Clouds In The Sky,
Google Drive Arrives

Cloudy Skies: Roundup
Of Linux Cloud Storage

Picasa On Linux:
There ARE Alternatives

PCLinuxOS:
The Band & Their Song

Linux Financial Apps: Grisbi

Alternate OS: PC-BSD, Part 3

LXAutostart: A Closer Look

QEMU: The Other
Virtual Machine (Part One)

Move Hard Drive From
One Computer To Another

Install & Run PURE-FTPD
Server On PCLinuxOS

Genealogy With Gramps, Part One

Encode It With QR Codes

And more inside!
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Welcome From The Chief Editor

What an exciting time it has been, from the latter part of April to the latter part of May. Cloud storage discussions rocketed to the forefront of tech talk circles, fueled by Google’s announcement of Google Drive. Google has desktop clients available for Google Drive – if you are a Windows or OS-X user.

They claim to have a Linux client “in the works.” If Google’s support of Linux can be gauged by their (recently withdrawn) support of Linux with Picasa, us Linux users will likely die of anoxia (lack of oxygen) from holding our breath while we wait on Google to provide equal support for the Linux desktop. Of course, this is the same company that runs its business on Linux. Yet they can’t be bothered to support the very operating system that makes them billions and billions of dollars every year. Perhaps some of the growing anti-Google sentiment would dissipate if they would only treat Linux users like the first-rate users they are.

Meanwhile, you may have noticed a change in the magazine’s web site around mid-March, 2012. Weric was hosting the magazine’s website on his servers for most of the past three years. Due to a lack of time and tightening funds, he asked us to see if we could find a new server to host the magazine’s site. So, thank you Weric for being such a gracious host.

Around mid-March, we moved the magazine’s website to servers operated by David Moore. You probably know him better as YouCanToo, the resident PCLinuxOS baker. The old magazine web site used an outdated Joomla! content management system that was difficult (at best) to update and maintain.

So, when we made the move, we decided to leave the Joomla! troubles behind, and recreate the website from scratch. Our new website is almost totally based on plain HTML. With myself logging in – at most – twice a month to maintain and update the site, and Rudge doing the same for the HTML version of the magazine, there really wasn’t much need for a content management system.

Instead, I use Kompozer to update the HTML pages every month. I work on updating the local copy of the entire magazine website that I have mirrored on my hard drive. When it’s time to release the magazine, I simply upload the updated HTML files to the magazine’s server. I can already tell you that the amount of work involved with a typical magazine release has been cut down to about one-quarter of what it used to be when we were using the Joomla! content management system. There’s something to be said for keeping things simple.

We hope you enjoy the magazine’s new website. One of the goals in designing it was to make it lean and fast, a goal that should be easy to attain without all the overhead of a content management system to make things unnecessarily complicated.

Until next month, I wish each and every one of you happiness, prosperity, serenity and peace.

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PCLinuxOS: The Band & Their Song

by Paul Arnott (parnote)

What happens when some of the musicians in the PCLinuxOS forum, scattered around the globe, want to record a song together? After all, they are scattered around quite a bit: North Carolina, Oklahoma, New England, Texas, Mississippi and South Africa. Well, thanks to the Internet, they are able to pull it off.

That’s exactly what six of the musically inclined forum members did. With Rudge on the drums, horusfalcon on the bass, longtom on the acoustic guitar, BubbaBlues on the electric guitar and organ, and joechimp doing vocals, they each laid down the tracks to a bluesy ballad. With lyrics written by resident PCLinuxOS songstress ms_meme, they put together a finished product. They called their song “Goodbye Windows.” They posted it to the forum on May 16, 2012, as an 8.6 MiB MP3 file.

Originally, Rudge proposed the idea in the PCLinuxOS forum on February 22, 2012. As the discussion continued, there were more musicians lurking in the forum than originally thought. After five days of discussions and 135 replies to the initial forum post, Rudge pulled the plug on the idea. He was reluctant to have anyone feel left out of the endeavor.

A few days later, the idea was reborn, but this time with a little less fanfare – again, so no one would feel left out of this initial effort. The obstacles to making this come to fruition were monumental. The “members of the band” were separated, geographically, by hundreds, if not thousands of miles, time zones, continents, and wide expanses of ocean. But thanks to the tenacity of the group, they got the results they were seeking – nearly three months after the initial proposal.

“Well, at first it was an idea in a previously mentioned post that quickly snowballed out of control to the point where I simply had to delete the post because of the flood of conflicting ideas and arguments that it spawned,” said Rudge.

“By this time however, I had received a select few sane ideas that had some intriguing promise. Mostly from BubbaBlues and horusfalcon.

“The details of how the music came about are a bit sketchy even to me but the band itself came together once I realized that BubbaBlues was the man that had a talent I did not possess. That is the talent to take charge and get people to do something.

“I know music, but I suck at organization and delegation. Once I saw that BubbaBlues had those skills, I asked him to take charge of the group and he did. He did indeed, and he did it very well. So, while it may be generally assumed that this was mostly MY doing, it was not. It was mostly BubbaBlues that pulled all this together,” Rudge continued.

Although Rudge had originally proposed the idea, BubbaBlues had the most experience with these types of collaborations, so BubbaBlues “drove the bus,” so to speak.
“After Rudge mentioned in the forum that he wanted to do this, I offered my help because I had done these collaborations before and knew what to do,” said BubbaBlues. “I basically had the other players record their parts at home and send them to me, then I did all of the mixing and mastering, and added my guitar part and waved a magic wand and we had a complete song.

“You just have to start with a beat and a basic idea of what you want. I used a drum machine and the base organ part. Then you add a bass line, and I also added longtom’s acoustic guitar part. Next, I replaced the canned drum beat with Rudge on live drums. Then we need the vocals, so that’s where joechimp stepped up. Once all of that was mixed, all it needed was some fill-in riffs and some guitar solos, so I laid that track down, mixed, added some compression and reverb where it was needed, waved the magic wand and there it was,” said BubbaBlues about the process of putting this whole thing together.

When asked about his role in helping to make this song come about, horusfalcon responded, “Simple.

I’m just a bass player. When the call went out for musicians, I was there to fill the last part needed.

“A bass player generally just lays the foundation for the rest of the music, working with the drummer to drive the beat. I got the chance to develop my own bass part for this, though, and that was really fun.

“I saw a post on the fora from Rudge asking for folks to participate in a musical project. By the time I had seen it, the only position still open was for a bass player. Things went through a few changes, and Rudge, BubbaBlues, and I worked together to lay down the underpinnings of this tune. Frankly, after that, it seemed like a long time went by without hearing anything about it, and, then I saw today where the tune was finished. Surprising, really.”

BubbaBlues added, “I just want to say how impressed I was with horusfalcon’s bass line. When Rudge and I heard the bass part the first time, it was by itself, without the other music. Man, he was all over the place with obscure runs and stuff. Rudge told me, “Dude that’s the strangest thing I ever heard.” Then I picked up my guitar and started playing along with it. Sure enough, it was brilliant! Bass guys sometimes don’t get the credit they deserve, but nothing is more valuable to another musician than a solid bass line to play to. Cool. Thanks horusfalcon, hats off to you, bud!”

Longtom added his acoustic guitar talents to the project.

“I was just a guitar player who was asked by BubbaBlues to record a track for the project. So I did and loved it,” said longtom.

“In the beginning I was intrigued by the idea and didn’t quite know how recordings can be done and mixed in PCLinuxOS. When I did my last professional recording we used a 16-track tape recorder, huge mixers and amps etc. Old people might remember.

“So, longtomjr and I sat and played with several options after Rudge’s post and I mentioned some interest in the thread. I also made a couple of recordings, which I sent to Rudge, BubbaBlues, as well as ms_meme, knowing she would enjoy that.

“Others, like me, showed their interest, first in the initial thread by Rudge, and afterwards, via more personnel exchange. So BubbaBlues stuck up his hand and took it upon himself to coordinate the effort.
“After a while Bubba contacted me and asked me to do a track for the song. I was honoured and did just that with pleasure,” longtom continued.

Joechimp’s vocals have been likened to those of the late and legendary Tom Waits by some forum members. He describes his role in helping make “Goodbye Windows” come to life.

“My role was kind of late to the party. Lot’s of hard work was already put in by others before I did my part. I think some of the other band members really wanted me to initially be a part of this so in the end, I was offered this wonderful opportunity. My role was adding the Vocal track to a mix of music, minus the lead part, which BubbaBlues added after he added my vocals. Being in a band, any kind of band is a privilege. I thank them from my heart,” said joechimp.

“At first, when this came up, it was just in a thread Rudge started about doing a song,” continued joechimp. “Lots of people wanted to get involved. Then too many wanted to get involved and I kind of lost interest a bit. Rudge wanted me to play bass, but I have been having trouble with my hands and didn’t think I could give it my best effort, so I bowed out. I had made a post about singing but then forgot about it and the thread sort of died off. Then just recently, I was asked if I would like to do the vocals. I could hardly believe it. After all this time I didn’t think there was any chance of that. I was honored and thrilled to be asked.”

Of course, those lyrics that joechimp sang were penned by PCLinuxOS’s own songstress, ms_meme. True to form, she tried to downplay her contribution to the project (and truthfully, didn’t want to be included in this article about “The Band”). However, her “editor” insisted that everyone involved with the project be included.

“I received a PM from BubbaBlues asking me to send him some lyrics. I sent him some that I had been working on,” said ms_meme. “Later got another PM asking if they could use them. He had added a bit more to what I sent. I thought it was very nice that they were going to use what I had written.

“I am happy to see that the group got together and came up with a wonderful sound. I really had no other communication with the group.”

PCLinuxOS: The Band & Their Song

In usual ms_meme style, she also responded in her usual poetic style:

Poems about PCLinuxOS I’m a writin’ all the time
BubbaBlues asked, “Would you write the band a rhyme?”

Opened up my KWrite and went right to it
“Thanks,” said Bubba “I knew you could do it.”

The Band’s groovy sound you just gotta love it
I’m so very happy I was a part of it.

Most of the band members laid down their individual tracks at home, with whatever equipment they had, using either the Audacity or Audacious applications from the PCLinuxOS repository. BubbaBlues, however, took a slightly different route.

“I think the other guys probably used Audacity to record their individual parts, but I’m not going to lie to you,” said BubbaBlues. “In my studio I use Cakewalk Sonar on Windows XP. It’s professional quality stuff that I’ve been using since long before I knew anything about Linux. I already have it set up and know how to use it and I’m just not going to spend hours or days trying to learn how to use something else just to avoid using Windows. I hate Windows, but love Sonar.”

There is no argument when you hear the results.

So, one burning question remains: will there be a repeat performance?

“We haven’t even discussed it. There is always a possibility,” said BubbaBlues.

“If I have a say in it, that is a resounding YES!” added joechimp. “I would love to do more. It is a lot of work, especially on BubbaBlues. He is doing all the editing and mixing, as well as playing.”

“I think this question ventures into guarded territory,” quipped Rudge.
“I am not sure. I would love to. However, I haven't heard from our band leader yet,” added longtom. “But if there is such a performance and I am asked to make a contribution, I will honour that call with great pleasure.”

It sounds like ms_meme's gonna need to sharpen her quill, get a new bottle of ink and warm up her rhyme ... as the rest of the band members warm up their internet connections. Stay tuned[a], because I don't think we've heard the last of The PCLinuxOS Band.

"Goodbye Windows"

Bought me an OS called Windows
Cost me a whole lot of dough
Fought with that OS called Windows
Just a dog and pony show
Another error message such misery and woe
So into the trash it goes

Waiting for all those Windows Updates
Always coming in slow
Kept my nerves tied up in a knot
But baby what did I know
Laggin' and defraggin' misery and woe
So into the trash it goes

So I tried out that PCLinuxOS
thought I’d give that one a go
It's got what I need, you see,
and everything's free
No more spendin' my dough
Now I'm on the right track
and Baby I'll never go back
Goodbye Windows, you blow!

PCLinuxOS: The Band & Their Song

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Clouds In The Sky, Google Drive Arrives

by Paul Arnott (parnote)

On April 24, 2012, the skies got a bit more cloudy when Google officially announced their cloud storage solution, called Google Drive. Talked about since 2006, that talk reached a feverish pitch over the past few months, as rumors and speculation accelerated about Google finally releasing Google Drive.

Google Drive replaces Google Documents, once you elect to sign up for the service. From then on, all of your documents are presented in Google Drive. However, Google Drive elevates Google Docs from just mere document creation, storage and collaboration, to being able to store and share any type of file, up to your storage limit.

That storage limit starts off with a free 5 GiB of storage. You can purchase additional space, costing $2.49 for an additional 25 GB, or $4.99 for an additional 100 GiB. If necessary, you can purchase up to 16 TB of additional storage space, with a Google account upgrade. Any additional storage space you purchase is shared between your Google Drive and Google Picasa accounts.

Fortunately, the space used to store your Google Docs content does not appear to affect your Google Drive storage space. Rather, it appears that your Google Docs content has been made unlimited. To view how much of your allotted storage space each file is consuming, click on the “Sort” button on the screen, and select “Quota used” from the list that appears. In the screenshot above, you can see several files that are consuming space from my free 5 GiB of free storage space.

Yet you can also see files that simply have a “--------” displayed under the Quota Used column. Those are the documents that I either created directly in Google Docs (as is my usual custom when writing articles for The PCLinuxOS Magazine), or that I converted to Google Docs. Most of my content in Google Drive consists (at this time) mostly of articles for the magazine that have been created within Google Docs – including those created and submitted by other magazine writers over the past three years.

Anyone, using any OS, can access their Google Drive account from any modern web browser. Client-side applications already exist for Windows, OS-X, iOS and Android, and a Linux client is currently under development. With the client-side apps, any file you upload to your Google Drive account will be synchronized with, and accessible from, any of your devices that are also connected to Google Drive.

If you use Google’s Chrome or Chromium browsers, there are special Google Drive “apps” that you can install from the Chrome Web Store to help you enhance your experience with Google Drive. At the time of the writing of this article, I didn’t see anything all that earth-shattering that I couldn’t do without. Your needs may be different, so check out the apps to see if some of them are useful or helpful to you.

Google Drive is intended to be integrated with other Google services. In the first week that Google Drive was out, Amit Agarwal, the founder and author of the Digital Inspirations technical blog out of India, told his readers how to integrate Google Drive with Gmail, allowing you to selectively save Gmail attachments to your Google Drive account.
Clouds In The Sky, Google Drive Arrives

The Uproar

Almost immediately after its release, Google Drive’s Terms of Service (ToS) language came under heavy fire and debate. Since Google’s aim is to create and offer a series of interoperable services, their ToS is, perhaps, written to be a bit wider than services that only offer cloud based data storage. Google uses one ToS to cover all of the services that they offer. The portion that raised the runkles of Internet users reads as follows:

Your Content in our Services

Some of our Services allow you to submit content. You retain ownership of any intellectual property rights that you hold in that content. In short, what belongs to you stays yours.

When you upload or otherwise submit content to our Services, you give Google (and those we work with) a worldwide licence to use, host, store, reproduce, modify, create derivative works (such as those resulting from translations, adaptations or other changes that we make so that your content works better with our Services), communicate, publish, publicly perform, publicly display and distribute such content. The rights that you grant in this licence are for the limited purpose of operating, promoting and improving our Services, and to develop new ones. This licence continues even if you stop using our Services (for example, for a business listing that you have added to Google Maps). Some Services may offer you ways to access and remove content that has been provided to that Service. Also, in some of our Services, there are terms or settings that narrow the scope of our use of the content submitted in those Services. Make sure that you have the necessary rights to grant us this licence for any content you submit to our Services.

