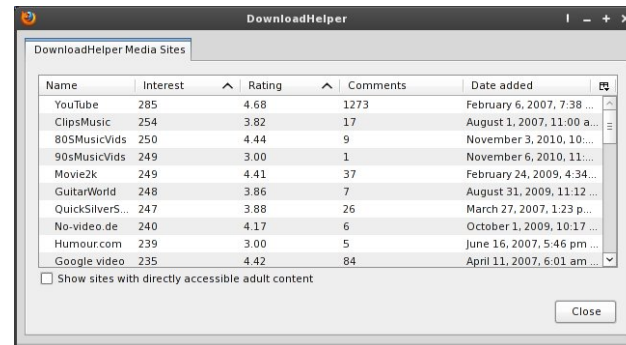
DownloadHelper Media Sites dialog box

A left click of your mouse on the toolbar or status bar icon will bring up a list of media sites with directly accessible media content. Selecting one of the video sites will open a page in Firefox from the Video DownloadHelper web site, with links to the media.

By default, sites with adult content are not listed. If you wish to view sites with adult content, merely check the box at the lower left corner of the dialog

box. After being asked if you really meant to list sites with adult content, followed by a "Yes/No" dialog box asking you to confirm that you are over 18 years of age, the sites with adult content will be listed in the dialog box, right along with the sites that have more "general interest" videos and media. If you have children in your house that use your computer, this may pose some problems that you may not be prepared to deal with.

If you do have children in the home, the Video DownloadHelper developers have fortunately come up with a responsible solution. Ever since v 3.5, Video DownloadHelper has featured a "Safe Mode." To activate it, visit their web site and click on the link in the middle of the page. The next time that Video DownloadHelper is run, it will automatically switch to the "safe mode" configuration, preventing the listing of sites with known adult content.

Summary

Video DownloadHelper takes the pain and agony out of downloading videos from wherever they may appear on the web. Sure, there are other applications that attempt to do the same thing, but Video DownloadHelper works very well, with minimum effort, without having to leave the confines and comfort of your Firefox browser. If you also use either Chromium or the Google Chrome browser, I wouldn't look for this to be ported to that platform any time soon, if ever. In fact, there are no video download extensions for Chromium or Google Chrome that I can find (maybe I'm not looking in the right place?). If you consider that both Chromium and Google Chrome use the Google Chrome

browser extensions, and the fact that Google also "owns" YouTube and Google Video, it's unlikely that you will ever find any official extension for Chromium/Chrome that allows for the downloading of video or any other multimedia content.

Simply put, Video DownloadHelper is the best solution for snagging those videos that you may want to grab a copy of for your own private use.

Setup Error

Microsoft Windows has encountered an unrecoverable error. Please reboot and install PCLinuxOS.

OK

Reach Us On The Web

PCLinuxOS Magazine Mailing List:
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http://pclosmag.com/

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PCLinuxOS Magazine Forum:
http://pclosmag.com/forum/index.php
Main PCLinuxOS Forum:
http://www.pclinuxos.com/forum/index.php?board=34.0
MyPCLinuxOS Forum:
http://mypclinuxos.com/forum/index.php?board=157.0

Screenshot Showcase

Posted by Oneakim, March 8, 2011, running KDE 4.

Learning rtmpdump Through Examples

by pstranger

Today, technology goes forward and we get some new possibilities. TV broadcasting doesn't lose time and goes forward too. Today, you can watch online TV and watch TV programs on demand. But what if you want to record them? Don't worry - some programs and live broadcasting (not all yet) can be recorded.

If you are not so young, then you can remember the VCR (video cassette recorder) era. You could turn on your video recorder, push the "Record" button, stop it after some time and after rewinding the tape you could play a recorded program on your TV. So what does the computer era offer?

Some theory

Today, TV broadcasting via internet goes in many popular stream formats and protocols.
You have certainly heard about such streaming formats:

- flash video streams (Adobe Flash Player): FLV, MP4, F4V
- Windows media streams (Windows Media Player): WMV, ASF, ASX and others.
There are also various streaming protocols.
Examples of streaming protocols:

- flash video: HTTP, RTMP, RTMPE
- Windows media video: HTTP, RTSP, MMS and others.

Let's take a look at services which are broadcasting in the RTMP protocol. What is it? Wikipedia says:
"Real Time Messaging Protocol (RTMP) was initially

a proprietary protocol developed by Macromedia for streaming audio, video and data over the Internet, between a Flash player and a server. Macromedia is now owned by Adobe, which has released the specification of the protocol for public use."

So if your favorite online service (TV or video archive) uses the RTMP protocol you have a good chance of being able to save its video stream as a file on your local drive. There is an excellent utility for recording streams broadcasting TV and video on demand. This utility is called "rtmpdump." What is it? *"rtmpdump" is a console toolkit for RTMP streams. Does the word "console" mean advantage or disadvantage in this case? I think it is big advantage for such a tool. Its operating principle is simple: you input the name of a command with some options, which include the address of the video server, and get a desirable file containing the recorded TV program. You will see no graphical input on the screen, nor other useless information. It just connects to the server, consuming only the network traffic containing the video, and records it to your hard disk. If you know about the powerful "wget" utility, then you can imagine what it is like.*

Prepare

It's time to start. To have "rtmpdump" in your operational system, you should install the package having the same name from the repository. This package goes with another utility, which is called "rtmpsuck." This tool can also record video stream, but we will use it as auxiliary tool to find options for "rtmpdump."

