The LUGOD FAQ

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1. Administrata

1.1. What Is The LUGOD FAQ?

Some questions get asked repeatedly. When this happens, they may not get answered as fully or as well as they did before. Repeated questions are a waste of time and bandwidth for everyone. This is an attempt at providing high−quality answers for frequently asked questions.

1.2. Where can I find the LUGOD FAQ online?

The latest stable version resides at http://www.lugod.org/documents/faq. The latest beta version can be found at http://www.dirac.org/linux/lugod.

1.3. Are there translations available?

Ab, ohg vs lbh jnag gb genafyngr guvf qbphzrag gb nabgure ynathntr, lbh pyrneyl unir gbb zhpu gvzr ba lbhe unaqf. Tb ernq fbzr zna cntrf! :−)

1.4. Who Wrote This FAQ? Who Do I Contact About Corrections?

The author is Peter Jay Salzman `<p@dirac.org>`. I accept corrections and additions gracefully.

1.5. Who else can we thank for submitting stuff to the FAQ?

In alphabetical order, here is a list of people who have provided content for this FAQ:

Ryan Castellucci, Melissa Hardenbrook, Henry House, Mark Kim, Foo Lim, John McDonnell, Rusty Minden, Rick Moen, Jeff Newmiller, Dave Peticolas, Peter Jay Salzman, Lynn S. Wood.

2. The Basics

2.1. What Is LUGOD?

LUGOD stands for "The Linux Users' Group of Davis". Note the placement of the apostrophe. We are, as our name implies, a Linux users' group: a bunch of people who use Linux. LUGOD provides a means for us to support each other with technical know−how and also to provide a cool social network.

We are quite proud of LUGOD. People who come into contact with us like Dave Anderson (seti@home), Jeremy Allison (Samba), Rick Moen (linuxmafia.com), Chris DiBona (VA Software), and many others all say that LUGOD is the most active and prolific LUG they've ever seen. We do lots of stuff: support, social, evangelism. Why do we do it? Because it's fun! LUGOD started out as a purely social group. We're a bit too big for that anymore, but the social element is still an important aspect of everything we do.

Formally, LUGOD is a 501(c)7 non−profit club. It is supported entirely by volunteers and donations (not tax−deductable, alas). We have a constitution and a set of bylaws. Membership is free, though you do not need to join to participate.

2.2. Where Does The Money From Donations Go?

The mission of LUGOD is provide services, technical assistance and a social network to the local Linux using community. Every penny that LUGOD makes goes to fulfilling this mission and nothing else. We're financially responsible, but what we do sometimes take money.

Some donations go to expanding our lending library. We don't purchase many books because we get so many book donations, but sometimes there will be a book that people want and really ought to be in our library which has no chance of getting donated. A book on learning LaTeX is a perfect example.

We don't normally provide food at the meetings, but for special meetings, where the guest speaker is special, we like to have some kind of food and beverage at the meeting to help celebrate the event. The food you see at the average meeting has been donated by some kind soul.

Part of our mission is to hold monthly installfests. The people run the installfest give up an entire day (10:00am to 6:00pm) once a month for every month of a year. And it can be a very difficult job! These people are the heroes of LUGOD; without them, we couldn't have installfests. As a way of saying "thank you" to the installers, we provide them with pizza for lunch. We don't feed the attendees (we couldn't possibly pay for all of them), but they can donate money to the installfest fund and share in the pizza. We usually have around 10 installers each month. That can be a little pricey.

LUGOD is *constantly* holding public Linux demonstrations, classes, info sessions and speaking events. The money required for making copies of our pamphlets and handouts can really add up.

We constantly advertise since part of our mission is to get people to use Linux and attend our events. We don't usually pay for advertising since we don't usually have the funds for it. However, for really special events we will sometimes take an ad out in a newspaper like the Comic News Press.

2.3. Is LUGOD Associated With UC Davis? The City Of Davis?

When we first started, we considered being a registered UC Davis club. This would've given us a lot of money each year and certain perks like being able to register rooms in UCD for events.

Unfortunately, the price was too high. As a campus group, there are no restrictions on who could be a member, but officers have to be registered UCD students. We didn't want our non−student membership to be 2nd class citizens by not being elegible for officership. So we chose not to be associated with UCD.

It has been asked, "Why not become a campus club and just not tell UCD that your officers are not UCD students". We could've done that, and chances are that nobody would know the difference, or more importantly, care. We wanted to be honest. Imagine that!