You can find more information about how Google uses and stores content in the Privacy Policy or additional terms for particular Services. If you submit feedback or suggestions about our Services, we may use your feedback or suggestions without obligation to you.

Specifically, it has been the second paragraph of the ToS that has most users getting their undies in a bunch. Google, as with any large corporation, wants to avoid defending itself in legal issues scattered around the world’s courts. It’s speculated by many who have attempted to analyze the language used that overzealous lawyers put these terms into the common ToS that covers all of Google’s services.

Remarkably, Google’s language doesn’t differ all that much from the ToS of other cloud-based storage providers. You can look at the ToS for Apple’s iCloud (particularly, the “License from You” section), Microsoft’s SkyDrive (particularly, Section 5), and Dropbox (particularly, the “Your Stuff & Your Privacy” section). Of the three comparable services, Dropbox probably has the most liberal language in their ToS. However, the ToS of iCloud and SkyDrive contain exceptionally similar language to that in the Google ToS. Granted, most Linux users won’t be utilizing the services offered by Apple or Microsoft. But the fact remains that Google is not without company on the ground they are standing.

Summary

It’s no secret that there is a growing anti-Google sentiment growing, especially among Linux users. Users around the world are quickly tiring of Google’s data mining and collection. It’s quite likely that Google knows more about you than your spouse, and all of it is a direct result of their data collection from the vast number of users who use their services.

Also, Google doesn’t have a very good track record with keeping their new services around for very long. Google Wave lasted 14 months before the plug was pulled, and many argue that it wasn’t really given a fair chance. Google, only four days prior to the launch of Google Drive, announced that they were
dropping Linux support for Picasa. Google Buzz came and went in very short order. The list of discontinued services is long. We can hope that Google Drive will fare much better than those that populate the long list of discontinued Google services.

All in all, if you can live with or accept Google’s incessant data mining and collection, Google Drive looks to be a solid service that will benefit users of all operating systems. Providing a generous 5 GiB of free storage space is more than double the space offered by Dropbox, but less than half of my free storage space on Minus.com.

Clearly, there will be as many different uses for Google Drive as there are Google Drive users. Google's long awaited entry into the cloud-based storage arena has thrust cloud-based storage services to the forefront of the discussions about technology.
Linux Financial Apps: Grisbi

by Meemaw

In the first installment of these articles, I stated I would review six financial apps. Since then, I have found that I missed one, Skroog, so my articles will total seven. Skroog will be reviewed in a later article. This month’s program is Grisbi http://www.grisbi.org/. According to the website, it is available for Linux, Mac and Windows. I also found a link to a Users Guide in English - but when you pull it up, it’s in French. The main site says there’s a developers channel in IRC at #Loot. Grisbi is in the PCLinuxOS repository, so there’s no need to go elsewhere.

Starting Grisbi for the first time, you are shown a Welcome window and asked to create an account file. There will be five more separate windows. In window two, you will name your file as you want and designate date format, number appearance and if you want your file encrypted. Window three asks for your preferred currency, while window four asks if you want to use the standard category list or none. In window five, you will enter your bank information, and window six will lead you to creating an account or importing information from other software.

Creating an account will lead you to four more windows, where you can designate the type of account (bank, cash, assets or liabilities), designate which bank is used and the beginning balance of the account. In the last window, you can give the account a specific name. For this article, I named my account file Meemaws, and using the bank name Hometown Bank, I created a Checking Account and a Savings Account.

Finishing these steps, you will see the following window, which has all the information you have already entered.

In the event that you need two separate files (maybe helping another with their banking) to keep the transactions separated, you can create another account file from File > New account file. If you want another account within your own file, you can create that from Edit > New account. Note that at the top of the window, there are two tabs, one saying Transactions and one saying Properties. The window above is the Properties tab, and the Transactions tab is where you will begin adding transactions to your check register. At the bottom of that window, you will see the line Transaction/Scheduled Form.

Click the arrow to the left of that line, and the Add Transactions window will open. You can leave it open all the time if you wish, as this is where you will enter all transactions in all accounts.

As always, you enter the Payees yourself, and if you chose the standard categories, you have them to edit however you want.

Also, each window has its own toolbar, depending on what window you are using. The Transaction window has New, Delete,
Edit, Reconcile, Print and View. The View tool is very handy. It lets you decide which transactions to view, whether you want to view all of them or only those since you last reconciled your account. It also lets you choose how you want each transaction to display: a single line for each showing only the date, payee, amount and balance, double or triple line displays showing more or even a full view showing category and any notes you may have entered.

Besides your accounts list in the tree at left, you have **Payees** and **Categories** sections, and can add, delete or otherwise edit them there. The Scheduler is in the tree, and you can schedule your automatic transactions there. Also there is a **Budgetary Lines** section, a **Credits Simulator** and **Reports**.

The **Scheduler** is used to enter repeating transactions, like a life insurance premium or house payment that comes out of your account every month. Clicking **Scheduler** in the tree at left, you get the following screen:

This is a different chart than those I have seen before. It allows you to compare payments for different time frames and pick the one that has the best payment for your budget.

Highlighting the line for the length of time you want, you can then click on the **Amortization** button at the top. You then get another screen with an amortization, or payment schedule.

Grisbi has a feature we haven't seen so far. The **Credits Simulator** is a loan payment estimator. You can put in the amount of your loan, interest rate, length of the loan and a few other options, and discover what your monthly payment will be. You can export the information and even print out an amortization schedule. In the example below, you can see information for a loan for $200,000 at 6% for up to 30 years (top right).
This schedule gives you every payment for the duration of the loan, and shows what part of each payment is principal and what is interest. If you want to cross off each payment as you make it, you can print the schedule, or export it as a .csv document.

Also in the left-hand tree in Grisbi is a section called Budgetary Lines. I’m pretty sure it is a form of budget planner, but to be honest, I can’t figure out how to use it. I’m sure it’s outlined in the manual, but until it is translated from French, I’m out of luck.

Summary

Grisbi is a nice program for managing your finances. It is fairly easy to use, and doesn’t seem to have any of the difficulties I found in a couple of other programs. Other than the Budgetary Lines section, I like it.

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Mark's Quick Gimp Tip & Double Take

Mark's Quick Gimp Tip

The great thing about graphics apps is they have a lot of built-in “automatic” functionality. The Gimp is no different. With a couple of mouse clicks, the Gimp can help you create buttons, logos, and even patterns. If you need to spruce up a web page or add a little zing to a report, the Gimp can help. (In this example, I'll create a logo). Go to Gimp's menu and select File > Create > Logos (or Buttons or Patterns if this is what you want to create). A dialog box pops up and from here you can make selections for text, sizing, color, etc. After you've made your choices, click Okay and the Gimp does the rest! It's all automatic! And the nice thing is, once you have your logo created, you can do some further editing in Gimp. The final result is comprised of layers. You can move the layers around, change their size, whatever strikes your fancy. Get creative!

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

Double Take

Find at Least Seven Differences Between Cartoons!

Carved In Stone

Answers on Page 54
Forum Foibles: Come To The Sandbox

Now the PCLOS Forum is always swinging
If you listen with your heart you'll hear ms_meme singing
Come to the Sandbox my darling
Come to the Sandbox my love

Wherever you may be you'll find Tux beside you
We're always here to have fun and to play
Although you open up a Window or two
We'll always let you back if you promise not to stray

The Forum will take away all of your sorrows
You'll have memories to last all your tomorrows
Come to the Sandbox my darling
Come to the Sandbox my love

Texstar will always give you full measure
With loving care to PCLOS everyday
He made it all for your pleasure
Don't you think he deserves a little more pay

PCLOS is always free don't have to borrow
You'll have it today and tomorrow
Come to the Sandbox my darling
Come to the Sandbox my love
There's food in the sandbox. Just steer clear of the lumps that have a thin coating of sand all over them. Rudge

JRex almost always goes to bed before me. I tuck her in and then come to play in the sandbox for a bit before getting sleepy myself and turning in. Rudge

Lots of us try to have fun here in the sandbox. It does let us act like little kids in and adult world. However, we are still adults and in turn appreciate, lets say, more diverse humor. I post lots of pictures. They seem to make a post funnier. joechimp

I'd like to add PCLOS as a "sandbox" douglmack

We got an entrance gate, a private car wash, a suggestion booth, a swimming pool and a sandbox for the kids. ms_meme's neighborhood is our clubhouse. Rudge

Thank you, Neal. Maybe you have a recipe for Pecan Sandies or something. Look in your Sandbox Oasis File. ms_meme

I see you've found the Sandbox to your liking. djohnston

Sandbox and buttons
Not a natural thing
Buttons get lost
Sand gets stepped on
and scattered about
Put buttons on belly's and
that's where they'll be
Sand in the sandbox and
everyone plays
joechimp

Get back to your chores
The coffee break is through
Work to be done in the Sandbox
The jokes are overdue
ms_meme

And you didn't even count me among the PCLinuxOS users. Even after I was first responder in the Sandbox thread. I tell ya, I don't get no respect. (my best Rodney Dangerfield imitation) djohnston

That's ok, there is a certain person who frequents the sandbox that sports a "Golden Poo Shovel" and the knowledge to use it! Mike

You realize of course when that little zombie kitty makes a poo, it's going to end up in the sandbox. LSeraphim

Maybe we will see you back in the sandbox soon? Rudge

(And feel free to move my request to sandbox if you think it's more appropriate there.) melodie

Tough deal this Sandbox environment. joechimp

Couldn't find a good place to post or someone to ask, so I figured safest place would be in the sandbox. glamdring

Do you have a nomination for the biggest Sandbox 'un-truther? ms_meme

Welcome to this community!
And enjoy your PCLinuxOS installation... (if you've questions / things you don't know / doubt about / ...... or want to make fun, ask it.... or dive in the sandbox) rubentje1991

Thanks for the welcome and i'll definitely be seeing you in the sandbox. oldlobo
I have searched to repos but i can't seem to find sandbox. I googled and all i got was some cheats for crysis. Do you have the website for sandbox? My quest continues

rfbennett1

The "Sandbox" is an area of the forum. You can find it here: http://www.pclininuxos.com/forum/index.php/board,4.0.html YouCanToo

The insane ones all use Sandbox on this forum ....... best be prepared Just18

Many peoples around the world comes here to help. Don't forget to visit our sandbox.

Leiche

If you feel a little crazy after tweaking your computer, feel free to visit the Sandbox.

Meemaw

Leiche's advice is good. Do visit the sandbox. It's fun. See you in the box. alex

Leiche's right, in the sandbox we can all hang out and go a little crazy sometimes.

tschommer

Hey, it's the Sandbox! djohnston

I know you're a regular Sandbox attendee.

djohnston

Since you have nothing to do except use your computer, take a venture over to the Sandbox, if you haven't been there already. Meemaw

Most stuff I write in Sandbox, might on occasion, pertain to some form of sarcasm. Nothing to get upset about, obviously, bit of fun and all that. Abraxas

There you go, now we have two behind the barn sneaking a smoke. Before you know it the whole sandbox gang will be back there smoking. smileeb

Sorry for causing mass hysteria in the Sandbox. I will hide from you behind the Great Wall of Texas. ms_meme

The sandbox and the people you meet there are the best friends you can have. smileeb

In case anyone missed my stupidity, I thought this would make a good Sandbox post. Rudge

My forum character is a beautiful young girl who is always seen with a rose. She lives in the Grimm world of the Sandbox where there is peril and terrible things happening and curses and dwarfs and bears and cats and dogs and penguins and danger and magic and witchcraft and (best of all) wickedness. ms_meme

It's Friday. So was I. I'm not at the Sandbox am I? alex

Enjoy your PCLinuxOS installation! And have a nice time in the Sandbox (or helping people on other places of the forum) rubentje1991
See I learn something everyday in the Sandbox. joechimp

If you just make yourself at home and visit the various areas here, you'll find we're a bit loony tunes at times, especially in the Sandbox. Old-Polack

Sandbox is the place, where you lost your brain. Leiche

Look no further than the sandbox, and you'll have more friends than you bargained for. tschommer

I hang out here on PClinux in the Sandbox mostly. I lurk a lot. howardb0235

If you come across the Sandbox, don't hesitate to jump (or dive) in! rubentje1991

well, fortunately we have sandbox T6

If you start coming to the sandbox and sticking around you will have to be fitted with the special white sport coat with the buckles in the back. smileeb

To be fair, this was posted in the 'sandbox' (the near-lawless area, I might point out) and things tend to go askew here. Thank Heavens no one mentioned the most sacred word bacon...OPPS!!! amoeba

Hope you post on the forum, especially in the fun for all Sandbox...... menotu

Welcome to the nuthouse --> (the sandbox forum) wayne1932

The sandbox - I suspect is filled with quicksand. MtnMan

Chaining me to the sandbox lol I like that. linuxforever00

I will check the sandbox out. Headed there now. Buzzkiller

if someone takes me out of the sandbox... luikki

Out of the Sandbox? No can do! You're superglued in. Neal

You of all people should know by now that anything put in the sandbox has a tendency to go off at a tangent. nok

See what happens when you visit the Sandbox? I just got some education. nixer how do you throw the big bone into the sandbox??? ponchuk

Or just follow the Sandbox for a week. Was it eek Huh Or weak Undecided Hmm... Me doesn't know. Ejieek! Vortex

The Sandbox is a good place to get to know more of the regular forum members. Archie

You have arrived at the right place. Plenty of room in the Sandbox for you to meet others and and get to know the more active members. jimwilk

Welcome to the forum. It rarely gets this manic, except in the sandbox of course. nok
You should never get out of the sandbox, no matter how bad you have to go. smileeb

I don't read the main website, nor the announcements, everything gets to the Sandbox sooner or later. If I didn't explore "unread posts since last visit". Crow

These things are not hard to understand, just different to the way you're used to working. Stick around, visit the sandbox (don't feed the critters), and have fun. 7272andy

There are so many different ways to contribute, just hanging around and click through posts to give people page views is the least you could do. You could move on from there to hang out in the sandbox section, that's where people go to just hang out and talk about general stuff that has nothing or has something to do with anything. muungwana

Sandbox is not a Help section. It is a Fun section. Neal

Welcome to the Forums AndrzejL! blah blah blah. Enjoy your stay. blah blah blah Check out the sandbox. blah blah blah Joble

If you get bored come to Sandbox. Crow

In case you decide to go distro-hopping again, I am personally going to chain you to our Sandbox where you can play and make some awesome new friends. Archie

And also I keep updates by viewing the sandbox section. TommyLee567

I'm usually to be found here, loitering with intent, around the Sandbox. nok

Stay away from the sandbox, you might get distracted and learn a lot about everything BUT Linux. aguila

We exile pests to the Sandbox. Archie

For having fun, don't miss the sandbox. aguila

Welcome from the sunny South Africa. Feel right at home and don't go to the sandbox. There - I did it - I warned you ... longtom

therein lies the problem, for the "sandbox" is but a silly place (most often). weirdwolf

The doctor's prescription for your ailment: Take 2 hours of Sandbox fun and 2 hours of Help section posting. Rest and repeat. Do this until you're feeling better. Neal

Stick around, check out the Sandbox, meet some of our loonies, join in the silliness. Old-Polack

This being the sandbox the next question will be: "How well does this technology handle bacon?"  Bald Brick

Plus the Sandbox is often a port of call for lots of us to have a bit of fun. menotu
When you are in the sandbox make sure you wear your goggles, because there are a few that throw sand and it hurts the eyes. One other thing, do not say anything bad about bacon, it is as bad as saying you like blue screens. smileeb

If you've found the sandbox already, it's no secret we have our own brand of lunacy running rampant within the community. Old-Polack

Sometimes they play nice in the sandbox. smileeb

Everybody can do a bit of Sandbox "blabbering." That's the way it is here. No one is excluded. Neal

Sanity is not a strong side of the Sandbox! AndrzejL

Remember: this is the Sandbox only kids allowed. Edit. Chimps too. Crow

Does that mean some of the sandbox crowd qualify to be users? smileeb

If you feel daring, visit the Sandbox.... it's kinda crazy there. Meemaw

There is usually something in Sandbox to take the mind off the daily troubles. Was_Just19

Hey life in the Sandbox.......like having a slab of bacon stuck to the roof of your mouth. joechimp

So when you don't have a question, join the frenzy in the sandbox. It may get crazy every once in a while, but that's how it's supposed to be. tschommer

For as long as I can remember, the whole sandbox has been suffering from Dementia 5. 7272andy

The reason I start threads like this is probably because I have lost any sense of reality since coming to the Sandbox. joechimp

You're here in the sandbox and wonder where the sand is. joechimp

Perhaps I should just stay in the sandbox and shut up? Rudge

So, go to sandbox section and make a few silly posts, and you are in.Stupid?...yes, I know. Xenaflux

Could all y'all reserve off topic jollity for the sandbox? jaydot
Fixing Crontab -e
"No Such File or Directory" Error

by AndrzejŁ

I was trying to run crontab -e on one of my machines, to add a few cron jobs, and I found myself looking at this error:

```
/bin/sh: /usr/bin/vi: No such file or directory
```

What the ...? I have vi installed, I thought, and I started to investigate. Crontab is looking for the vi file in the wrong place.