In order to use "rtmpsuck," we need some preparation. "rtmpsuck" is a local RTMP proxy

server which passes traffic into the internet through itself, detecting the flowing RTMP protocol and it's parameters. "rtmpsuck" goes with no parameters. So if you run "rtmpsuck" you can only see:

```
RTMP proxy server ... ... Streaming on
rtmp://0.0.0.0:1935
```

What that says is that the server is running and listening on port 1935. It's necessary to notice that port 1935 is a default port of RTMP servers. But in this case, "rtmpsuck" is useless. Why? Because to make it work, you need to redirect RTMP traffic to a proxy server, which in turn will help us to know the connection parameters to the media server. To do this, you need to run the following command as a "root":

```
iptables -t nat -A OUTPUT -p tcp --
dport 1935 -m owner \! --uid-owner
root -j REDIRECT
```

The meaning of this command is to add a new rule in the table controlling your network traffic in order to redirect outbound TCP traffic flowing to the default RTMP external server port (1935) to a local RTMP proxy server, except traffic which belongs to root. So, if you now open a page in you browser to watch a media stream, your traffic will flow via the proxy server, and "rtmpsuck" will provide you information which can be used in "rtmpdump." After getting all the information, you can close "rtmpsuck" (Ctrl+C) and must remove the "iptabels" rule which you added before:

```
iptables -t nat -D OUTPUT -p tcp --
dport 1935 -m owner \! --uid-owner
root -j REDIRECT
```

Examples   Online IP TV broadcasting ("Russia Today")

Step 1 Run as a root in terminal:

```
iptables -t nat -A OUTPUT -p tcp --
dport 1935 -m owner \! --uid-owner
root -j REDIRECT
```

Step 2 Run as a root in terminal:

```
rtmpsuck
```

Step 3 As an ordinary user, open in Firefox this address: http://rt.com/on-air/rt-america-air/

Step 4 Switch to root's terminal. You should see something like the following:

```
app: live flashVer: LNX 10,1,82,76
swfUrl:
http://rt.com/s/swf/player5.4.viral.sw
f
tcUrl: rtmp://rt.fms.visionip.tv/live
pageUrl: http://rt.com/on-air/rt-
america-air/
Playpath: RT_US_3
```
Break the command after a while (Ctrl+C).

Depending on your connection quality, you can get different meanings of the option "Playpath". You can change the options of video quality by using the following entries after the command Playpath:

RT_US_3 - high
RT_US_2 - medium
RT_US_1 - low

Step 5 Run the command in root terminal:

```
iptables -t nat -D OUTPUT -p tcp --
dport 1935 -m owner \! --uid-owner
root -j REDIRECT
```

Step 6 Run the command in terminal as an ordinary user:

```
rtmpdump -r
rtmp://rt.fms.visionip.tv/live \
-a live \
-y RT_US_3 \ -W
http://rt.com/s/swf/player5.4.viral.sw
f \
-p http://rt.com/on-air/rt-america-
air/ \
-f "LNX 10,1,82,76" \
-o ~/rt.flv \
-V \
-B 600
```

After 10 minutes, you will get the video file "rt.flv" in your home directory which you can play in your favorite media player.

You can know what these parameters mean if you run the manual of command "rtmpdump":

```
man rtmpdump
```

Option -V is just verbose, turn it off if your test recording is passed.

Exercise 1 If you live in Europe or Asia (or if it is just convenient to you), you can try to get the parameters for main broadcasting. Firefox address is http://rt.com/on-air/

Online IP TV broadcasting ("Bloomberg")

Repeat steps 1 through 5 for address http://www.bloomberg.com/tv/

Step 6 Run the following command in terminal as an ordinary user:

```
rtmpdump -r
rtmpt://cp87869.live.edgefcs.net/live
\
-a live \
-y us_300@21006 \
-W
http://player.ooyala.com/static/cachea
ble/29d28e187072cf05af879e362d57b42d/p
layer_v2.swf \
-p http://www.bloomberg.com/tv/ \
-f "LNX 10,1,82,76" \
-o ~/bloomberg.flv \
-V \
-B 600 \
--live
```

Here we added the option " -- live" to make utility work right.

TV streaming LIVE ("Euronews")

The address of streaming broadcasting is: http://www.euronews.net/news/streaming-live/

"rtmpsuck" gives us the next:
```
app: rtpeuronewslive
flashVer: LNX 10,1,82,76
swfUrl:
http://www.euronews.net/media/player_l
ive_1_7.swf
```

```
tcUrl:
rtmp://178.32.100.43:1935/rtpeuronewsl
ive
pageUrl:
http://www.euronews.net/news/streaming
-live/
Playpath: eng_euronews-flash-750.sdp
```

so our command will be:

```
rtmpdump -r
rtmp://178.32.100.43:1935/rtpeuronewsl
ive \
-a rtpeuronewslive \
-y eng_euronews-flash-750.sdp \
-W
http://www.euronews.net/media/player_l
ive_1_7.swf \
-p
http://www.euronews.net/news/streaming
-live \
-f "LNX 10,1,82,76" \
-o ~/euronews.flv \
-B 600
```

Video on demand ("Deutsche Welle")

There are many good programs you can find on this page: http://www.dw-world.de/dw/0,,4756,00.html But if you try above technique, disappointment will wait for you. The reason for this is the video server is broadcasting on a different port. If you look into the source code of "rtmpsuck" you can see that default port of RTMP server (1935) is hard-coded, and that is why "rtmpsuck" is not a helper to us in this case. The tool that will help us is called "tcpdump." It is a console network sniffer. The nice feature of this tool is that it can show only printable symbols contained

in network packets, which is handy for capturing web pages and this kind of stuff. If this tool is not yet installed on your system, you should do it now. The next utility is "grep" which helps to print lines matching a pattern which can be set.

Let's get one of the excellent programs about lifestyle Europe, which is called "Euromaxx." We assume that RTMP proxy server is not running and redirection traffic is turned off.