When we outgrew Steve's Pizza, we began to look for a new meeting place. The city of Davis has many perfect meeting rooms, but they are very costly to rent. We applied for a waiver of room fees but the Davis City council turned us down. They would rather have let our group die than give us a room for free that wasn't being used in the first place. So, no, we're not affiliated with the city of Davis, either.

2.4. What's The Fastest Way To Make Friends At LUGOD?

We've all been there. You go somewhere and everyone knows each other, except for you. You don't know who to talk to and it's uncomfortable until you eventually make some friends. But some of us make friends faster than others. How do you speed up the process?

Firstly, have the webmaster (currently Bill Kendrick) take a picture of you at our meeting for our members page. This will allow other people to associate your name with your face so we can say hi to you at the meeting and know whom we're greeting.

Secondly, sign up for the mailing lists and interact with us. We can't expect to know someone without interacting with them. The mailing lists provide an excellent forum to interact and get to know you.

Thirdly, the single most important thing you can do to make friends quickly at LUGOD is to volunteer for something. We have *plenty* of things you can volunteer for. We're always looking for people to staff our monthly installfests and Linux demonstrations. LUGOD always has something in the works: classes... talks... booths at events... tons of stuff. We always need people to help staff these things. You don't need to be technically inclined either. We always need people to just "be there" to pass material out, field general LUGOD questions and direct traffic. By volunteering at events, your name is almost guaranteed to be remembered by the people at the event. Bringing food like chips and salsa to a few consecutive meetings is guaranteed to make you an extremely popular person.

2.5. Who Has Been Kind To LUGOD?

The following people have been most kind to LUGOD:

- *Joel Baumert*: Arranged for us to get some excellent meeting space at Z−World.
- *Z−World*: Even though we don't meet at Z−World anymore, it would be hard to overstate how kind Z−World has been to us. Jim Riffel, Joel Baumert and Z−World has donated so much to LUGOD that

I'm not sure how we'd ever pay them back.

- *Codeweavers*: Donated Crossover Plugin and Crossover Office to LUGOD for our demo machine.
- *Bill Kendrick*: Cofounded LUGOD, is the best webmaster we could ever hope for.
- *Maxim Group*: Donated sandwiches at lots of meetings.
- *Rusty Minden*: For tirelessly organizing our installfests.
- *mother.com*: Gave us our initial web connectivity and mailing lists.
- *nerdbooks.com*: For giving all LUGOD members an in−store discount of 10%.
- *O' Reilly Books*: Donated hundreds of dollars worth of books to LUGOD, most of which LUGOD donated to the Yolo Public Library.
- *Rod Roark of Sunset Systems*: Gave us our current web connectivity and mailing lists.
- *Christine Scobee*: For bringing lots of snackables to meetings.
- *Officers, current*: Mike Simons, Henry House, Melissa Hardenbrook
- *Officers, previous*: Rhonda Bailey (treasurer)
- *Remington Stone*: Co−wrote the bylaws and helped get tax−exempt status with Peter Salzman.
- *Steve's Pizza, Lampost Pizza*: Provided space for meetings before we found Z−World.
- *VA Linux Systems (and Joe Arruda)*: Gave us lots of swag.
- *VMware*: Donated a full version of VMware work station to LUGOD for our demo computer.
- *Marianne Waage*: Designed the LUGOD website.
- *Andy Jones*: Host of "Dr. Andy's Poetry and Technology Hour" who gives LUGOD radio airtime.

3. General Questions

3.1. How Do I Ask a Question?

It's not as easy as it sounds; if you think asking a question is trivial, you probably don't really know how to ask a good question. Asking for help involves 4 things:

1. The symptom: "My system does X".
2. When does X happen: "My system does X when I do Y
3. The output: "My system does X when I do Y. The output is Z"
4. Relevent entries in your system log.

So in other words, this question:

```
My computer hangs.  What could be causing this?
```

is much better asked as this question:

```
After my computer is on for a few hours, the system doesn't respond to the mouse or
keyboard.  The monitor is blank, and the only way I can recover from this is by hitting
the reset button.  I looked in /var/log/messages, but the last few entries just say
"MARK" (what does that mean?).  I'm running Suse 7.3 with a 2.4.2 kernel.  I can
successfully log into the computer remotely from my system at work when this happens.
```