To fix it, run these commands:

```
su

ln -s /bin/vi /usr/bin/vi
exit
crontab -e
```

Now, you will be able to add entries.

If crontab -e ever gives you a “no such file or directory” error, check to be sure that the application you are running is where it should be. If it isn’t, either create a soft link in the /usr/bin directory, as we did here, or provide the full path to the location of the application.

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PCLinuxOS Magazine
Cloudy Skies:
A Roundup Of Linux Cloud Storage

by Paul Arnote (parnote)

With the recent release of Google Drive, Google’s entry into the cloud storage arena, it’s a good time to take a look at what other cloud storage solutions exist for Linux users. Just in case you’ve spent the last couple of years on a deserted island or hiding under a rock, cloud computing, including cloud storage, has been at the forefront of tech chatter during that time.

The PCLinuxOS Magazine uses a cloud computing solution (Google Docs) as the preferred method to share magazine articles with the rest of the magazine staff. This enables all the members of the magazine staff to comment and collaborate on the articles. It also opens up the editing of the articles to any staff member who wishes to do so. For the magazine, it has opened up the entire process to anyone who wishes to participate, and brought the entire production of the magazine out into the open, for all to see.

Opinions tend to run fairly strong when it comes to the various aspects of cloud computing, and there doesn’t seem to be much middle ground. As a result, many users are vehemently opposed to cloud storage, while others embrace it with open arms.

Those opposed to it want to keep their data on their local computers, and don’t trust the security of their files to a third party “trustee.” There’s also the issue of privacy of personal data that might be stored with cloud storage providers. Of course, there’s nothing preventing users from encrypting their files before uploading them to a cloud storage provider. Another thing to consider is what to do in the advent of a hardware failure experienced by the cloud storage provider.

To illustrate, cloud storage provider Atlassian recently experienced a loss of customer’s data. The list of customers that use Atlassian’s cloud storage service include American Airlines, the BBC, Hulu, Oracle and Facebook. The data loss was blamed on “the failure of ‘multiple’ storage disks at its cloud storage provider on 28 April,” according to an article on The Register tech web site.

The supporters of cloud storage are typically those users who aren’t too worried about the privacy issues (hint: don’t upload sensitive information to a cloud storage provider without encrypting the files first). They embrace the convenience of having their data available on any of their connected devices, or most any computer they happen to be using.

It’s fairly easy to divide the available cloud storage solutions into two categories: those that offer a Linux desktop client, and those that are available only with a web interface. Some of those that fall into the “web interface only” category could change in the near future, as Linux clients are developed for them.

Web Interface Only

The nice thing about the cloud storage solutions that are “web interface only” is that they can be accessed with most any computer running a modern web browser, on any modern operating system. The drawback is that, without a dedicated desktop client, there is no easy way to keep the files synced between your computer and the cloud storage provider. This could become a huge issue if you, for example, have a presentation to give, but make last minute changes to that presentation before you head from the office to the airport. Without a desktop client, there are a few extra steps that you must perform to insure that the most recent copy of the presentation is among your files stored with your cloud storage provider.

Google Drive, the newest cloud in the sky, comes from one of the biggest players in cloud computing. Debuting on April 24, 2012 (after being in development since 2006), the much talked about Google Drive offers users 5 GiB of free storage.

Google Drive replaces Google Docs, once you elect to sign up for the service. To sweeten the pot, none of your native Google Docs documents count against your 5 GiB of free storage space. Also, if you upload a file to Google Docs/Drive, those files also don’t count towards your 5 GiB of free storage – provided that you convert those files into native Google Docs documents. If Google Docs doesn’t have a compatible format to convert it to, then the uploaded file can still be stored in Google Drive, but it will count towards your 5 GiB storage limit (under the free storage plan).

Additional storage can be purchased for the nominal fee of $2.49 per month for 25 GiB, and $4.99 for 100 GiB.
GiB. With an upgraded Google account, users can purchase up to 16 TB of storage. There doesn't appear to be any real file size limits for most file formats, except for video files, which are capped at 10 GiB. They just have to fit into your available storage space.

Currently, Google Drive has a desktop client – but only for Mac and Windows users. A desktop client for Linux is supposed to still be in development. However, given how Google has faltered in their support for Linux, both currently and in the past (the most recent victim was Google's withdrawal of Linux support from Picasa just four days prior to the Google Drive announcement), I wouldn't hold my breath waiting for the Linux desktop client. Despite the fact that Google runs on Linux, their support for Linux is shameful.

Amazon Cloud Drive is another heavyweight cloud provider that gives away 5 GiB of free storage space to users. Currently there is a 2 GiB file size limit on files uploaded to and stored on Amazon Cloud Drive.

Additional storage space can be purchased. Obtaining 20 GiB of storage will cost you $20 annually. 50 GiB of storage will cost you $50 annually. 100 GiB of storage will cost you $100 annually. Plans are offered up to 1000 GiB of storage for ... you guessed it ... $1,000 annually.

At the time of this article, Amazon is making a limited-time offer of free, unlimited MP3 file storage with the paid plans, regardless of whether you bought them from Amazon.com, or if you uploaded them from your own private collection. The free 5 GiB plan offers free, unlimited storage of MP3 files purchased on Amazon.com, and the storage of those MP3 files does not count towards your 5 GiB storage quota.

Amazon Cloud Drive currently has desktop clients – for Windows and Mac users. It's unclear if work is progressing at all on a Linux client. Still, Linux users (as well as users of any other operating system) can use the web interface to manage their files. From reading reports about the Windows and Mac versions of the desktop client, it doesn't sound as if Linux users are missing out on anything spectacular. Most reports complain that even those desktop clients are woefully inadequate, and almost as if were released without much regard for their intended use or functionality.

Just like Google, Amazon uses Linux to power the backbone of its online presence. Just like Google, Amazon's Linux support is woefully inadequate. This is another cloud storage provider that I wouldn't waste my time growing old over while waiting for a Linux desktop client.

The most generous of all, ADrive offers 50 GiB of free data storage. Not only do they offer the most free data storage, but they also allow the largest file sizes to be uploaded to the service – up to 16 GiB! Fee-based, paid storage plans do exist, both for personal and enterprise customers. As you might suspect, the paid storage plans offer more “fluff” features, such as an Android application.

ADrive is listed here, under the web interface only category, despite having a desktop application. The browser version of the ADrive file manager currently uses a Java application to facilitate file management. The problem with the desktop application is that it is developed under Adobe Air, and most Linux users that I know won't install Adobe Air on their systems, or for that matter, any other Adobe application for which there doesn't exist a native Linux alternative. They may install Flash, but only because they must if they want to watch streaming content on the net. Most other Adobe applications, such as PDF readers, have much better written native applications that don't come with Adobe's overhead and sloppy programming practices.

The service does come with some other unique features, with their paid services. First, users can transfer files by either FTP or WebDAV. Users can transfer files right from their web browser, over FTP. I imagine with a little work (read that, trial and error), you should be able to get it to also work from any one of the many FTP clients in the PCLinuxOS repository. With WebDAV, users can map the ADrive network to their computer(s), allowing full access to the files stored on ADrive at any time. Users of ADrive's free personal plan will have to use the Java-based “file manager” in their web browser.

Sharing files from your ADrive account is fairly easy. Simply mark the file you want to share, then click the “Share” option. Your file will then be moved to your “My Shared Files” folder, and a unique web link will be generated that you can then share with anyone else on the Internet. Up to 10 people at one time can download the same file.

Currently, ADrive doesn't seem to have a lot of physical limitations. However, if you store more than 250,000 files in ADrive, they report that performance will start to be affected. According to their ToS, they will not tolerate files that put the ADrive service in jeopardy, such as files that infringe on copyrights or that are in violation of the DMCA. They also disallow (according to their ToS) files that are encrypted or that are marked with a file extension other than the one that represents the data contained in the file. Bearing those points in mind, ADrive seems to be a rather generous and easy to use cloud storage provider. They also have plans to support the hosting of streaming media in the near future.
Cloudy Skies: A Roundup Of Linux Cloud Storage

Launched in October 2010, Minus.com offers a generous 10 GiB of free cloud storage. There is a 2 GiB file size limit on individual files, but Minus.com offers unlimited downloads and transfers. I couldn’t find any mention of the ability to purchase additional storage space.

Minus.com’s whole philosophy is to create the simplest file sharing experience possible. They have succeeded, to some degree, providing drag-and-drop file upload capabilities right in the web browser. Just drag the file you want to upload and drop it anywhere on your Minus.com web browser page.

They also offer plugins for Firefox and Chromium browsers, as well as Chrome OS. The browser plugins offer yet another way to manage your collection of files stored at Minus.com. There are also client apps for Android, iPhone and iPad. As if that wasn’t enough, Minus.com also offers desktop clients for Windows, Mac and Linux. The desktop app is merely an icon that sits in the notification tray of your panel. When you want to upload a file to Minus.com, just drag the file from your file manager and drop it onto the taskbar icon.

When you upload a file to Minus.com, it is assigned a shortened URL that you can use to share the file with others. The whole process has, in accordance with their goals, been kept as simple as possible. Minus.com is definitely a win, especially for Linux users.

Dropbox has been around for a while now, and is a popular service among many PCLinuxOS users. Dropbox was really the first cloud storage provider to make a big splash on the Linux desktop. That “big splash” was largely due to Dropbox’s early Linux support by making the service easily integrate into virtually any Linux desktop, via the user’s chosen file manager.

Dropbox creates a folder in the user’s home directory. Simply copy or move a file to the Dropbox folder, or more preferably, to a shared folder within the Dropbox folder. The file is uploaded to the Dropbox server, and then copied to any of your other devices that also have Dropbox installed on them. If you’ve shared your folder with anyone else, they will also receive the file, since it will also be copied to their computer. In this way, you can create a private network, of sorts, with other users you want to share files with. Only users with whom you have shared the folder can access the files contained within it.

Dropbox also has a “Public” folder. Copying or moving a file to the “Public” folder will allow you to share that file with virtually anyone else on the net. Under KDE, you can install the Dropbox service menu. This will allow you to right click on a file in your “Public” folder and obtain the link to the public file. Nautilus users can also install a similar service menu. Users of other file managers will need to go to their Dropbox page and retrieve the link to the file in their “Public” folder from there. Anyone with that link will be able to download the file from your Dropbox “Public” folder. They also have a similar function for photos and images stored in your “Photos” folder, under the Dropbox main folder.

When you install Dropbox from the PCLinuxOS repository, you can initialize it by going to PC > Internet in your applications menu, and selecting
Cloudy Skies: A Roundup Of Linux Cloud Storage

Dropbox. You will be presented with a dialog box that allows you to either create a new account, or allows you to sign into an existing Dropbox account. An icon is placed in the notification area of your panel. From there, you can access the integration of the Dropbox tools with your computer, manage Dropbox preferences, monitor the most recently changed files, pause the syncing of files, exit Dropbox, or access the Dropbox website. From then on, every time you start your computer, Dropbox will be started when you boot your computer.

Currently, Dropbox provides 2 GiB of free storage. Paid, fee-based plans are available. You can purchase 50 GiB of storage for either $9.99 per month, or $99.00 per year. The 100 GiB storage plan will cost you $19.99 per month, or $199.00 per year. By signing friends and family up to a Dropbox account (using you as a referral), users of the free Dropbox plan can earn an additional 500 MiB of storage per person added, up to an additional 16 GiB of storage space. Users of the paid 50 GiB plan can earn up to 32 GiB additional storage space, and up to 64 GiB of additional storage space for users of the paid 100 GiB plan.

Overall, Dropbox has experienced widespread adoption among Linux users. This is largely due to the fact that they were one of the first to offer Linux desktop integration. The PCLinuxOS Magazine makes fairly extensive monthly use of Dropbox, to share files between those of us who create the PDF version of the magazine and Rudge, who attends to the layout of the HTML version of the magazine.

SpiderOak offers 2 GiB of free online storage, with a file size limit of 2 MiB per file.

Once you sign up for the service and launch the desktop client, you navigate to the folder(s) on your computer that you want to share. You mark those folders for sharing, and your files in those folders are uploaded (synced) to the SpiderOak servers.

SpiderOak is an excellent cloud storage solution. It is different than most, so you will have to think differently when using it.

It seems that each service brings their own brand of uniqueness to bear, and Wuala is no different in that regard. Owned by LaCie, the same company that makes external drive storage units, Wuala (pronounced like the French “Voilà” (vwa-lâ)) gives away 5 GiB of free data storage, like many other cloud storage providers.

In October 2011, Wuala doubled the free storage offer from the initial offering of 1 GiB free storage to 2 GiB, apparently in order to better compete in an increasingly competitive cloud storage market. Then, on April 24, 2012 – the very same day that Google Drive was announced – Wuala sweetened the deal even more, increasing the free storage space to 5 GiB, which matches the free space offered by Google Drive and other cloud storage providers.

Another thing that sets Wuala apart from other cloud storage providers is their limit on the file size of uploads is much larger, allowing up to 100 GiB files. While some providers, such as ADrive, expressly prohibit the encryption of files in their ToS, Wuala uses client side encryption, encrypting your files in 4 MiB “chunks” before they are uploaded to the Wuala servers. Wuala employs AES-256 encryption and RSA-2048 key exchange and signatures for your files. Not even LaCie, the owner of Wuala, can decrypt your files, making them very secure. Wuala also mirrors your data in different locations, so that, should there be a hardware failure, your data remains intact.

You can install the Wuala desktop client from the PCLinuxOS repository. When you launch it, you will get a window similar to the one shown below, and an icon will be loaded into the notification area of

SpiderOak is somewhat unique in that there is no web interface for uploading files. To upload and share files, you must install the SpiderOak desktop client from the PCLinuxOS repository. Currently,
your panel, giving you access to pausing or resuming downloads, exiting Wuala, or launching the desktop client.