Step 1 Run as a "root" in terminal next set of commands:

```
tcpdump -ieth0 -nn -A |grep -e"rtmp"
-e"connect" -e"play">/euromaxx.txt
```

It means that strings which included patterns (rtmp, connect or play) containing in network traffic and flowing trough network interface (eth0 in my case) will be recorded in file "euromaxx.txt," which will be located in root directory ("/").

Step 2 As an ordinary user, open in Firefox page: http://mediacenter.dw-world.de/english/video/#!/93184/euromaxx/Program=7555 and start to play the video. Wait a moment for the video to start to play, click the "pause" button on the built-in player, and click the "Update page" button on Firefox. Repeat this action 4 times.

Step 3 Go to root terminal and break running commands (Ctrl+C).

Step 4 Open the file "euromaxx.txt" in text editor and find piece of text:

```
connect.?..........app..
```

```
a4337/dwwod1/..flashVer...LNX
10,1,82,76..swfUrl..;http://mediacente
r.dw-
world.de/player/flash/media.player.swf
..tcUrl..*rtmpt://tvone.fcod.llnwd.net
/a4337/dwwod1/..fpad....capabilities.@
m........audioCodecs.@.........videoCo
decs..@o.......
videoFunction.?.........pageUrl..Khttp
://mediacenter.dw-
world.de/english/video/#!/93184/euroma
xx/Program=7555..object.Encoding.@....
.....
...............closeStream.........
..........H.....P.....play...........
;mp4:dwtv_video/flv/eme/emagen100311-
euromaxx01ep_sd_avc.mp4
```

Now you can easily determinate options for "rtmpdump".

Step 5 Run command in terminal as ordinary user:

```
rtmpdump -r
rtmpt://tvone.fcod.llnwd.net/a4337/dww
od1/ \
-a a4337/dwwod1/ \
-y
mp4:dwtv_video/flv/eme/emagen100311-
euromaxx01ep_sd_avc.mp4 \
-f "LNX 10,1,82,76" \
-W http://mediacenter.dw-
world.de/player/flash/media.player.swf
\
-p http://mediacenter.dw-
world.de/english/video/#!/93184/euroma
xx/Program=7555 \
-o ~/euromaxx.flv
```

After a while you will find the recorded program in your home directory.

The pitfall of this technique is that you can meet dots in an inappropriate place in the string. The reason for this is the fact that the text string, which should be continuous, is situated in two network packets and "tcpdump" changes unprintable symbols to dots. So, if something goes wrong, then place the key -V into you "rtmpdump" command and look at the debug messages. If "rtmpdump" can't even connect to the server, then the reason in this case is rather a wrong URL.

Finishing stroke

There is a natural desire to record some program on a schedule (placing recording script for example in "cron"). If you will use the same file name of a recorded video program, then you will rewrite the previous one. In order to avoid this, it is very convenient to use the file name which contains the name of the broadcasting server, including the date and time of the recording. The next script shows the usage of this trick for our first TV broadcasting example:
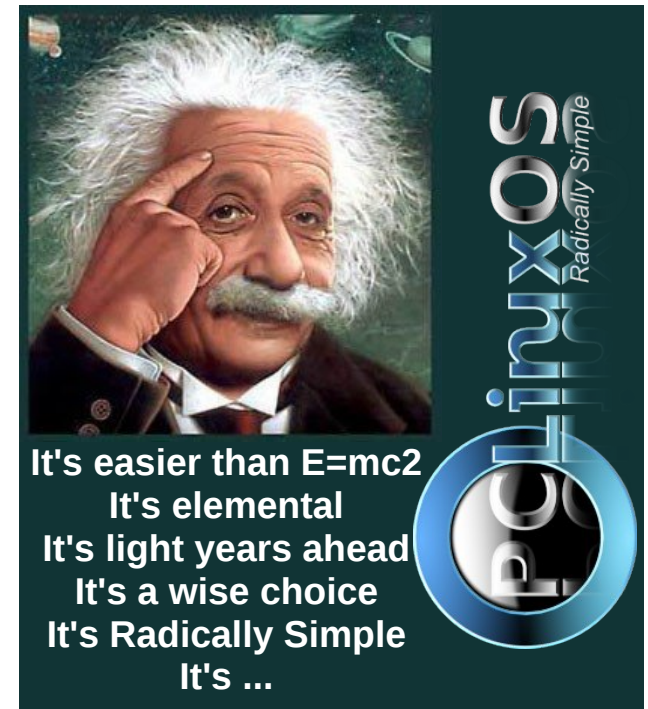
```
#!/bin/bash
BASENAME="rt"
FILENAME="$BASENAME"_`date +%Y-%m-
%d_%H%M%S`.flv
rtmpdump -r
rtmp://rt.fms.visionip.tv/live \
-y RT_US_3 \
-o ~/$FILENAME \
-B 1200
```

Exercise 2

Write a script for the scheduler in order to record a program which was yesterday in the last video on demand example using this hint:

```
YESTERDAY=$(date -d yesterday
+"%d%m%y")
```

The answers will appear elsewhere in this issue of magazine. Also, you can find more information about streaming media recording on this site http://all-streaming-media.com/

PCL DE

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It's ...

Retroshare: The Secure Social Network

by Archie Arevalo (Archie)

Preface

Slax invited users to test out Retroshare on the PCLinuxOS Support Forum and I responded by installing and using it. I also found out that since Retroshare has very scarce documentation and FAQ, this article might help users install, set up and use Retroshare. At this point of writing, there are still issues that need to be addressed, but insofar as my experience goes, I hope that users won't have to go through the hassles of making it work. It is a good piece of software that has potential.