And this question:

```
My CD writer doesn't work.  How do I configure it?
```

Is much better asked as:

```
I'm having trouble with my CD writer.  It's a SCISI Plextor Ultra writer.  I
tried to burn a copy of some mp3's using xcdroast, but it keeps burning
coasters.  My SCSI card is an Iomega EZ SCSI PCI card.  I have a SCSI hard
drive connected to the same card (but I know they're assigned different SCSI
id's) and it works perfectly.  I'm running Redhat 7.1 with a 2.2.18 kernel.
When I run xcdroast, it prints out:

   Starting to write CD/DVD at speed 4 in dummy mode for single session.
   Last chance to quit, starting dummy write in 1 seconds.
   Waiting for reader process to fill input buffer...input buffer ready.
   Starting new track at sector: 0
   Track 01: 0 of 59 MB written.
   /usr/bin/cdrecord: Input/output error.
   write_g1: scsi sendcmd: retryable error
   status: 0x2 (CHECK CONDITION)
   Sense Key: 0x5 Illegal Request, Segment 0
   Send email to p@dirac.org if you're actually reading this.
   Sense Code: 0x64 Qual 0x00 (illegal mode for this track) Fru 0x0
   Sense flags: Blk 0 (not valid)
   cmd finished after 0.002s.  Timeout 40s
```

3.2. Where Can I Get More Info Or Hints About My Problem?

One of the myths propagated by Microsoft is that nobody is around to help you when you have trouble with a Linux system. I admit, there's a problem with Linux support, but it's quite the opposite. At times, there's TOO MUCH support. Linux support is free and available 24/7. Linux support doesn't end with documentation−−−it starts there. LUGOD is available for help, as are countless websites, other LUG's, Usenet, Google and more.

Before asking a question on vox−tech, check out the vox−tech archives to see if anyone has asked it before:

```
http://www.lugod.org/mailinglists/search
```

Also, do a search on Google groups. Most questions that get asked on vox−tech have been asked and answered hundreds of times on a Usenet newsgroup. Google groups is the #1 best source of info about Linux.

```
http://groups.google.com/advanced_group_search
```

Next, for more verbose discussions about various topics, you can consult a HOWTO. The collection of HOWTO's is ever increasing and they're a good way to learn a topic which may not be covered by a book. You can probably find the HOWTO's on your system in `/usr/share/doc/HOWTO`.

If you don't see them then you should definitely install them from your Linux installation disk. Every distro carries the HOWTO's in various formats like text, postscript and html. If you don't know how to do this or don't have Linux installation CD's you can download the HOWTO's from The Linux Documentation Project:

```
http://www.tldp.org
```

They also have FAQ's, Guides and books at linuxdoc. Familiarize yourself with what's there, at least once, and the next time you need to know something about, say firewalling, you'll remember there were a few relevent sounding documents at www.tldp.org about firewalling. By the way, there is an excellent Linux FAQ at linuxdoc.org. Even seasoned Linux veterans can learn from it:

```
http://www.linuxdoc.org/FAQ/Linux-FAQ/index.html
```

Don't forget the man pages. Learn what **man −k** does. Don't forget the info pages. If you don't know how to use info pages, do **info info**, then press *h*. It's a 10 minute info page tutorial, and is worth every minute.

Sometimes you have a quick question and don't want to wade through all the information out there to get the answer. This is called wanting to be spoonfed. Sometimes we just don't have the mental strength to hunt down the answer to every small question we have. That's OK. Just don't make a habit out of it.

3.3. What Is The Best Linux Distribution?

Post this question to the comp.os.linux Usenet newsgroup. They'll have some excellent answers for you.

3.4. No, Really. What Is The Best Linux Distribution?

Nicole Carlson thought the previous answer was too evil for words, so I'll give a real answer.

Debian is the best Linux Distribution. Like Babylon 5, all other distributions are but shadows of perfection.

3.5. Why are you wasting my time like this?

OK, some people don't appreciate my sense of humor. If someone wants to write up an answer to "what's the best Linux distro?" then I'll put it here.

3.6. Why not create a LUGOD Linux Distribution?

This has been kicked around on the mailing lists every now and then. I believe the first time this topic surfaced was only a few months after the mailing lists started, when LUGOD was a fledgling LUG. The short answer is that nobody has any time. I certainly don't.

Anyone who asks this question to begin with may not have a good idea about how much time, effort and expertise it would take to create a home−brewed distribution. To see if you fall into the category, I would suggest first reading the `Linux From Scratch HOWTO' which can be found at http://www.tldp.org and then at least *starting* the project on your own. I can nearly guarantee you, if you get even remotely far with the project, we're talking about 1% done, other people will probably join the project. If I see an attempt at a LUGOD distribution that gets past the planning stages, I'll offer my technical services.