The desktop client window supports drag-n-drop uploads. Just open your regular file manager and drop the file into the folder you want to upload it to. As it’s uploading, there is a vertical progress bar to the right of the file to give you visual feedback on how much of your file has been uploaded to the Wuala server. There is also a progress indicator at the bottom center of the Wuala window.

Once it’s finished uploading, the file will be synced to all of your other devices that also have Wuala installed, automatically, just as happens with your Dropbox folder. If you are on a computer or device that doesn’t have Wuala installed, you can always launch Wuala from the web to access your files on any computer with Java installed.

To share files and folders with others, it’s equally as easy. When you right click your mouse on a file, simply select “Copy Link” from the context menu, and paste that link into your email, chat window, or however else you are sharing it. You can also share the entire folder of data by selecting “Share Folder” from the right click context menu, and selecting “By Secret Web Link” from the “Share Folder” submenu. Click on the “Copy” button in the dialog box that opens, then share that URL with those you want to grant access to the folder. Only folks with the “secret” URL can access that folder (besides yourself). Emailing yourself a link to your files will insure that you can access your files, even if you are using a computer connected to the net, but without Java installed.

Wuala’s usage guidelines are fairly short and straightforward. While asking that users refrain from posting copyrighted works, they also ask that you mark anything beyond a PG or PG-13 rating as “not family friendly.” This is easy to do, simply by right clicking on the file or folder, and selecting “Mark As Not Family Friendly (18+)” from the context menu. You can also view their ToS here.

Just as with most cloud storage providers, Wuala also offers users an opportunity to purchase additional storage space. You can get 20 GiB for $39 per year (average of $3.25 per month), 50 GiB for $79 per year (average $6.58 per month), or 100 GiB for $129 per year (average of $10.75 per month).

Overall, Wuala represents a very solid performer in cloud storage solutions for the Linux desktop. Because of its vast cross platform support, your files will also be just as easily accessed among all of your capable devices, regardless of the OS installed.

Summary

Now you know about at least seven cloud storage solutions for your data. Are there more cloud storage providers out there? Oh, yeah! It seems like there are hundreds, if not thousands, of them – with new ones springing up every day. In fact, I could probably fill a multi-volume book with a description of the players in this race for your data, even if I froze the list at today’s number of providers. Just do a Google search for cloud storage providers, and you’ll see what I mean. I’ve whittled the list down to just those that have the highest potential interest to Linux users, based either on the popularity and visibility of the provider (Google and Amazon, for example), or based on whether the cloud storage provider has a Linux desktop client. The latter whittled the list down quickly, since Linux support is usually the exception, and not the rule.

The cloud storage provider arena is looking much like the dot.com explosion of the 1990s did. I suspect that, in the end, the very same thing that
happened with the dot.com explosion will happen to the cloud storage providers. Millionaires and billionaires will be made, while many others will lose everything they ever had. That is, the strong will survive, and in the aftermath, there will be many, many casualties. Of course, along with those casualties goes any data that you may have stored with them. You will be wise to pick your cloud storage provider very, very carefully. But right now, it seems everyone wants a piece of that pie, and for the moment, there seems to be enough pie to go around.

Cloud storage is an old idea that has resurrected its head, with a new game plan. It originates in the deep past of networked computing, when storage was expensive and applications and data were all stored and accessed from a mainframe computer over a dumb terminal. During this era of computing that couldn't have possibly been foreseen then, the new twist on this old idea is to make your data accessible on all of your connected devices. Just as it was then, there are advantages and disadvantages to remote storage. The obvious advantage is being able to access your files from wherever you happen to be. Among the disadvantages are the security of your files, and the ability of the cloud storage provider to be able to restore your files in the advent of a hardware failure.

I suspect that the true benefits of cloud storage lie somewhere in between the two extremes. Clearly, cloud storage offers the increased ability to collaborate with others on projects. Meanwhile, I (for one) will continue to save all of my important documents and data locally, on my own computer, while using cloud storage solutions to supplement my locally stored data, and to provide access to that data when I am away from home.
QEMU: The Other Virtual Machine (Part 1)

by Patrick G Horneker (phorneker)

VirtualBox has been the emulator of choice for many articles in PCLinuxOS magazine. It is easy to use and configure, and is very popular in the world of information technology.

However, VirtualBox is not the only game in town when it comes to x86 machine emulators.

There are two other machine emulators available for installation from Synaptic: QEMU and Bochs. Bochs emulates x86 machines manufactured in the late 1990s, and was the first PC emulator for UNIX systems. Hardware emulated in Bochs is very limited, and Bochs was designed to run early UNIX and DOS systems.

What Does QEMU Emulate?

QEMU emulates the following processors:

* x86 (both 32-bit and 64-bit) machines
* PowerPC
* Oracle (formerly Sun Microsystems) Sparc (32-bit and 64-bit)
* MIPS (32-bit and 64-bit)
* various ARM processors (found in Android tablets and early PalmOS devices)
* Motorola ColdFire (5206 and 5307)
* Etrax Cris
* Microblaze
* SH4
* Xtensa

Note: ColdFire is now manufactured by Freescale Semiconductor, a spinoff of Motorola Corporation. The Motorola reference here is to show the evolution of the 680x0 processor once used in early Macintosh systems. The 680x0 evolved into the ColdFire processor.

The Etrax Cris and Microblaze are typically used in embedded systems that run Linux.

SH4 is Hitachi’s processor that is a RISC system (as is Microblaze). This processor was used as the processor for Sega’s Dreamcast video game console. Note: The Dreamcast was the first video game console with a connection to the Internet. The bad news is that Embedded Windows was used as the operating system for Internet access and to run the games available for the console. The good news here is that Linux is available for Dreamcast.

An article at http://www.linuxfordevices.com/c/a/Linux-For-Devices-Articles/Running-Linux-on-the-Sega-Dreamcast/ shows how this is done. This is not for the faint of heart as this is a complicated procedure due to the fact that the Dreamcast console does not include a hard drive.

Dreamcast games have two tracks on the CD-R. The first track is an audio track, obviously for the game’s music. The second track is a standard ISO9660 containing the game’s program and data.

Tensilica’s Xtensa is also a RISC processor, but this is typically used with multimedia hardware such as DSPs for video and audio. (Look at how many televisions you can purchase today that embed Linux.)

Kernel Module Available Only for x86 Emulation

Like VirtualBox, QEMU comes with a kernel support module, which works only for x86 emulation. Called KVM (for Kernel Virtual Machine), the kernel module allows QEMU to use the host processor instead of the emulated processor for faster performance.

x86 Hardware Emulated

For x86 machines, QEMU emulates the following hardware:

* Choice of VGA video with VESA 2.0 extensions or Cirrus 5446 video adapter
* Standard mouse and keyboard
* Floppy disk
* Serial and parallel ports
* Choice of SoundBlaster 16, ES1370, Intel 82801AA AC97, Intel HD, Adlib OPL2, Gravis Ultrasound GF1, or Cirrus CS4231A for audio
* PCI and ISA bus
* IDE with ATAPI support for disk storage

Network cards emulated for the PCLinuxOS installation of QEMU are:

ne2k_pci: Novell NE2000 (PCI version)
i82551: Intel 82551
i82557b: Intel 82557
i82559er: Intel 82559
rtl8139: Realtek 8139
e1000: Intel EtherExpress 1000
pcnet: AMD PCFastIII (same as that emulated in Virtualbox)

Disk Images in QEMU

QEMU can use actual storage devices such as hard drive partitions, floppy drives, or CD/DVD drives, or QEMU can use virtual disk images (of any size).
The **qemu-img** utility is used to create and manipulate disk images.

The **dd** command (featured in Peter Kelly’s article) creates disk images in the **raw** format that can be used with QEMU, VirtualBox and other emulators.

To create a hard disk image for use with QEMU, we must invoke the **qemu-img** utility as follows:

```
qemu-img create <disk name> <disk size>
```

where `<disk name>` is the name of the image you wish to create. By convention we append `.img` for virtual disks that represent hard disks (and sometimes floppies), and `.iso` for images representing CD and DVD disks.

```
<disk size> represents the size of the image file in bytes. Append G to represent gigabytes, M to represent megabytes, and K to represent kilobytes. (T can be used to represent terabytes, but this is impractical for this type of operation as it would take an enormous time to create such a virtual disk image.)
```

Suppose we wanted to create a 4GB disk image to install FreeDOS. We would type the following:

```
qemu-img create freedos.img 4G
```

This creates a virtual disk of 4 gigabytes in size in the **raw** format. The **raw** format is the default used by this utility to make virtual disk images portable between emulators such as VirtualBox, VMWare and Bochs.

Another advantage of using **raw** format images is that once formatted in the virtual machine (or created with the **dd** command), they can be mounted under PCLinuxOS. Just create a mount point (where feasible) and mount the disk image.

**qcow2**, **qcow** and **cow** are virtual disk formats that are native to QEMU. **cow** stands for Copy on Write.

Disk images here start with enough space allocated to store the disk format, but not the data. As data is written to the disk image, the image expands as needed (hence Copy on Write), not unlike disk images in VirtualBox.

**qcow** is the native disk image format for QEMU versions before 0.12.0. It is supported in current versions of QEMU for compatibility reasons.

The current version of QEMU for PCLinuxOS supports the **qcow2** format.

Disk images in the **raw** format can be converted to **qcow2** with the **qemu_img** utility invoked as:

```
qemu-img convert -f raw -o qcow2 <raw image> <qcow2 image>
```

**vdi** format is used to create virtual images that can be used on VirtualBox 1.x. Use **vmdk** if you want to create virtual disk images for use in VMware 3 and 4. Use **vpc** is you want to use the virtual disk image in Microsoft's Virtual PC.

To check the integrity of a disk image, type:

```
qemu-img check <disk image>
```

If you are not sure what type of disk image you are using on QEMU, type:

```
qemu-img info <disk image>
```

You can resize disk images with the following:

```
qemu-img resize <disk image> <size>
```

size can be an absolute value (use K for kilobytes, M for megabytes, and G for Gigabytes) or a relative value, that is prepend the value with + or - followed by the size you wish to expand (or shrink) the disk image.

**Invoking QEMU From the Command Line**

The x86 machine is the default emulation for all versions of QEMU. Unless you want to install an operating system designed for another supported processor, we shall invoke QEMU for an x86 machine.

Typing **qemu** by itself will open a new window and display the following:

![QEMU window]

Obviously, nothing could happen here as QEMU has nothing to work with. This was invoked no disk images supplied, and no CD or DVD disks in the DVD/RW drive.

Let us see what happens when I insert a operating system CD/DVD in the DVD drive. For this test, I shall use a copy of FreeDOS 1.1.

Invoking **qemu** here yields the same result. Clearly, we need to tell QEMU what disk images are to be used. In addition to disk images, you can use actual disk devices on the host instead of virtual disk images.

Just as with real computer hardware, QEMU needs some type of disk or network connection to boot an operating system. (You can use QEMU to boot an operating system from a boot server through a network connection.)
Disk Parameters

QEMU supports two floppy drive devices and four hard disk and/or CD/DVD devices, either actual hardware devices or virtual disk images (hard drive or ISO images).

- **-fd**a First floppy drive or floppy image
- **-fd**b Second floppy drive or floppy image
- **-hd**a First hard drive image or actual partition
- **-hdb** Second hard drive image or actual partition
- **-hd**c Third hard drive image or actual partition
- **-hdd** Fourth hard drive image or actual partition
- **-cd**rom ISO image or actual CD/DVD drive

**Note:** You can use **-cdrom** or **-hdb** for ISO images, **but not both** on the command line as **-cdrom** and **-hdb** represent the same device to QEMU.

Theoretically, we can use up to two six disk devices for a QEMU session. In practice, we want to emulate a typical x86 machine setup, which consists of a single floppy drive, a CD/DVD drive and a hard drive. Hence, we want to supply parameters for **-fd**, **-hda**, and **-cdrom**.

One of the better uses for QEMU is to implement an old school PC running either DOS and/or Windows on PCLinuxOS. Unless you have a properly licensed version of DOS and/or Windows (usually packaged for retail sale or on some restore disks that come with old school PCs), you must use FreeDOS to implement a DOS machine in QEMU.

For FreeDOS, we only need **-hda** and **-cdrom** devices. Why use **-fd**a? If you have old DOS-based software, chances are, the software was distributed on floppies.

**Let's Implement A DOS Machine**

Why not just use DOSBOX for this task? DOSBOX was designed to run DOS-based games with VGA/SVGA graphics that run off one CD-ROM or one floppy diskette and nothing more.

QEMU emulates a full x86 machine to run most any software that ran under DOS, including parallel and serial ports. (DOSBOX does not emulate any serial or parallel ports.)

Assuming we have already downloaded the FreeDOS ISO image (which should be in your Downloads folder as **fd11src.iso** as of this writing), it is a good idea to create a directory to store your virtual machines.

On my laptop, I created a directory called **vm** (for virtual machines). Within **vm**, I created a directory called **iso** to store CD/DVD images, and a directory called **floppies** to store floppy disk images.

To get FreeDOS to where it is going to be used, I typed:

```
mv ~/Downloads/fd11src.iso ~/vm/iso
```

Now, the FreeDOS ISO image is in a directory where we can easily access it. Let’s get into the **vm** directory. (Type **chdir ~/vm** to get there.)

```
qemu-img create freedos.img 2G
```

on a command line (next page, top left).

We now have a 2GB virtual disk image ready to be formatted and FreeDOS to be installed. Notice that the **raw** disk format is used. This is useful as after we install FreeDOS, we can mount the disk image on the command line and transfer files to and from the disk image as we need to. We will need to do this when we setup networking for FreeDOS.

**QEMU: The Other Virtual Machine (Part 1)**

Now, we have the parameter for **-cdrom**, namely **iso/fd11src.iso** which contains the FreeDOS ISO disk image.

**Note:** This version of FreeDOS is **not** a LiveCD as is typical for most Linux distributions, but is instead a basic installation CD, which gives you a bare bones DOS installation.

Next, we have to create a disk image in which to install FreeDOS.

Typically, DOS supports only the FAT16 filesystem for versions 6.22 and earlier. FAT16 supports partition sizes of up to 2GB. FAT32 was introduced with Windows 95 and supports partition sizes of up to 137GB.

FreeDOS supports both FAT16 and FAT32 partitions, with FAT32 being the default for new FreeDOS installations.

Under PCLinuxOS (and other Linux distributions), a FAT16 partition is mounted as type **msdos**, whereas a FAT32 partition is mounted as type **vfat**, when dealing with disk images on the command line.

So what size of a disk image do we want to create for a new FreeDOS installation? VirtualBox defaults to a 512MB partition for FreeDOS disk images. I recommend 2GB for a FreeDOS installation as this is the maximum amount of space available for a typical DOS machine. We can then type:

```
qemu-img create freedos.img 2G
```

on a command line (next page, top left).

We now have a 2GB virtual disk image ready to be formatted and FreeDOS to be installed. Notice that the **raw** disk format is used. This is useful as after we install FreeDOS, we can mount the disk image on the command line and transfer files to and from the disk image as we need to. We will need to do this when we setup networking for FreeDOS.
But we're not done yet. We need to tell QEMU which disk to boot FreeDOS from. The -boot parameter takes care of this detail. The following is a list of what we need to supply to QEMU as to where to boot from:

- `boot a` Boot from the first floppy image or physical drive
- `boot b` Boot from the second floppy image or physical drive
- `boot c` Boot from the first hard disk image of partition
- `boot d` Boot from the CD/DVD disk image, CD/DVD drive, or second hard disk image or partition

Those of you who are familiar with DOS and/or Windows will easily recognize the parameters as drive letters that you use to access the disks.