Your mileage may vary. Whatever is written in this article are my own experiences and observations. I am not an authority in Retroshare. I'd like to promote its use because I think it is a good, useful application.

The scope of this article is divided into two parts. The first part deals with the installation and setup, as well as some uses for Retroshare. The second part, which will be in the next issue of the PCLinuxOS Magazine, will deal with the different features, tips and tricks for using Retroshare.

Installation and Setup

Retroshare lets you securely chat and share files with your friends and family, using a web-of-trust to authenticate peers, and OpenSSL to encrypt all communication. It is a client bundled with goodies

one might find in apps such as Kopete or Pidgin, Konversation or XChat, KTorrent or Bittorrent and Frostwire - and it is becoming obvious that many of my preferred apps are KDE - all built into one single application. It also provides features such as channels or news feeds and slightly different type of forums.

Most of these features and functions will be examined and explained in details later, but first let us begin with installing and setting up the software. Make sure that your installation is fully updated and current.

Open Synaptic and Search for Retroshare. Install it, along with any dependencies it might have. Once installed, you can find it on the Application Launcher Menu under Internet. Click the entry to launch Retroshare.
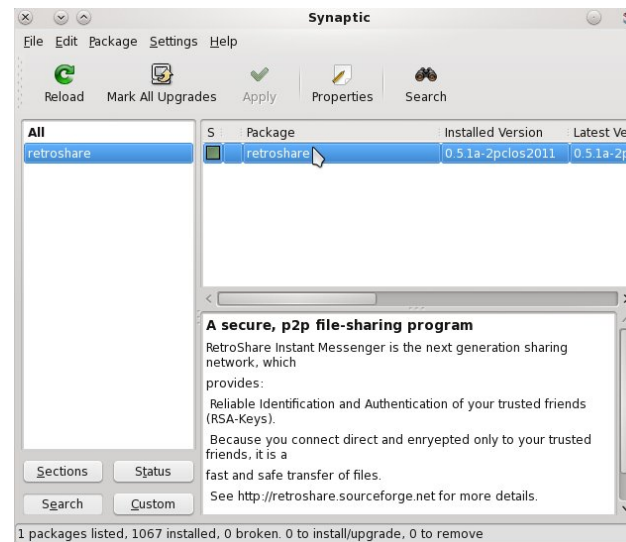
Retroshare uses Gnu Privacy Guard (GnuPG or simply gpg) extensively to authenticate users and friends. Before you can start using Retroshare's features, you need to create a profile. If you already have an existing Profile (Gpg key), you can use that instead. In the meantime, my test machine informs me that it did not locate any existing profile, so I should create one.

Fill in the blanks for your name, email, password and location, then click Generate new Profile.

The Gpg key block Retroshare would use is only a few lines of jumbled characters that would be your unique ID. The key generation itself might take a little while, so this might be a good time to make yourself a sandwich.
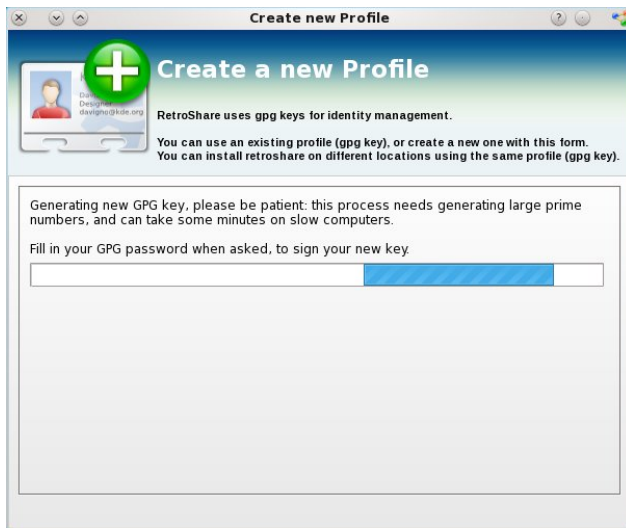
If for some reasons, the GPG key generation fails on your setup, you can use the console to create your GnuPG to be used on Retroshare. The procedure is short and sweet. You can read more of the command at http://www.gnupg.org/gph/en/ manual.html#AEN26. On the console, type the command **gpg --gen-key** then press Enter.

You will be asked what kind of key you want to create and shown a list of keypairs. The default (1) should be suitable, but would require a larger
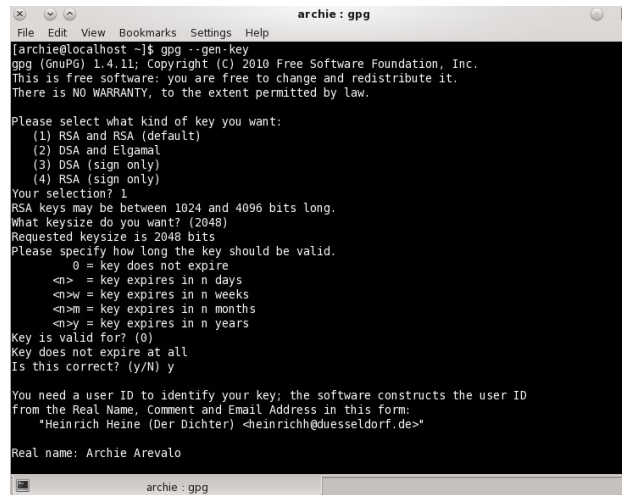
keysize than (2) or (4). The smallest size is 768 bits and the largest is 2048 bits. The longer the key is, the more secure it would be against brute force attacks. At last, you will be asked to specify how long the key should be valid. The default has no expiration, but if you want to use it say for six months, type in 6m. If you want to use it for 2 years, type 2y. If you want to use it for 3 weeks, type 3w.