Since we are installing FreeDOS from a CD image, we will need to boot from the CD image. Hence, we need to use `-boot d` as the other necessary parameter.

**We Are Ready To Install FreeDOS**

Now we have all necessary parameters needed to install FreeDOS on QEMU. Let us now invoke QEMU with the following command line:

```
qemu -hda freedos.img -cdrom iso/fd11src.iso -boot d -m 32
```

The first thing we need to do is to allocate space on the disk image for FreeDOS. Select Create Drive C: to accomplish this task.

I recommend using FAT32 support for installing FreeDOS, so you may answer Y to this question. When you mount `freedos.img`, you will mount this disk image with type `vfat` rather than `msdos` (center, right).

Next, we get the FreeDOS version of the famed FDISK utility. Here, you will need to create a new partition on your virtual disk. Fortunately, you may press `Return` here as the correct selection is already selected.
We will need to create a primary DOS partition to install FreeDOS. The extended partition options are for hard drive (and images) greater than what FAT16 or FAT32 will allow for one partition, not unlike allocating primary and secondary partitions on PClinuxOS.

This is a no brainer here. Since we are using the entire virtual disk to install FreeDOS, we can safely say Y here. The entire disk is used to create the partition and make it bootable from QEMU.

This screen makes it obvious we have done so. Press ESC twice and this will appear (center, top):

QEMU will reboot FreeDOS from the CD image. When the installation screen comes up, press Return to start the installation process.

Press Return to create the new filesystem. You will need to type YES (type in the actual word YES). FORMAT.EXE will run and format the entire virtual disk. When FORMAT is finished, the following will appear:

Press 1 to start the actual installation of FreeDOS. Press return to select the default keyboard layout.

Of course, we will need to format the hard drive image. This sets up the FAT32 filesystem on the virtual hard drive image.
You will get a notice about the General Public License. Press Return to accept the license. There will be one last message about being ready to install FreeDOS. Press Return again and this appears:

![FreeDOS Install](image1)

being installed from the virtual CD image.

Follow the prompts on the screen until this appears:

![FreeDOS Installer](image2)

Select option 1 from this menu to install the bootloader. When the process is completed, you will return to the main menu. Choose Boot from system hard disk to boot FreeDOS from the virtual hard drive.

You will get a boot menu. Press Return and the following will appear (top, right):

You have successfully installed FreeDOS on QEMU.

Next time, I shall show you how to configure virtual hardware on QEMU.


The PCLinuxOS Knowledge Base

It Belongs To YOU!
Picasa On Linux: There ARE Alternatives

by Paul Arnote (parnote)

It’s no secret. On April 20, 2012, Google announced on the official Google Blog that it was ending further development or support for the special Wine-based version of Picasa that they had been providing Linux users since 2006.

"We launched a WINE-based version of Picasa for Linux in 2006 as a Google Labs project. As we continue to enhance Picasa, it has become difficult to maintain parity on the Linux version. So today, we’re deprecating Picasa for Linux and will not be maintaining it moving forward. Users who have downloaded and installed older versions of Picasa for Linux can continue to use them, though we won’t be making any further updates."

Never mind that virtually all of Google runs on Linux. Never mind that Google has versions of Picasa for OS X and Windows. Never mind that Linux users have used Picasa for the past six years. Like a redheaded stepchild, Google has now kicked those Linux users out of the nest. Linux users, once again, fail to “feel the love” from Google.

Surely, this will bring no tears to those growing number of Linux users who have tired of Google’s incessant data mining. Under KDE, users are flocking to Gwenview and digiKam to manage their photo collections. Gnome has the popular Shotwell application. Native Linux alternatives do exist. For those of us who accept (but may not necessarily like) Google’s data mining, and who have used Picasa to store and share our photo collections with family and friends scattered around the world, the news leaves Linux users of Picasa high and dry.

To be perfectly honest, I originally started out to write an article on how to install the Windows version of Picasa under Wine. In order to log into your Picasa account, you also have to have Microsoft’s Internet Explorer 6 installed. Picasa will run under Wine – there is no doubt about that. Internet Explorer 6 can be installed via either winetricks or PlayOnLinux. It’s even more odd that Google’s Picasa requires Internet Explorer 6 to enable logging into Picasa, since they are backing away from supporting that very same version of that very same browser with their search engine. However, that whole exercise did not work out so well. Instead, I looked for other Linux alternatives, and I was surprised at what I found.

Picasa Web Interface

Before talking about Linux-specific alternatives to using the Picasa software, anyone can use Picasa’s web interface to upload images and manage their collection of images.

Once you are logged into your Picasa account on the web, click on the “Upload” button, as shown in the upper right corner of the screenshot above.

Picasa will default to storing your uploaded pictures in a new album, named with today’s date. You can rename that album, or select one of your existing albums. When you select the “Add to an existing album,” the text entry box will be replaced with a drop down list, populated with the names of all your existing albums.

Now, just drag your images into the box outlined with the dotted line, or click on the blue bar in the center of the box to select the images you want to upload to the chosen Picasa album.

One reason Picasa is such a popular image storage and sharing service is the generous space that Google provides. As you can see from the image above, users are provided with a full 1 Gib of storage space for their images. If you are a Google+ user, you can store images up to 2048 x 2048 pixels
for free (as in, not counting toward your 1 GiB storage space quota, meaning free storage). All non-Google+ users can store images up to 800 x 800 pixels for free. Additionally, you can store videos less than 15 minutes in your Picasa albums for free.

Once you reach your 1 GiB free storage space, your images will be resized to make more room. Users can purchase additional storage space, which is shared between Picasa and Google Drive. 25 GiB of storage will cost you $2.49 per month, and 100 GiB of storage will cost you $4.99 per month. You can purchase up to 16 TB of storage, by upgrading your Google account.

Shotwell

The first of the Linux alternatives is Shotwell. Surprisingly, despite being a Gnome application, it doesn’t pull in a ton of Gnome dependencies when you install it. In fact, I didn’t notice a single Gnome dependency when I installed it on my Xfce desktop.

Using the File > Import from folder option, I was able to access the folders of pictures stored on my hard drive. Just one caveat: be sure the folder doesn’t have any video files in it, or Shotwell will crash when importing the images. At least it does on my computer.

Select “Preferences” from the “Edit” menu, and go to the “Plugins” tab. There, you can choose which service(s) you want to be able to upload your images to. For me, I don’t “do” Facebook, I’m not especially fond of the Flickr service, and don’t use the others all that much (if at all). So the only one I have checked is Picasa, since I have a ton of images stored there – and shared from there with friends and family, near and far.

When you first go to “Publish” your images, you will have to sign into Picasa. In the upper right corner, you can select which service to upload your images to, if you selected more than one. Since I selected only Picasa, that is the only one available for me to use.

Enter your Google sign in on the “Email address” line, followed by your Google password. Click on the “Login” button and you will be logged into Picasa.

You can choose to upload images to an existing album, or create and name a new album to upload pictures to. If you want the album to be listed in your public gallery, be sure to check the box next to “List album in public gallery.” Select the size you want your uploaded images to be (I chose “Medium”). The default value is 800 x 600. You can also choose “Large” (1600 x 1200) or “Original size” (which, with today’s modern digital cameras, that can be quite...
large). Once you've made all your selections, click on the “Publish” button to upload your images to Picasa.

As you are uploading, a progress bar will display in the dialog box to inform you of the upload progress. Once your upload completes, log into your Picasa album and you will see your new pictures displayed in your Picasa collection.

Gwenview

Gwenview is a KDE application that allows you to upload your images to not only Picasa, but also 13 other destinations.

Gwenview will display the images in the selected folder as a series of thumbnails, much as Shotwell does. Select the images you want to upload. You can select multiple images at a time by holding down the Ctrl key when selecting individual pictures, or by holding down the Shift key to select a range of successive images. Then, select the Plugins > Export menu, and select the destination to where you want to upload your images.

When you select PicasaWeb from the list of services, Gwenview will ask you for your Google login information.

The images you selected to upload to Picasa will show up in the next dialog box, in a long, vertical list. You can select one of your existing albums from the drop down list, or you can create a new album as the destination for your new uploads.

If you select a new album, you will be shown another dialog box, where you can name that album and give it a description. You can also select the access permissions for that album. Select OK after you have
your new album information entered and your access permission set up as you want.

Now, just click on the “Start Upload” button and your images will be uploaded to Picasa. As each image upload is completed, a check mark is placed in front of the completed files, while a progress bar in the lower right corner shows you the progress of your uploads.

**digiKam**

The other KDE application here is digiKam, which has found its niche among KDE users to help manage the images from their digital cameras. Of course, it will also manage all of your image collection. It really doesn’t care what the source of the image is – whether it came from a camera or not.

Once you’ve selected the images in the right pane of the digiKam window that you want to upload to Picasa, select the “Export” menu, then “Export to PicasaWeb...”

One nice feature is that digiKam and Gwview use the same plugin to export images to Picasa and the other services. Therefore, the dialog boxes are exactly the same between Gwview and digiKam.

Another nice feature that is shared between digiKam and Gwview is that both applications allow you to import images from Picasa. This is a nice feature when you have multiple computers, have uploaded your images from one computer, but want access to those images from the other computer.

When you select “Import from PicasaWeb” from the Import menu, you will see the dialog box below, allowing you to log into Picasa and select the album you want to download to your computer.
Select the album you want to download, then click on the “Start Download” button to download the contents of the album to your computer.

Summary

Google may have abandoned Linux users, but true to form, Linux provides alternatives. The version of Picasa that Google was providing to Linux users was, in actuality, the Windows version of the application, wrapped in a Wine container.

There are advantages to having native Linux apps to fill the void created by the lack of a Linux version of Picasa. First of all, Linux users will no longer have to use a Windows version of Picasa to manage their Picasa accounts. Secondly, the Linux applications that fill the Picasa void are applications that most Linux users will have installed on their systems, anyways.

As is usual, Linux provides its own solutions. The Linux community has, through the years of being ignored, became accustomed to “rolling their own” solution. The abandonment of Linux by Google with their Picasa software leaves Linux users in the familiar position of finding their own solution.
Bald Brick: Faithful Forum Foibler

Blackbird wanted to be a Bald Eagle but something went terribly wrong

How Blackbird became Bald Brick

Perhaps Blackbird should have tried to be a chicken

Blackbird

Professor Bald Brick Lecture # 999

The Forum loves Bald Brick no matter who he wants to be

Bald Brick screaming "Let me out of the Forum!!"
Move Hard Drive
From One Computer To Another

by AndrzejL

Due to a hardware failure I had to say goodbye, (I think permanently, this time), to one of my fave machines. I have a spare one, so I am not going to cry over it. But what got me worried for a moment was whether I would be able to get my data / installation from the old machine to the new one. In the past, when I was moving from one machine to another, I was just reinstalling fresh with my latest remaster.

This time, however, I was moving an hdd from an AMD based machine to an Intel based machine. The hdd had an installation that was running on the a64 kernel. Intel will not run well with an a64 kernel, I thought. I was right. The first thing I noticed was an hdd timeout, (due to different modules/architecture). And, soon after, a kernel panic followed. Yeah, that went well, I thought.

The remaster was made with an a64 kernel, too. So, that idea was as good as... I didn’t want to lose all my data or to spend a great deal of time reinstalling from scratch. I had too many customized settings on this installation. So, I thought for a while, and I recalled a great post by a good friend of mine, Old-Polack on the PCLinuxOS forum.

With the hdd in the machine, I booted the computer with PCLinuxOS 2011.6 KDE4 LiveCD and chose Console from the grub options. Then I logged in as root using password root.

Then I issued the following commands:

```
mkdir /here
mount /dev/sdaX /here (In my case it was sda1)
mount -o bind /proc /here/proc
mount -o bind /sys /here/sys
chroot /here
service network start
apt-get update
apt-get install kernel-2.6.38.8-pclos1.bfs
```

This basically means that I changed the root point of the filesystem from the LiveCD to my hdd installation, started a network connection there and installed a BFS kernel. After this was done, I pressed the power button and allowed the machine to power-off slowly.

Then I booted the machine from the HDD installation, but I chose the BFS kernel entry from the grub boot screen, which now appeared there and was ready to be used. After a while of waiting for the modules to compile, I was able to boot the machine into the KDE4 desktop.

I redid my xserver, sound, cpufreq and grub (defaulted to BFS kernel) settings, and I was good to go. All my stuff was still there, but in a new machine, and without reinstalling...

Now you can use this method to reinstall kernel / upgrade kernel / install apps / change settings, and so on, if booting from the HDD installation fails.

Awesome trick. Thanks Old-Polack.

Now can someone please tell me how to do the same thing under Windows without the BSOD?? Not that I need it ... I was just pointing out another Linux advantage.

Visit Us On IRC

- Launch your favorite IRC Chat Client software (xchat, pidgin, kopete, etc.)
- Go to freenode.net
- Type "/join #pclosmag" (without the quotes)
Install & Run Pure-FTPD Server On PCLinuxOS

by David Moore (YouCanToo)

So you want to install and run an FTP server?

First, you must choose one of the many FTP server offered in PCLinuxOS. For this how-to, I will choose one of the following three big ones. All are available in Synaptic, along with many others.

VSFTPDP
PROFTPDP
Pure-FTPD[a]

I chose Pure-FTPD. The reason I chose this is because it is fast, secure and it also has a GUI module for Webmin. PROFTPDP also has A GUI module for Webmin. Unfortunately, VSFTPDP does not. If you do not intend on using Webmin or don't need a GUI, VSFTPDP is a very secure and fast server, and easy to setup and run.

Since I chose Pure-FTPD, I will also need to load Webmin from Synaptic. Once loaded, I will need to download the pureftpdd.wbm module for it from Webmin.com.

Now, we will begin the process by installing some packages. Open Synaptic and click on “Reload” first. When that has finished, search for ebmin and mark it for installation. Then, search for Pure-FTPD and mark it for installation. Click the “Apply” button. Webmin may require other packages to be installed.

Once we have installed these packages, we need to make sure these services are set to start upon booting. Open PCC (PCLinuxOS Control Center), choose “System,” and then choose “Manage system services by enabling or disabling them.” Scroll down the list until you find Pure-FTPD. There will be two different ones listed:

Pure-FTPD
Pure-FTPD-xinetd

Note: Only check one of these two services to start! If the Pure-FTPD service is not already checked, make sure the box labeled “On boot” has been checked. DO NOT check the pure-ftpd-xinetd service. Now, click on the start button. This is going to start up the Pure-FTPD server. We will see some dialog saying that Pure-FTPD stop failed. This is normal, since it was not running to begin with. Then, below that, we will see something like this:

OK

Congratulations! Our basic FTP server is running. We DO NOT have to go any further if we simply want to use the Pure-FTPD default values. Installing Webmin just gives us a GUI to make changes to these values. We can also edit the Pure-FTPD configuration file from a console window.

Now to start Webmin, open a console window as the root user, and type the following:

cd /etc/webmin

and then enter the command

./start

Webmin will ask some setup questions. Just press return to use the default settings. It will eventually ask for a login password. We will need to enter one
of our choosing. Note that our password will not be echoed to the screen. After entering our password, it will ask if we want to use SSL (Secure Socket Layer). We will need to either enter a ‘y’ for yes, or a ‘n’ for no. I suggest we choose ‘y’ and use SSL to access the webmin GUI. After this, it will ask us if we want Webmin to start at boot time. Again, I would choose ‘y.’ Now Webmin will setup its configuration, and then tell us how to access the GUI.

https://localhost:10000

Now, in our web browser, go to https://localhost:10000 and connect to Webmin. The first thing we will notice is that our web browser is going to complain.

Click on “I Understand the Risks.” Now another more dialog will popup saying:

Click on the “Add Exception” button. Well, we are almost done. Another dialog box will open. Click on the “Confirm Security Exception” button on the lower left of the dialog box.

The dialog box will vanish, and we should be greeted with Webmin’s login page. Now, let’s login to Webmin. Enter the username. Just in case you were sleeping, the default username is “admin.” The password is the one that we chose during the setup.

Now that we have logged into Webmin, we need to install the Pure-FTPD module. To do this, in the left hand pane, click on “Webmin.” From the menu, click “Webmin Configuration,” and from the right hand pane, choose “Webmin Modules.”

Now locate the pureftp.wbm module that you downloaded from from Webmin.com and saved to your hard drive. Once selected, click the “Install Module” button. If everything went right, you will see:

The following modules have been successfully installed and added to your access control list:

Pure-FTPD server in /opt/webmin-1.580/pureftp (212 kB) under category Servers

In the left hand pane, click on “Servers” and then “Pure-FTPD Server.” Once more, move over to the right hand pane and click on “Module Config.”

In the image, these are the lines we need to change. We need to remove the word “local” from each line. Also, we need to change the line for the Pure-FTPD config file to “/etc/Pure-FTPD/Pure-FTPD.conf.” The paths should look the same as the ones in the image above. Once this has been done, scroll to the bottom of the page and click “Save.” Now you will be greeted with Pure-FTPD Server GUI Page.

From this page, we can change your Pure-FTPD configuration, add Pure-FTPD users and see who is
logged onto our FTP server under the Pure-FTPD Monitor button. One last thing has to be done. Click on the Pure-FTPD configuration button. This will bring up the configuration file. Scroll down until you find the following section:

```bash
# If you want to enable PAM authentication, uncomment the following line
PAMAuthentication yes

# If you want simple Unix (/etc/passwd) authentication, uncomment this
# UnixAuthentication yes

This needs to be changed to read:

```bash
# If you want to enable PAM authentication, uncomment the following line
# PAMAuthentication yes

# If you want simple Unix (/etc/passwd) authentication, uncomment this
UnixAuthentication yes
```

Notice that the PAMAuthentication line has been commented out and the UnixAuthentication line has been uncommented. Once these changes have been made, click “Apply Changes,” and then “Save.” Now we are ready to use our newly installed FTP server.

For those of you that did not install Webmin, you also have to edit the Pure-FTPD configuration file. You will find it at /etc/Pure-FTPD/Pure-FTPD.conf[h] and you will need root access to edit the file. You need to make the same changes to the PAMAuthentication and the UnixAuthentication as we did above. To restart the server, as root in a console window enter the following:

```
[root@laptop webmin-1.580]# service Pure-FTPD restart
Stopping Pure-FTPD: [ OK ]
[root@laptop webmin-1.580]#
```

For more information about the different configuration settings, see man Pure-FTPD, or visit the Pure-FTPD Document Page at http://www.pureftpd.org/project/Pure-FTPD/doc.
LXAutostart: A Closer Look

by Daniel Meiβ-Wilhelm (leiche)

Under LXDE, there is no simple autostart function, and the script won’t work if you store it in an autostart folder. An autostart function is available for LXDE, but most of the time, you need to use an editor, or you must copy and paste startup files from /usr/share/applications to ~/.config/autostart. But what should you do when you want to add gnome-power-manager? Some users say it doesn’t work, while others say it works. So what must you do to be sure that it works?

I think there is a really simple solution. Use LXAutostart. From the beginning, you have the power to say “yes” or “no” to get it working. If it is correctly initialized, you will see the following window.

The tab Added Starter displays your current startup programs in the hidden autostart folder. Click on the Available Starter tab, and choose the program you want to add.

Isn’t it simple?

Note: if you add or remove a program, LXAutostart will restart and display Added Starter.

Now we want to add Gnome-Power-Manager. But how do we go about it? Clicking on the Advanced button brings up the window below.

Here you see some applications that are added, but not activated. Those applications are preceded by the # symbol. Only logininfo.sh & is activated. sleep 10 is a script command that waits 10 seconds before proceeding to the next application in the list. To add an application, you can click the OK button. You will then see the window below.

An entry line will be displayed. Enter a command for your program that should start when you login.

Click the OK button to activate your application. LXAutostart will then restart, and you can again click on the Advanced tab to check if your entered command is set.
You can create a backup of your current autostart script by clicking the **Save** button. If you get an error, or lose your current autostart functions, you can use the **Restore** button to restore your backup.

The **Exit** button will close the current window. To see if it works, you should logout/login.

If 10 seconds is too long for the sleep command, you can edit the entry by clicking the **Edit** button.