After you've provided information on those three items, you will be asked to verify the entries and type either a Y for yes or an N for no. So, type Y and press Enter.

You would also need to provide a user ID in addition to the key information. These user ID fields are your Real name, your Email address and any Comment you might like to add (or you can leave the comment field blank). Once again, you will be asked if the information you've provided for the user ID is okay,

or if you need to change something. If all is well, type the capital O and press Enter.

At this point, you will be asked for a passphrase. It could be your favorite password, or your favorite sequence of words. You won't be able to see what you are typing, and you will be asked to repeat what you typed for verification. Once completed, press Enter and the key generation will start its process. If the information you've provided is not enough to generate your Gnu Privacy Guard key, you will need to type in more words or start moving your mouse around or even open some application. Any activity will help the process in of cryptographic generation of your key.

Once generated, it will be stored at your ~/.gnupg folder, and you can use this key to create your profile in Retroshare.
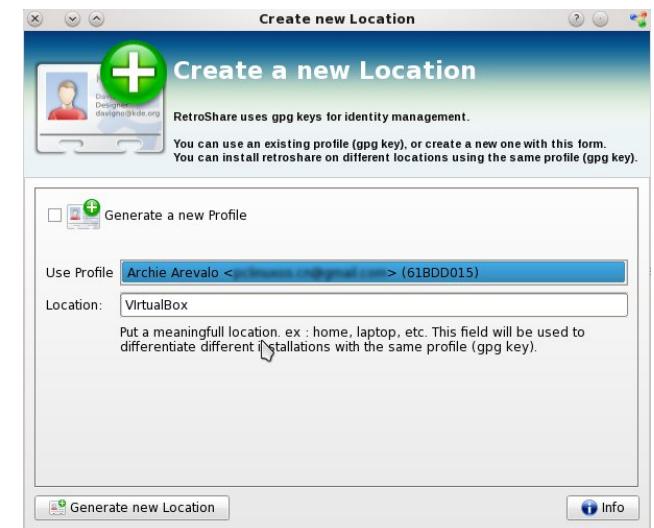
Note: If you get an error message, such as in the screenshot below, then you are definitely out of luck. You'll need to get off that VM emulator (such as VirtualBox) and install Retroshare on a real account. Apparently, Retroshare does not like emulators, although there have been reports that Retroshare failed to create Profile IDs for some users.
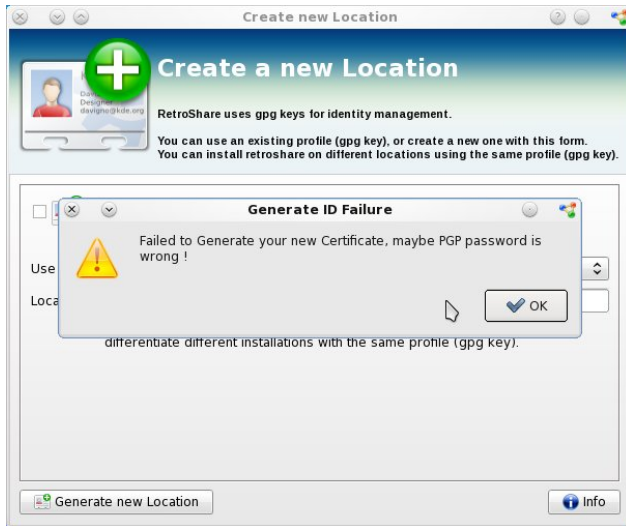
Okie-dokie. It took a little while to generate your ID and all is well. You now have to type in your passphrase to assign your profile for the use of this particular Retroshare setup.
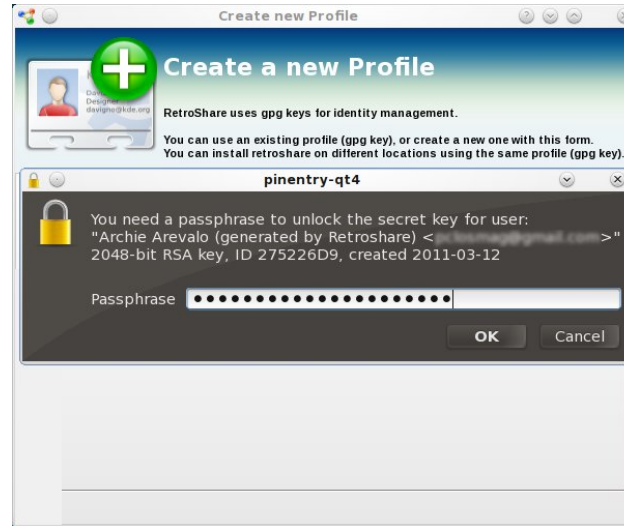
And you're done. From this point on, it is important to remember that you can change your settings, add/remove friends, etc. So, on with the Quick Start Wizard.

Nothing to see here, just click Next. On the next window, we should make our selection from the items to maximize for the best performance.

Note: If you have a lot of bandwidth to spare, it wouldn't hurt to set the Download and Upload Speed Limits a little higher. If you have a dynamic IP, it wouldn't hurt to register for a Dynamic DNS to ensure that when your IP changes, you can be assured that you are covered. The Connection and Discovery are chosen automagically and should be OK for most uses, unless you feel geeky enough to change these settings. Cool! So, now click Next.

So, we've arrived at one of the real essence of Retroshare – the P2P sharing. What? You do not want to share anything? Music files? Wallpapers? Then don't use Retroshare, LEECHER! Also, note

that you will be able to change this setting at any time you might wish to do so.