```
# Created by Daniel Mrak
# License GPL
# Website http://www.pclinuxos.com
# LX-Autostart is a simple way to start yourfavorite
# applications automatically, when LXDE starts up.
#================================================================================
# (en)Add entries here to set up applications to automatically
# start whenever you start the desktop.
# (de)Haben Sie hier Ihre Anwendungen ein, die Sie automatisch
# starten wollen, wenn die Arbeitsfläche startet.
#================================================================================
# (en)Add your program in a new line. As sample:
# (de)Legen Sie hier ein Programm in der neuen Zeile ein. Als Beispiel:
# # xbar -ps top -a above-desk &
# #!DOCTYPE su
# (en)Don't forget the ampersand (&) sign.
# (de)Vergessen Sie das und (&) Zeichen.
# Sie können Anwendungen starten oder deaktivieren mit "&".
#================================================================================
# (en) Wait 20 seconds before starts up.
# (de) 10 Sekunden warten bis zum starten.
sleep 10
```

This is a simple editor to activate, remove, or edit a command for your autostart functions in the script. After clicking the OK button, LXAutostart will restart to load the new edits.

I hope you like it. It will help you to manage all your autostart applications on your LXDE desktop.
Genealogy With GRAMPS, Part 1

by Jan Bullock (cstrike77)

I've been working on my genealogy for almost 36 years. I will be 59 years old later this year, so I got an early start. It all started with a question to my dad about how long our family had been in America. He told me he didn't know, and suggested I should write a letter to his brother, which I did. About a month or so later, I got a 9 page letter, front and back, documenting our family tree back to Jesse Bullock, my third great-grandfather. Listed were all the children every couple had, including the ones who died young, and the wives maiden names, but no dates! So I was fairly lucky in that he was the "keeper" of the family history, and shared it with me. I've been sharing it ever since.

Genealogy is one of the fastest growing hobbies almost world wide. Queen Elizabeth encouraged all citizens in the U.K. to do their genealogy. And the internet has turned into a genealogists gold mine of information, with some of it free, while other information is available for a fee. Who Do You Think You Are has spiked Ancestry.com's website use during the program when it's on, and the original show was done in the U.K. These articles are going to be centered on how to get started, and how to enter your data in GRAMPS.

Getting Started On Your Ancestral Search

Getting started might be easy or hard, depending on how much you know about your family, if you have parents or grandparents living, or other extended family. One thing that was stressed long ago when we were doing everything on paper was to ask questions of all your living relatives. That's fine for the younger people just getting started, but for some of us, that time has long passed. I might suggest, for the younger budding genealogist's, that one thing that was taught to us long after my grandparents passed is to use some sort of recorder to record stories/history of your grandparents and parents, while they can remember stories told to them, or what they may have lived through.

When I started way back when, we started with two pieces of paper, a pedigree chart to document our direct lineage and a family chart to list father, mother, and in some cases their parents and your siblings. We always did these in pencil, so if we made a mistake we could easily erase and fix it. Today, I think besides your genealogy program to enter your data in, which is basically your paper, I think I'd start out with paper records also, because you can always take a file folder and a spiral notebook to a library. Some places you go to search for records will only let you take these items, and some others will not let you bring computers in.

Starting at your local Library is a good thing, as there are many books on genealogy. I recommend Handbook on American Genealogy, a very good starter book that breaks down what records are available for every state and county in the U.S. Another good book would be Genealogy Online. The last book I recommend would be Who Do You Think You Are?

Starting at your local library is partially a drag, because of all those internet records to search through. If your family has been in one area for quite some time, there are resources like "a history of Peoria County" or "reminiscences of Peoria County 1850-1900." Using "Peoria County" as a place name, you can insert whatever county you live in.

The other "plus" is either using the Library's computers or your own laptop (if they have wireless) to access www.ancestry.com, or Ancestry Library, which is like an Ancestry World account. Most librarians have Ancestry available, and I think the LDS (Latter Day Saint's or Mormon's) Family History Centers have both Ancestry and www.familysearch.org available. Think of familysearch.org's website as Ancestry, but free. Most everything available at Ancestry is on familysearch.

Also available at your local Library are census indexes, where you can look for your ancestor on the census, and then use ancestry or familysearch to find the document. Also, normally there's a Genealogical or Historical Society in the town or county where you live. A lot of them have canvased the local cemeteries and published books on them, which usually will be available at your local library also.

The one thing I did researching my Bullock family was pull everything on the surname in the two counties they lived in. So I had a lot of data which was my family, and found out later that the data I could not fit into the family happened to be another non-related Bullock family that my uncle had told me about.

I've picked Elisha Ping (1819-1890) and his wife, Lucretia Kuykendall as the family to focus on for this article. There was an obituary in my local paper for a Kuykendall and he was born in Decatur, Illinois, not too far from Vigo County, Indiana where Elisha and Lucretia married. I didn't have much on Elisha's family, and I have another genealogical search done on my family and that didn't have much either. I wanted to find out if the Kuykendall that passed here was related to the ones in Indiana. I had looked into this family a while back, while tracing the genealogy.
of Roy Martin Ping, whose name is listed on the Vietnam Wall. I've traced his family back to Robert Ping, who joined the Indiana 16th Infantry in Vigo County, Indiana. So I know that Roy Ping is a cousin, but not where he fits in the family. Elisha's son, Robert, went to the North West with him.

So let's get started. I searched [www.mocavo.com](http://www.mocavo.com), a free genealogy search engine. You can sign up for a free account, upload a gedcom (more about that later), and receive an email alert when they match information from your gedcom. So the entries I found for Elisha+Ping are shown below. The first entry shown is [www.findagrave.com](http://www.findagrave.com) which even has a picture of Elisha. The second visited link has a very good sourced article of his life:

George Miller moved to the Walla Walla, WA, area and became the third and fourth white families to settle in that area. They named the town Dayton. Elisha served two terms as County Commissioner (beginning 1864), three terms on the Territorial Legislature (1867, 1871, 1873) and three terms on the Dayton City Council (1875, 1877, 1883).

For forty days during the winter of 1861 the mercury was 28 degrees below zero, it snowed every day for thirty days. The snow was 32 inches deep on the level even though they did have a slight chinook. Here is an interview with George W. Miller telling of his farming operations near Dayton, Washington:

"During the season of 1861, we (We being Miller and his father-in-law, Elisha Ping) plowed up that portion of Dayton from the Chase Cabin west to Patit Creek and from that creek west to the foothills where Brooklyn now stands being something over 50 acres and farmed it two years. When harvest came the grain was cut with a turkey-wing cradle and bound and shocked. Then it was hauled from the fields and the grain tramped out by yoke of oxen which were used on the farm. Then a scoop shovel was used to throw the grain up in the air that the wind might blow the chaff out. The first crop was sold to George Ives to feed his pack train of mules during the winter of 1861-1862 for which not a cent of payment was ever made. When Ives was hung in Montana we felt avenged. My father-in-law, Elisha Ping and I both built cabins on the Patit in 1861. In the fall of 1862, I built a barn of lumber, being the first lumber structure erected in the county. The lumber was whipsawed on the Eckler Mountain at the big spring near the Fewster Place."

Source: "Dayton's Main Street and more Newsletter" Nadine Dieringer Publisher, in 1998 received permission to print it as compiled by Mrs. Charlotte Smith and printed by the Dayton Chronicle in 1965. [http://www.rootsweb.com/~wacolumb/index.html](http://www.rootsweb.com/~wacolumb/index.html)

HON. ELISHA PING. - In this kindly face we see another of the honored pioneers of the Pacific Northwest. Born in Pulaski county, Kentucky, March 13, 1819, Mr. Ping's early years were spent in the chase after the fascinating phantom of "Out West" which lured so many of our best people to these pleasant shores.

His early years were spent in Illinois and Indiana. In the latter state he was married in 1840 to Miss Lucrecia Kuykendall. She died in December,1863. In 1851, Mr. Ping, with his young family, went to Wisconsin; but they still yearned for the "Westmost West," and the next year set out across the plains for Oregon.

Reaching his destination in safety, he made St. Helens his first stopping-place. After short residences in St. Helens, and in Douglas and Linn counties successively, Mr. Ping removed in 1860, to Dayton, Washington Territory. His original homestead is now part of the townsite of Dayton. That beautiful and fertile region was then part of Walla Walla county, Columbia not having yet been created. Mr. Ping served his county two terms as county commissioner, with conspicuous ability. His first term began in 1864. He was first elected to the legislature in 1867, again in 1871 and again in 1873. He was elected to the council in 1875 and also in 1877, and again to the assembly in 1883. He was a member of the first Republican convention of Washington Territory.

As a legislator, Mr. Ping was always prominent in his advocacy of measures which would conduce to the
good of the people, and to the maintenance of honest government. Not less active has he been in the government of the town where his lot has been cast. He was a councilman three years, during which time the expenses of the city were reduced about half, and retired only because of his wish to cease active work.

He was married to his present wife, Sarah E. Alley, in March, 1882. Her native state is Maine.

Mr. Ping is now enjoying in his elegant home the well-won rest from his life of toil. His five children, three daughters and two sons, are all married and happily settled in life. In his foresight, enterprise and patience, Mr. Ping is one of the finest examples of the pioneers of this great northwest. He merits his success.

Source: History of the Pacific Northwest, Oregon and Washington, 1889


15 Nov 1850 census of Sugar Creek, Vigo County, IN, found the Ping family living in dwelling #128:

Elishu Ping 31 KY Farmer
Sarah 27 IN
Jemima 6 IN
John 4 IN
Robert 3 IN

3 Aug 1870 census of Walla Walla County, WA, found the Ping family living in dwelling #109. Next door in dwelling #108 was son Robert and family:

Elisha Ping 51 KY Farmer
Malinda 48 IL
Frank 14 OR
Julia 12 OR

30 June 1880 census of Dayton, Columbia County, WA, found Elisha boarding with the Sarah Tarboy family in dwelling #462:

Elisha Ping 61 KY KY TN Farmer.

This is what a source should look like. There's also a book done on the Kuykendalls published in 1919 which has one of the best first person accounts of their trip from Wisconsin to the North West Territory, which I found on Google Books. However, there is way too much to include here.

Finding Sources

So, next we go to Ancestry.com and see what's there. On the Ancestry.com site, we search Elisha Ping, born in Pulaski County, Kentucky in public family trees and we come up with the entries shown below, and probably a bunch more. I didn't look further. You'll notice that all have his birth pegged at 1819. Birth records were not recorded in Kentucky until 1916 (by state mandate). This goes for most every state in the U.S.. But there are other birth records for Pulaski County Kentucky in the late 1800's. All births after 1816 were supposed to be registered by law at the County of birth, but the registration of births was often delayed. My dad was five when his birth was recorded. Dad, his father and his uncle made a buckboard trip into town and his birth was recorded. Now remember, even though we can't see anything more than what's shown on the screen without being a paid subscriber, we know Elisha Ping's wife was Lucretia Kuykendall. So we go back and do another search for Lucretia Kuykendall with no birth date. And we have information on a few Lucretia Kuykendall's with birth years ranging from 1815 – 1822. We know she was born in Vigo County, Indiana.

So from this information, we know that Lucretia's father was Harry Kuykendall and her mother was Sarah "Sally" Smith, which is also shown in the Kuykendall book. Now here's where it gets interesting and why I say to verify sources. These records show a range of birth dates, and findagrave shows Feb. 10, 1823. So who's right and who's wrong? Looking at census data from 1850 shows Elisha as 31 (1819) and Lucretia as 27 (1823).

Since we know that this census was taken after her birthday (April) I'd say the 1823 date is correct. The book on the Kuykendalls of America shows 1822 as date, so we know where the errant data may have come from. However, I would make a note of the two
dates shown, note where they came from, and the evidence I have picked that should be the correct date. I'd also email some of these researchers and ask their opinion on what I have found, and explain my opinion on why I picked a date different from what they have.

Findagrave.com is one of my favorite sites. I can search by last name, United States, pick my state and, if needed, the county I want to look at. Normally I look at all in the state by that surname, but you have the option of just searching a particular county. In the last month, they've added another 2 million names, but be aware most of the information on findagrave is canvassed and pictures taken of the graves themselves. So normally, if there is no marker, there is no entry in findagrave.

Rootsweb was taken over by Ancestry a few years ago, but it is still a free site. There was an exodus of web sites and data taken down and moved elsewhere at the time, but so far nothing contained on the site has been moved to the pay site. There is so much available on rootsweb we could do half an article on what's there. The one thing missing for the time being is the SSDI (Social Security Death Index). It's been taken off-line and is only available for the time being on Ancestry's site. There has been a petition circulating on the internet to bring back that information source.

One of my most used sections is the family trees. Whenever I'm searching for information, it's the first place I go to see if anyone's posted their genealogy.

My next most used section would be the email lists. I'm subscribed to so many lists, I don't have a count. To make matters worse in searching for family information, I'll subscribe to a list after searching the surname I'm working on, post a question to the list and, even if I don't find anyone researching that branch or get my question answered, I'll still stay subscribed to the list. If later someone can answer the question I have, they can post to the list and I'll get that as an email, instead of having to remember I posted there and to go back and check to see if anyone has answered. There are lists for surnames, which I'm only subscribed to a few. There are lists for states, which are broken down to the county level. This is what I'm subbed to.

There are lists for Wales, though to post to a few of them you have to speak/write in Welsh. I also do genealogy in the U.K., in Shropshire and some of the surrounding counties, and I'm subbed to quite a few lists for those areas. For me, since I'm internet challenged, and I only get an hour or two every day, I don't use the online message boards too often. They generally are not being used as much as they have been in the past.

Under Getting Started, you can take a tour of rootsweb, and take a look at all they offer. This is a screenshot (below) of the family trees section. As you can see, there are a bunch of people researching Elisha Ping. You can also see some have the spouses reversed. Some have Sarah E. Alley and some have Sarah E. Tarbox. Sarah E. Alley's married name was Tarbox. The reversing of spouses could be because they found them in the wrong order, and their genealogy program can't reorder them like GRAMPS and most other programs can.

Some are still clinging to programs they've used for years, I've used PAF since about 1985 or so. But with GRAMPS, I've found a new program I like. That's saying a bunch, as every couple of years I have looked. I'd download a few of the free programs and enter some data in one database and import my genealogy into another database, just to see how they worked. Normally gcdom importing was exceedingly SLOW!

Speaking of gcdoms, I said I'd explain them later, so I might as well do it now. A gcdom is a text file saved in a specific format to be able to transfer genealogical data from one person to another or one program to another. There have been standards for the gcdom format forever, and there was an article in Dick Eastman's newsletter from a couple of months back, which I've not gotten around to reading yet.

Since I've mentioned Dick Eastman's newsletter, I will say it is one of the longest running genealogy newsletters, and the only one I subscribe to. It is cutting edge, informative and even covers Linux every once in awhile. Want to know how to build your own high speed book scanner? They covered it. Want a hand-held page scanner? Again, covered. Both paid and free subscriptions are available. I'll be
the first to admit that not all subjects covered in the newsletter appeal to me, but there’s always tomorrow. Also, I need to mention that it comes out almost every day. There was an article in the newsletter a while back on deceased country singer Johnny Cash’s family. According to the article, all Cash in America are related, and originally came from Fife, Scotland. I have Cash in my line, but so far, I have not done much about it, as this is probably going to turn into a year long plus project.

Nevada, about a cousin who got divorced and remarried the same day. It took a week before the person had enough lookup’s to go to the courthouse, but I have a digital copy of his marriage. I had originally found the divorce and marriage on Ancestry. There are numerous family members with that name and I wanted to know which one it was.

Sadly, RAOGK lost their server on October 18 of last year, and Bridgett Schneider was in bad health. She has since passed, and her husband has said that the server will be back. For the present time they can be found on Facebook.

Online message boards or forums are helpful, too. The three best are on Ancestry.com, Rootsweb and www.genforum.com. Searching for ‘genealogy forum’ on the internet, you will find numerous forums, but these are the big three. The nice part about Ancestry.com is even if you don’t have a paid account, you can post to the forum, and they do offer some things free. The 1930 census was free for about a week. Most forums do not have the amount of posts they used to have. It’s like the lists - they are under-utilized or scanned for information and not posted to.

I myself might be a little guilty of scanning. I find little snips of information I don’t have on families and go from there. But in my own defense I do have a website and I do publish my genealogy on the site. So I’m sharing my information no matter where it came from.

Speaking of the genealogy, when I posted mine online I think there were around 2300 records, there are now over 20,000 records! I hate to admit, there was one person who added a lot of it and at the time I took his word on the entries, as I didn’t have access to Ancestry. I’m now going through a lot of it, and sometimes I find a mistake, which is one of the reasons I really stress sourcing your data.

Facebook has just made finding all things genealogical easier, since you can search genealogy and find all kinds of entries. One that I used to use that is only on Facebook now is Random Acts of Genealogical Kindness (RAOGK). There is data I’ve found there that I would not have found anywhere else. When you’re living in Illinois, have no way of traveling and no money to order records from another state, this website has been very helpful. They have volunteers almost everywhere.

You could email a person in a specific place who would look up a record you’d like to see and email it to you. I needed a marriage license in Clark County, Nevada, about a cousin who got divorced and remarried the same day. It took a week before the person had enough lookup’s to go to the courthouse, but I have a digital copy of his marriage. I had originally found the divorce and marriage on Ancestry. There are numerous family members with that name and I wanted to know which one it was.

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Let’s Visit GRAMPS

Now let’s get on to entering your data. Two files that need to be loaded in synaptic are pygoo and graphviz. I’m not too sure about the first but sure about the second one. Start Gramps and you will see this screen (below).
tab, click on the + again, and enter your source(s) of your birth (birth certificate). You could also change the confidence level to high, since you're using a reliable source. The thing I'd like to see would be a citation for internet sources along with a book source, but as far as I know there are no programs that have those type of sources yet.

After entering yourself, you can enter your spouse. I've kept both my mother's and my wife's genealogy separate. It is your choice here. At one time I had my wife's and my genealogy together, but I thought it would be better separated. I've mulled this option of adding them both back in, but I still like them separated. After entering your spouse's information, you can add your marriage information and children.

Here we have Elisha Ping and wife Lucretia Kuykendall entered in the database (below, left). Now would be the time to enter all of their children. If you make a mistake in entering the children in order, that's not a problem. You can go back and re-order both children and spouses if you happen to get them out of order. Most genealogy programs will let you do this, but there are some that won't let you re-order any records. You see I have a pedigree section on the right. This is a Gramps bar, and you can add this pedigree chart by right clicking on the tab and choosing to add a Gramplet.

There are a bunch of them to choose from, and I like having a pedigree chart on the right, as it makes navigating your genealogy much easier.

Here is a screenshot of my database at Elisha Ping (above, right). I'd always used at least two genealogy programs, one to enter data into, one showing the data that needed to be entered and gedviewer to search my own data and make sure that I was not entering more data than needed to be entered. There is so much overlapping information in my data that sometimes I already have most of the information, but not all of the family information entered.

Next month we’ll go into a little more data entry and looking at census records, marriage information and a few more websites.
Alternate OS: PC-BSD, Part 3

by Darrel Johnston (djohnston)

Installing any security updates and bugfixes is a snap. The update manager automatically starts when the desktop is started, and will connect to the chosen repository to check for available updates. While it is checking for updates, a yellow shield will be displayed as the icon in the system tray. After the update check is attempted, the resulting icon reflects the state of updates.

The snapshot above was taken from section 6.3 of the PC-BSD Manual, which covers the update manager. One day, I started PC-BSD and soon saw the round blue icon, indicating I had updates for installed PBIs. Actually, it was only one installed PBI.

Firefox was ready to update from version 10.0.3 to 12.0. That may seem like a large jump, until you realize that Mozilla now increases the major release number every six weeks. So, it was less than twelve weeks between updates. Updating was just a matter of highlighting the application name, then clicking the Update button.

After downloading, it was automatically updated. Note that a first time installation of Firefox is a much larger file than the one shown above. The difference between the older and the newer versions consisted of only 12 MB, and it was the difference between the two that was downloaded. That’s a very handy feature.

After posting the problems I had with KPorts in the PC-BSD forum, I was advised that KPorts had been troublesome for quite some time. The installed version was 0.8.2_4_1. Looking at the SourceForge wiki main page, we see that version 0.8.0 was released the last day of 2008. 0.8.1 was released April 1st, 2009, (a sign?), and 0.8.2 was finally released on December 13th, 2009. Well, at least it wasn’t a Friday. On the SourceForge FAQ page, the program’s author answers the question, “So what can KPorts 0.8.0 do?” His answer deserves some scrutiny.

KPorts 0.8.0 cannot install or deinstall ports/packages!
I know thats the whole point of the application, but it just isn’t done yet.
You can browse your portstree, search for packages and view all sorts of information about Ports and Packages. This should make some things easier and its nice to look at ;)

All I can say in response is that I should have done my homework! I opened the AppCafe, clicked on the Installed tab, highlighted kports and clicked the Remove button. Just like Linux, uninstalling the application left “link” behind, in the form of a hidden configuration directory in my home directory. I removed that, too.
With all that in mind, a PC-BSD forum user suggested I should use bxPKG as a GUIified port/package manager. I could either install a PBI or install from source. I still cannot locate bxPKG in AppCafe, the PBI manager. I located the tarball, last updated on April 28th, 2012, in the FreeBSD version 9 i386 repository’s stable section. I downloaded it, then unpacked the tarball to a directory. Next, I opened a terminal and changed to the /usr/ports/ports-mgmt/bxpkg directory. As user root, I entered make install clean. In a few short minutes, I had a fresh installation of bxPKG.

But, no desktop file. The executable has to be run from the root account. I could simply open a console and run it from CLI, but I created a desktop file for it. The first time I launched the program from the desktop file, KDE issued a crash warning, yet it recovered from the crash on its own. That should have been a warning sign.

Undaunted, I moved right along with bxPKG, as if I really knew what I was doing with this application. With the program window open, all system and PBI installed packages were listed in the left pane under the Installed Packages tab. I clicked the Updating Manager button at the top of the window (center, top).

An index was built and packages that could be updated were shown in a separate window.

With all packages selected, I clicked the Start button (top, right).

Nothing happening yet. I had to click the Start/Continue button.

Uh oh. All jobs completed with 14 problems. Let’s see if we can locate the source of the problems. PEBCKA?
I closed the bxPKG application and rebooted. KDE would not start due to at least two missing shared libraries. There were probably a few more missing, but only two were shown as preventing me from starting the display manager. This time, I did not have to reinstall. I had backed up the virtual machine before I began this fiasco, and it was a simple matter of restarting from the backup VM.

There are a few ways of installing packages in PC-BSD. To update the ports collection, we need to open the System Manager from the PCBSD Control Panel.

Under the Mirrors tab, we can select the repository we wish to use. The one shown was selected by default. It is also one of the mirrors listed in the United States section of the pulldown list.

Under the System Packages tab, we see the same sections listed we did when first installing PC-BSD. However, now the sections are greatly expanded with subsections.

Under the General tab of the System Manager, we can generate a diagnostic sheet. Clicking the button will produce a dialog window, asking you what to name the file and where to save it.

Under the Tasks tab, we see three buttons. One is what we were looking for to fetch the ports tree (next page, top).

Clicking the button will store the ports tree from our chosen repository to our local hard drive. We can then install binary packages, or compile from source code within that ports tree (next page).
I did not fetch the system ports tree. I had already done enough damage.

Under the Misc tab, we can choose whether or not to show a splash image on boot, choose a custom image to use and choose our preferred language. There is also an option to force IBUS keyboard input (center, top).

I had looked through the games section in AppCafe and did not see Frozen Bubble listed. However, browsing the /usr/ports/games directory, I saw a subdirectory for frozenbubble. So, I decided to use the CLI package manager to install the game. After opening a terminal, I switched to the root account and issued the command pkg_add -r frozenbubble.

After installing, I was given suggestions for starting the game if I received an error message (top, right).

That doesn’t sound promising.

I got perl script errors when trying to start the game.

One interesting capability of PC-BSD, because of its FreeBSD heritage, is the use of ports jails. A ports jail is a sandbox for applications that run isolated from other system processes. It can be used for testing applications, as well as isolating troublesome ones from the rest of the system. PC-BSD has created a GUI application for setting up ports jails,
called, aptly enough, Warden. You can read all about ports jails in section 7.1 of the PC-BSD Handbook. And, you can read about the Warden program in section 7.10. I'm not going there. I'd probably end up locking myself in and throwing away the key.

PC-BSD's aim and purpose is bringing FreeBSD to the desktop and making it easy to use. I would say it's 99% of the way there already. I would also have to say that it requires a bit more "horsepower" to run than an equivalent Linux version with the same basic capabilities and running the same desktop.
ms_meme's Nook: Down South In Texas

Down South in Texas near old Houston Town
There's where I met Texstar as he was a foolin' around
With his OS he'll always be found
Down South in Texas near old Houston Town

He had a vision he did embrace
I always saw a glad smile upon his face
Forever a workin' at such a fast pace
Finally that Windows he did replace

Then he christened it PCLOS
And gave it a fond caress
He took it to the forum
It was a great success

Down South in Texas near old Houston Town
Praises for Texstar how they do abound
All Linux users he does astound
Down South in Texas near old Houston Town
IBM Lotus Symphony 3.0.1

by Crow

Editor’s Notes: PCLinuxOS has, as its primary office suite, LibreOffice. It can be installed on your PCLinuxOS system by running LOManager, also known as LibreOffice Manager. As such, LibreOffice is supported in PCLinuxOS, and LOManager installs LibreOffice from a special section of the PCLinuxOS repository. Users are advised to not install applications from outside the official PCLinuxOS repository. The applications in the repository are tested to ensure that the installation of one application doesn’t break any other application – or a dozen other applications – in the process. Installing applications from outside the official PCLinuxOS repository will create an unofficial installation, and will render your installation unsupportable. Users installing outside applications (e.g., applications from outside the official PCLinuxOS repository) will be on their own if they run into troubles and will not be eligible to receive support in the PCLinuxOS support channels (i.e., the PCLinuxOS forum). If you choose to follow the instructions in this article, you do so at your own risk, and with full knowledge of the aforementioned.

In another development, IBM recently announced that it was refocusing its efforts on Lotus Symphony. IBM, instead of continuing development of an independent fork of OpenOffice (which is what Lotus Symphony is), is now rolling the entire code base for Lotus Symphony over into the Apache OpenOffice project. IBM announced that under their refocused efforts, they will now be helping the Apache OpenOffice community with further development of the application. IBM has prepared a fairly comprehensive FAQ to help answer any questions Lotus Symphony users may have regarding this recent development. – Paul Arnott, Chief Editor

I tested IBM Lotus Symphony when they released the first alpha in Windows. I liked the looks of it, but it felt heavy and unpolished.

Lately, I’ve been looking for an alternative to LibreOffice, and although Koffice looked fast, it is still somewhat buggy. I remembered Symphony and went to the IBM site http://www-03.ibm.com/software /lotus/symphony/home.nsf/home. I found that you can get an RPM meant for other distros. What I did next is not recommended in the PCLinuxOS forums. If you do the same, your installation may become unstable and won’t be supported if you need help. It is better to have a spare partition or use Virtual Box.

I downloaded the following packages:

symphony-3.0.1.i586.rpm (271 MiB)
symphony-nl1-3.0.1.i586.rpm
symphony-fp1-3.0.1.i586.rpm

The first two are Lotus Symphony 3 (as in Beta 3) installation and language packages, and the third is a fix pack. IBM recently released, and I downloaded, sym.dic.es.zip, a Spanish dictionary.

Installing an RPM in PCLinuxOS is very simple, as long as the package is compatible. First, you have to install “RPM Installer” from Synaptic, then just right click the file, go to “Open with...” and choose RPM Installer. I installed in the order listed above without problems.

The suite puts an icon in your system task bar. Launch the program from there, and you are presented with a clean and pleasant layout. You can choose from Document, Presentation, Spreadsheet or your more recent files.

Click the Document option and you get a tab with a well designed right side bar, which duplicates several of the options of the top bar. Fortunately, the top bar can be changed as you like. The bar at the right gives you four tabs: Properties, Styles, Predesigned Images and a Document Browser.
Return to the Home Tab and choose Presentation. It will open a new tab with the options outlined before, plus a series of templates.

Last is the Spreadsheet. It also opens in a tab and the included option is Functions.

Symphony includes a Web Browser that opens (you guessed right) in a tab and lets you download plug ins or search for info while you are working, which is pretty handy.

If you have several tabs opened and you don’t know which one you need, click the “Show Miniatures” icon. You will then have an arrangement of your opened tabs to choose from.

IBM has a gallery with clipart and templates ready to download. They are simple, but can be useful.

In short, Symphony is based on OpenOffice, but is much better in terms of usability. The tabs let you work with several programs like a text processor, presentations and web browser for the occasional search without cluttering your desktop. Also, the right bar is a better solution than the MS Office ribbon. It feels faster than OO.o and LibreOffice (although that is subjective), and it has that “professional” look that makes it look beautiful.

The only thing I would add is a split view, which is very useful when you are comparing documents. Maybe they will do that in the future.

**Answers to Mark Szorady’s Double Take:**

(1) Foot different; (2) Glasses frames missing; (3) Copier4 counter longer; (4) Drawer missing; (5) Window different; (6) Copier tray missing; (7) Clock larger
The Golden Age Of Computing

by Patrick G Horneker (phorneker)

Smartphones and tablets are slowly but surely replacing the laptops, netbooks, digital cameras, and media players we use today. From what I have seen, they are great for entertainment and social networking purposes. When it comes to productivity, these devices still leave a lot to be desired.

For example, how do you backup the data on an Android tablet? Through cloud services, of course. Even Carbonite (http://www.carbonite.com) provides data backup services for a monthly fee. But there is a problem that many users of these services do not think about.

What if the cloud services provider goes out of business, or otherwise gets shut down (as in the case of MegaUpload). Unless you have a local copy of your data on physical medium, you are out of luck when it comes to preserving your data.

This issue alone makes me long for the days when all computing was done on local machines, all data was stored on hard drives and floppy diskettes, and printers were connected through a parallel port cable.

In those days, networking meant physical connections to another computer through Ethernet or a dialup (landline) modem connected to a serial (RS-232) cable.

The Golden Age of Computing is a new series to bring back those memories.

Through Synaptic, PCLinuxOS has the tools that enable us to relive those days, namely VirtualBox, QEMU, Bochs, and to a lesser extent WindowMaker, Lessstif, AfterStep and FVWM2.

My WindowMaker on PCLinuxOS series brought the interface used on the NeXT machine to PCLinuxOS. WindowMaker implemented only the interface, not the complete system. For that we would need to download and build the source files that make up GNUstep, which is itself a time consuming task.

VirtualBox, QEMU and Bochs all emulate 80x86 machines. Through the FreeDOS project (http://www.freedos.org), we can build a DOS machine inside PCLinuxOS.

Historical Note: FreeDOS was made possible thanks to a Caldera Systems vs Microsoft case which took place from 1996 to 2000, during which Caldera was able to prove that much of the code for CP/M was used in MS-DOS. Details of the case can be found here.


I have already showed you that with my QEMU: The Other Virtual Machine article, and there are other articles that show you how to install FreeDOS on VirtualBox.

Computing in those days was more than just DOS. It was also computing in the age of NeXT (which I have shown through WindowMaker), CP/M, Apple Macintosh (and its predecessor Lisa), IBM mainframes of the 1960s and 1970s, the Atari, Commodore, Apple II series, TRS80 and many others.

Of course, there are many video gaming systems that were around in those days, too.

Besides VirtualBox, QEMU and Bochs, PCLinuxOS has emulators in Synaptic for the following (as of this writing):

1. Dega (emulates Sega Master System/Mark III/Game Gear)
2. DOSBOX (useful only for DOS games)
3. DOSEMU (the first DOS emulator for UNIX systems)
4. ep128emu (Enterprise 64/128, ZX Spectrum 48/128 and Amstrad CPC 464)
5. Hu Go! (Emulates TurboGrafx consoles[b])
6. Kega-fusion (another Sega Genesis and Game Gear emulator)
7. OpenMSX (Microsoft's attempt at a standardized operating system for first generation home computers back in the 1980s.)
8. PearPC (Emulates PowerPC machines)
9. SDL MAME (Emulates numerous processors developed in the 1970s and the 1980s, used mainly for emulation of arcade game machines, but could emulate several home computers as well)
10. VICE (Emulates Commodore machines based on 6502 and 65C02 processors)
11. e-UAE (Emulates Amiga machines, requires KickStart ROM, not included in the package).

Commodore has risen from the ashes with reincarnated Commodore 64 and Amiga machines. The new Amiga resembles Apple’s MiniMac in
design. Also, Commodore has released a Debian variant called Commodore Vision. All the new Commodore (and Amiga) machines can run PCLinuxOS.

So far, I have demonstrated the NeXT system look and feel with WindowMaker, and have showed you how to install FreeDOS on QEMU.

Emulating older computer systems in terms of software is one thing. Emulating physical hardware for older computer systems is another (primarily due to legal issues regarding the hardware, and the system ROM chips), unless you actually own the physical hardware you are trying to emulate.

There are other emulators not in Synaptic that are available for downloading and installing:

**Hercules** ([http://hercules-390.org](http://hercules-390.org)) emulates IBM System 370/390 and the 64-bit z-Series mainframes. Operating systems for the S370 and S390 emulation (created in the 1970s) are available in the public domain. With this, you can run an IBM Series 370/390 on PCLinuxOS, and is very useful as a database server. You will need to install x3270 or (from Synaptic) to access the emulator.

You can also install Slackware S/390 ([http://www.slack390.org](http://www.slack390.org)) on this machine if you want to run Linux on Hercules.

**MIX** and **MMIX** are Donald Knuth’s theoretical machines normally used for teaching of assembly languages. You can download a version of MIX from the GNU Project website ([http://www.gnu.org/software/mdk/mdk.html](http://www.gnu.org/software/mdk/mdk.html)).

Another part of the Golden Age of Computing can be installed on PCLinuxOS. I am talking about the TeX/LaTeX document publishing system also developed by Donald Knuth back in the 1970s. PCLinuxOS comes with both TeXeX and Texlive. Essential parts of this system are installed automatically when you install **TeXmacs**, **LyX**, **Texmaker**, **Kile**, or **Texworks** from Synaptic. Other components of TeX/LaTeX can be installed from the Publishing section within Synaptic.

This system is still useful today thanks in part to the aforementioned programs in the previous paragraph, and the fact that document source files can be compiled to PostScript or directly to PDF easily.

This article is only an introduction to a new series. I have already started with installing FreeDOS on QEMU and did the WindowMaker series.

The new series will start with a continuation of FreeDOS on QEMU and Virtualbox.
Encode It With QR Codes

by Paul Arnote (parnote)

You see them everywhere. Little black boxes with smaller black and white squiggly boxes in them. They may be on your passport, the bottle of ketchup you bought, printed in the newspaper or magazine you are reading, or on your next concert ticket. If you don’t have a smartphone, you probably never gave them a second thought. But now that I have my smartphone, it’s easy to see how useful they can be.

Called QR codes (for Quick Response codes), they were invented in 1994 by Denso Wave, a subsidiary of Toyota Motors Corporation. Their initial use was to track vehicles through the manufacturing process. It’s essentially a two-dimensional barcode that’s designed to be decoded at high speed. While Denso Wave still retains the patent rights on QR codes, they can be used without license and their standards are clearly defined and published as an ISO standard. Denso Wave has chosen not to exercise their patent rights over QR codes, which has facilitated its meteoric rise in popularity among smartphone users.

The older style UPC barcode was designed to be mechanically scanned by a narrow beam of light. QR codes work a bit differently. Here’s the explanation from Wikipedia:

The QR code is detected as a 2-dimensional digital image by a semiconductor image sensor and is then digitally analyzed by a programmed processor. The processor locates the three distinctive squares at the corners of the image, and normalizes image size, orientation, and angle of viewing. The small dots are then converted to binary numbers and validity checked with an error-correcting code.

So How Do I Use Them?

Using QR codes is actually quite simple. On your smartphone, you will need to download and install a QR code reader app. Start the app and scan the QR code with the camera on your smartphone. The app will take care of decoding the QR code and display it on your smartphone’s screen.

There are several QR code reader apps available, and most are free. I use the free QR Droid widget app, which I downloaded from the Google Play store on my Android phone. Visit the website for the app to learn more, or to search for other similar apps. This article is about QR codes themselves, and not one specific reader.

Not All Created Equal

Currently, there are 40 (count them) different versions of the QR code standard, each defined by a different overall size of the image. By trial and error, using six samples of different QR code versions displayed on Wikipedia, I discovered that my app doesn't decode version 40 of the QR codes. But, almost everything else I scanned was readable.

There are also some propriety adaptations of QR codes that you may not be able to read. Just as with most anything else, there are forks, variations and adaptations of QR codes for specialized purposes. One such example is the “Micro QR” codes, which are also unreadable by the app on my phone.

Thanks to built-in error correction, those who create QR codes can (within reason) “embellish” their QR codes with graphics. For example, the following two codes work essentially the same:

Shown above is most of the first paragraph of this article. I am one of those people who fell into both categories. I just got my smartphone – a Motorola Razr Maxx. Until I got it, I really didn’t give the “little black boxes with black and white squiggly boxes” a second thought. But now that I have my smartphone, it’s easy to see how useful they can be.
They will both take you to the English language home page for Wikipedia. If you have a smartphone, try them out. The “embellishment” helps make the QR code readable by those two-legged creatures that tend to use them – humans.

So … What Do QR Codes Do?

QR codes can do several things. They can contain several types of data, and typically, the QR code scanner app will decode and identify the data the QR code contains. QR codes can contain plain text, website or email addresses, telephone numbers, or even SMS text messages.

Here’s a QR code that contains textual data (the text it contains is immediately after the QR code):