Ahem. Okay, we'll click Add and choose a folder to share. You can start off with sharing your Downloads or your Music folder. I am sharing a few gigabytes of files (a few thousand files) with my friends on Retroshare. How does one go about browsing through all those files and folders? I'll tell you later. For now, let's keep on reading.

Retroshare is not as easy as setting up Wordpress, but it could be just as good an app. Let's click Next. And one more to go...

... and that's only to click Finish and you're done with the Setup. How does Retroshare look?

Using Retroshare

At first glance, might might not amount to much when looked at. However, underneath all those icons and tabs, there's a pool of worlds that separates the different tasks and jobs, yet somehow manage to merge them all together. Now, what does that mean? Explain in newbie terms, please.

How about downloading a couple of music albums from one friend, while uploading a set of wallpapers to another, at the same time you are chatting with these friends while they are busy posting news items on the channel feed for all the others who are

subscribed to such channel can read and reply? Yep, done that. All on one application? Retroshare is still behind on IM clients such as Pdigin in terms of VOIP features, but it is not only an instant messenger. It lags behind all the information about a torrent when compared to KTorrent, but Retroshare is not only a filesharing app. I suppose it's aiming to be an all-in-one communication software.

Let's take a tour...
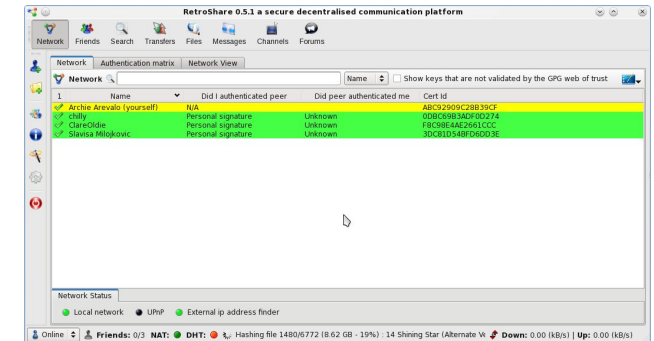
First, we'll look at each tab on the Iconbar, the Side Panel shortcuts and understand the Status Bar. First, the Status Bar, as it will be visible at all time.

The first item is your Online Status, and you can set it in either Online, Busy or Away, to let your friends know whether you are available to chat, or you are doing something important and you cannot talk with them, or that you are on a holiday at the Bahamas.

The second item is the number of Friends (Online/Total), and as you can see, starting puts you

at 0/0. Soon enough, you'll be able to connect with more friends, and that's when the fun really begins.

The next items are your NAT (Network Address Translation) and DHT (Distributed Hash Table) indicators. Green is "On" and Orange-Red is "Off." Do you need to worry about the color? Not that I am aware of, but it would be nice to have them all in greens.

The empty space on the status bar between the DHT light and the Up/Down arrows of your Download/Upload speed is where you'll see the status of your hashed files. I'll talk more about hashed files later.

On the Network iconbar and the Network tab is where you'll have your list of Friends, plus who you have authenticated and who authenticated you and their certificate IDs. At the bottom of this window is your Network Status.

Again, greens are good, meaning "On," and grayed out means "Off." Local network should always be green. UPnP (Universal Plug and Play) was off in my install, but did not really obstruct my file transfer to and from friends, nor my chat session with them. External IP Address Finder should turn itself on once Retroshare determines your External IP and forwards it to your friends. If you are having trouble getting this to turn on because of the changing IP address your provider is assigning to you, then a Dynamic DNS would be your best bet.

Adding a New Friend

Obviously, this app can only be useful if you have a friend to connect with. So the first thing you would need to do is add a friend. There are a number of ways you can do this, but most important is that your friend must also be using Retroshare, and that your friend had already done the installation and setup.
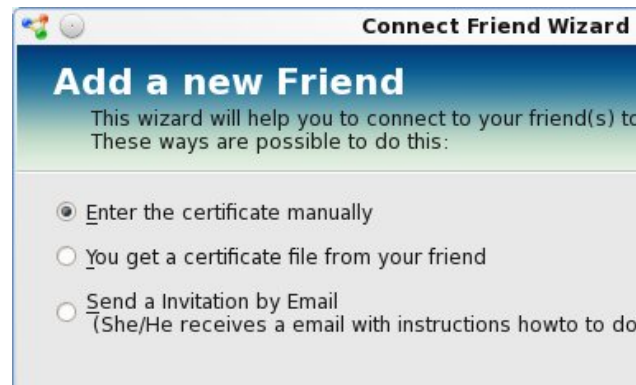
As you can see, you can:

* Enter the certificate manually

* You get a certificate from your friend, or

* Send an Invitation by Email

Let's try the first option.

Before you can enter a friend's certificate manually, your friend should have already sent you his key. Open your favorite file manager and locate the file you received. Once you have located the file, open it with your favorite text editor.
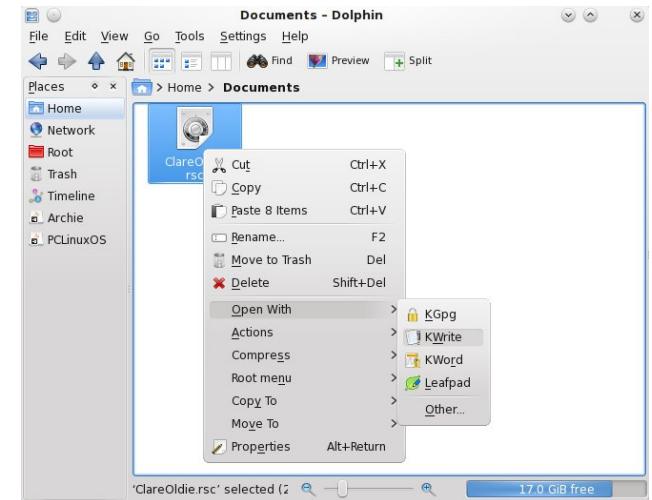
On your text editor, you will be able to view your friend's public key block as plain text, along with other information. Select the whole block from the first dash, all the way to the end of the file, by pressing Ctrl + A. When you have selected everything, press Ctrl + C to copy the selection to the clipboard.
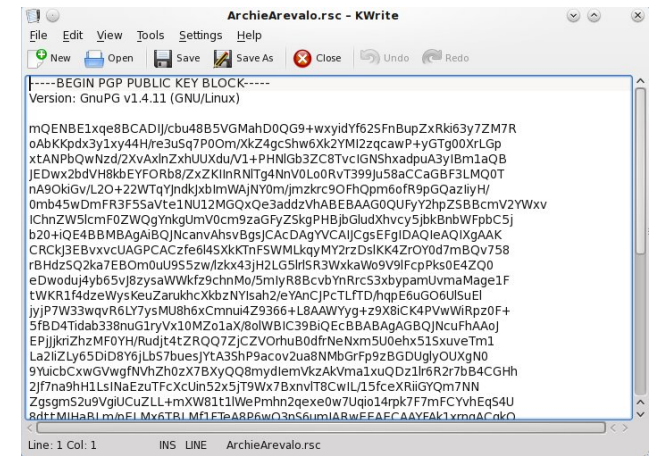
Click Next to Enter the Certificate manually. The Connect Friend Wizard's Text Certificate Window is divided into two sections: Your PGP certificate is located in the top section, which you can copy to the clipboard, save to a file or send by email. It is best that you save a copy that you can send to your friends later. The bottom part of the window is where you would paste your friend's key block. Mouse click on the empty section, right-click your mouse, and you should paste the contents of your clipboard. Inspect your friend's key block to make sure it is correct. Then click Next.
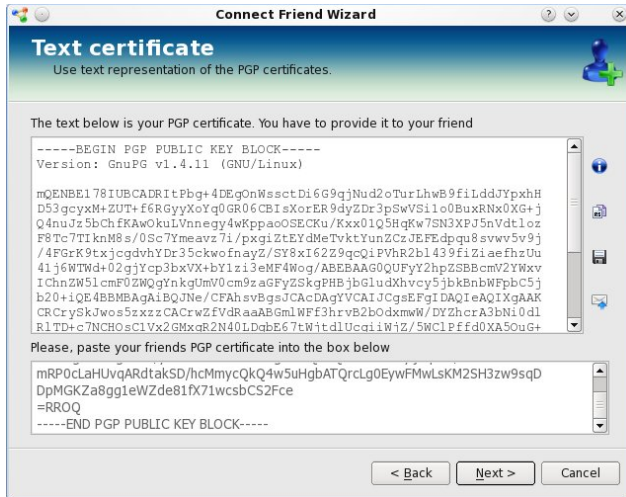

At this point, you will be shown details about your friend you added. You should take note of the Key Validity and set Trust to Fully. Also, you can start organizing your friends into groups. Click "Finish" and all you have to do is wait for ClareOldie to authenticate your request to add him as your friend and you're in business.
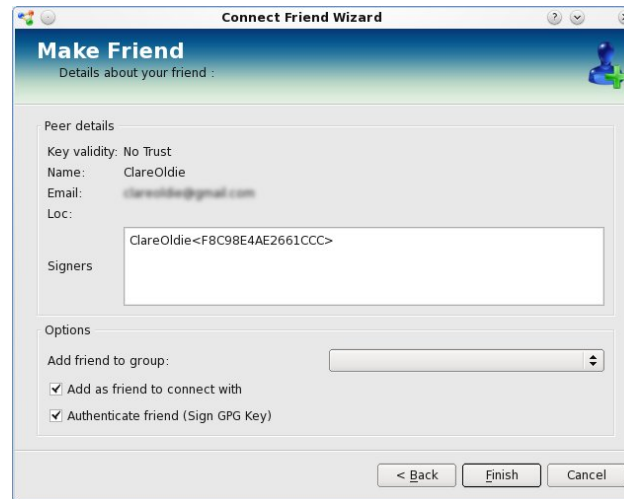
Another way to add a friend is through the second option. You can directly browse and select your friend's Retroshare certificate if you already have it on file, as in the screenshots below.
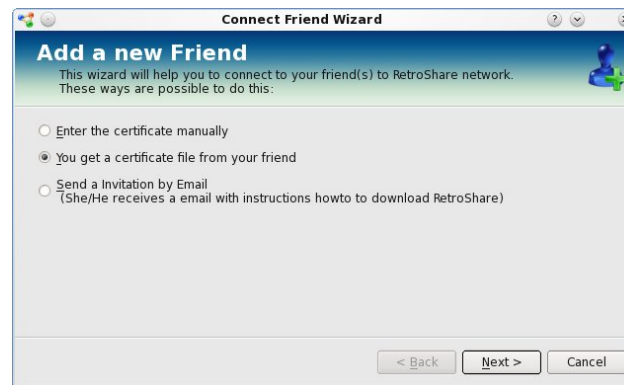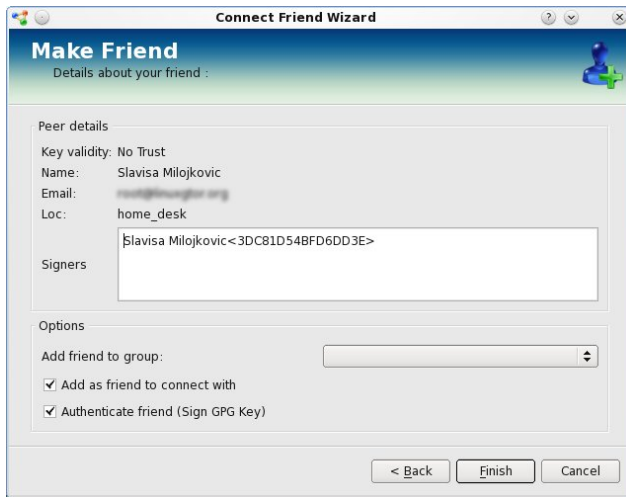