```
http://www.pclinuxos.com
```

Notice that I have the web address in human-readable form immediately below the QR code, rather than through the middle of the QR code (like the Wikipedia QR code earlier). I did this by importing the QR code from ... and opening it in Gimp ... oh, more on that later. It’s a personal choice, but I like this approach better.

Here is a QR code that contains a phone number:

```
901-555-7358
I need to discuss the plans for the weekend with you. Meet me at the coffee shop at 6:30 p.m. on the corner of Main and Fifth Avenue.
```

The phone number in the QR code is a fake number (123-555-1212). Go ahead. Scan it. You’ll see. This makes an easy way to share your phone number with other smartphone users. All they have to do is scan the QR code with their phone. No more problems transcribing the number, getting numbers transposed, losing scraps of paper or matchbooks with phone numbers written on them, or trying to be heard over the noise in a noisy restaurant, bar or concert.

You can also encode an SMS text into a QR code. Here’s an example (with the “translation” immediately following the QR code):

```
Encode It With QR Codes
```

"The PCLinuxOS Magazine is a free magazine produced by volunteers from the PCLinuxOS community, focusing on topics of interest to the PCLinuxOS community. The magazine is led by Chief Editor Paul Arnote and Assistant Editor Meemaw. http://pclosmag.com"

Here are a couple of QR codes that lead the “user” to a web site:
patrons to join a text messaging mailing list so they can be notified of news about the band. I think you get the idea here.

Creating QR Codes

Many of the QR codes appearing in this article were created at Kaywa QR-Code, using their free QR code generator. When you sign into the website, you’ll see this:

![QR Code Generator](image)

First, select your content type. You can choose between URL, Text, Phone Number, or SMS. Under “Content,” enter the data you want to have encoded into a QR code. Select the size of the QR code graphic you want (S, M, L or XL), then select Generate! Your QR code will appear in the white box at the left.

Kaywa provides a line of raw HTML formatted text that you can copy and embed into your blog or web page, or you can right click on the QR code image, and save the image to your computer’s hard drive. The latter is what I did for the QR code images in this article.

To further “embellish” my QR codes for the web address of the main PCLinuxOS site and of the main PCLinuxOS Magazine site that I used earlier as the example QR codes for website addresses, I copied the image into Gimp, added the human-readable text below the QR code, then re-saved the image.

Many of the phone apps also have the ability to create QR codes, so you can create them right on your phone. The QR Droid app I mentioned earlier has this ability, as do many of the other QR apps that are available. One thing that is nice about being able to create them on your phone is that you can also encrypt the data, using a 56-bit DES algorithm.

There are some inherent risks to QR codes. Unscrupulous individuals or entities can introduce viruses to your phone, cause your location or passwords to be revealed to (and collected by) a central server, or as happened in Russia a while back, unsuspecting users scanned a QR code that caused phones to send premium text messages at a cost of $6 (U.S.) each. You must simply use some common sense and restraint when using QR codes.

Anything For Regular Web Users?

Well … not yet. There is one college student, Kung Wong, who is working on a Firefox plugin that will recognize and decode QR codes. There are four parts to the postings, so search around to find all four parts (it’s not hard to find).

There is a beta plugin for the Chrome and Chromium browsers. It adds a menu entry to the right-click context menu that allows you to decode a QR code from an image. Keeping in mind that it’s still in beta, the reviews for this plugin were on the low side. It seems to need a bit more work before it’s fully functional.

Summary

As you can see, QR codes can be quite handy and useful. Certainly, you’ve seen them pop up all over the place in recent years. I hope this short guide helps demystify them for you, and enables you to better understand their use, as well as enabling you to make better use of them with your smartphone.
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