Click "Browse," and navigate to the folder where your friend's Retroshare certificate is stored.
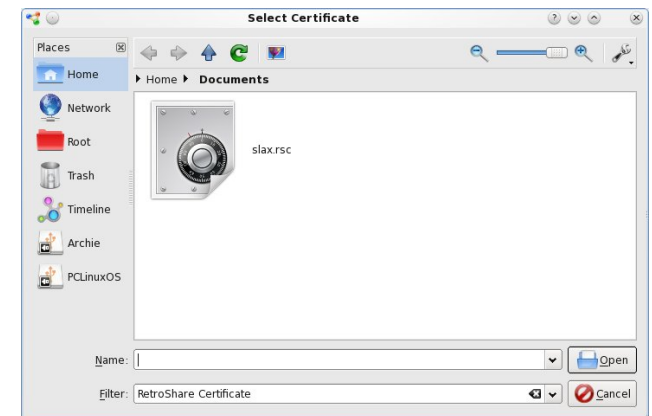
Click on the certificate to open and add your friend.

Screenshot Showcase

Click Finish.

The third option is by email invitation, where you will need to type in your friend's email address, and an invitation to Retroshare will be sent.

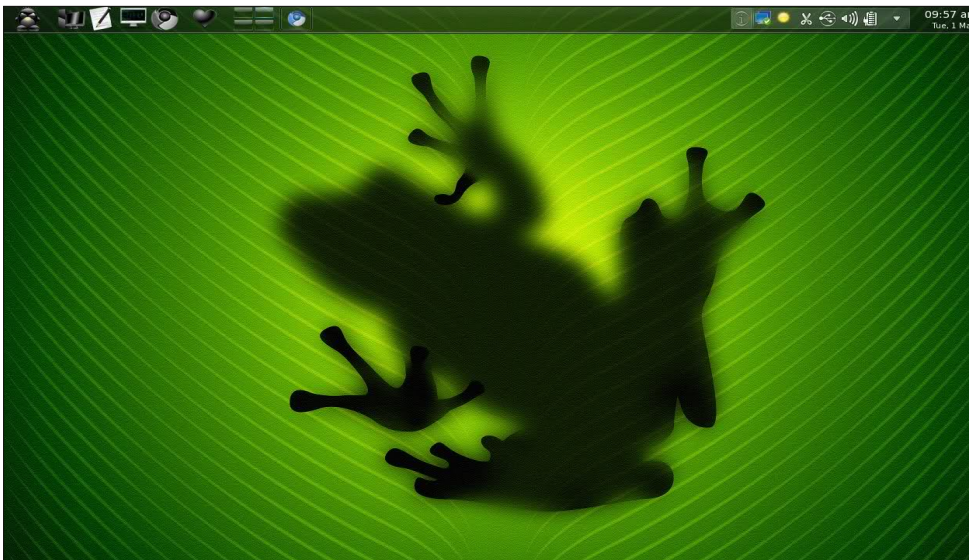So that's it for this issue. See you next month.

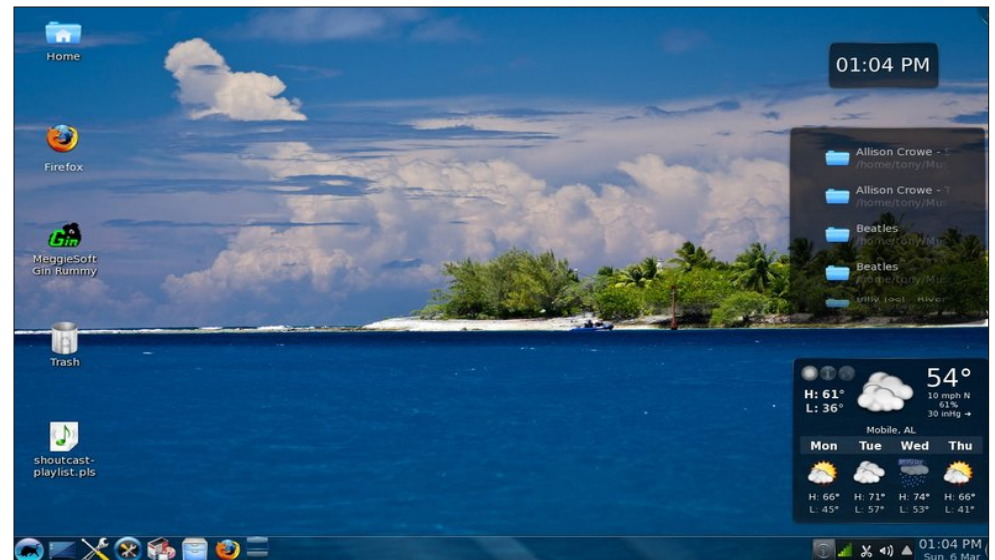*Posted by paja, March 12, 2011, running KDE 4.*

More Screenshot Showcase

Top: Posted by tschommer, March 8, 2011, running KDE 4.
Bottom: Posted by Archie, March 1, 2011, running KDE 4.

Top: Posted by Leiche, March 4, 2011, running LXDE.
Bottom: Posted by bones113, March 6, 2011, running KDE 4.

2011

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joechimp