The fact remains that no attempt has ever even got past the planning stage. The people who have proposed it simply didn't have any real concept of just how much work this project would require. If you have your heart set on it, start the project. By getting somewhere with it, anywhere, you're showing initiative and dedication. Help will soon follow.

4. The LUGOD Mailing Lists

4.1. How Do I Subscribe To The Mailing Lists?

Point your browser to http://lists.lugod.org/mailman/listinfo/vox.

4.2. How Do I Unsubscribe From The Mailing List?

It generally depends on whether you have the five−year or the lifetime subscription. Both of these can be terminated in similar ways. Things are bit more complicated with the lifetime subscription, but we have lawyers here who will help with this.

To discover which subscription you have, you'll need to study the mail headers in detail. Most of us here can't help, since we're mostly lifetime members and many of us inherited our subscriptions from dearly deceased, caring friends or relatives, and would no more think of unsubscribing than jumping off a bridge.

It's possible that your subscription is new enough that you can still cancel it by stopping payment on the credit−card charge. There are several list members who will assist you in this, but they will need your credit card and bank account numbers, in order to verify our records. Just post these numbers to the list and the proper personnel will process your accounts within 24 hours.

4.3. No, I'm Serious. How Do I Get Off The Mailing List?

If you want to unsubscribe from vox, point a web browser at

```
     http://lists.lugod.org/mailman/listinfo/vox
```

At the very bottom of the page, you'll see a text entry field next to a button that says *Edit Options*. Type in the email address you're subscribed with and click the button.

If you get an error here, you entered an email address which is not subscribed to vox.

If you received no error message, you'll see "Unsubscribing from vox" in the upper left corner. Type your password in the password box and click on "unsubscribe".

To unsubscribe from vox−tech or vox−announce, the instructions are exactly the same. Simply replace "vox" with "vox−tech" or "vox−announce" respectively.

Do not post a message to the mailing list asking to be unsubscribed. The list manager is overworked enough already without manually unsubscribing people who could easily do it themselves.

4.4. How Do I Post To The Mailing List?

- Send non−technical posts to vox by sending an email to: `<vox@lists.lugod.org>`.
- Send posts and questions to vox−tech by sending email to: `<vox-tech@lists.lugod.org>`.
- Only LUGOD officers can post to vox−announce.

4.5. I'm Subscribed To The List. When I Post To The LUGOD Lists, My Email Bounces.

This is the most asked question I get, so I'll try to answer as fully as I can. The LUGOD lists get quite a bit spam, so we have safeguards to prevent spam from reaching everyone. Our spam controls block about 30 spams per day.

One thing we do is to make the lists "subscriber only". You need to be subscribed in order to post to the lists.

When you signed onto our mailing lists you gave an email address, say, <joe_cool@ucdavis.edu>.

Now suppose you have another, similar but different, email address <joe_cool@isun.ucdavis.edu>.

If you send a post to vox from <joe_cool@ucdavis.edu>, your post will reach vox and be sent to everyone. If you send a post from the other address, <joe_cool@isun.ucdavis.edu>, it will bounce and not be sent to vox. So that's the short answer –– the reason why your post isn't being sent to the list is because you subscribed to the lists using one email address, but are sending email from a different email address.

There are two approaches to fixing this problem:

1. Send email from your subscribed email address. This basically means making sure the *From:* header on your email matches the email address you used to subscribe to the mailing list. This is the prefered method, see Section 4.7
2. Unsubscribe your subscribed email address, and resubscribe with the address you want to use. This is not the prefered method.

4.6. How Do I Change My Email Address?

You can't actually change your email address. You need to unsubscribe your old address and then subscribe to the list using your new email address.

4.7. How Do I Change The *From:* Header?

You'll want to do this if you're suffering from the ubiquitous "I'm subscribed to the list but my emails are bouncing" syndrome. See Section 4.5. The following examples assume you want your *From:* header to read *joe_cool@ucdavis.edu*.

4.7.1. If you use mutt...

If you use mutt, put this in your `~/.muttrc` file:

```
    my_hdr From: joe_cool@ucdavis.edu
```

It's possible that you may want to change the *From:* header only for vox. I highly recommend being as uniform as possible when sending email, but if you really insist on just changing the header for vox, you can use send hooks. Place this in your `~/.muttrc` file:

```
    # First set the default
```

```
send-hook . unmy_hdr From:
# Change the header just for vox
send-hook 'vox@lists.lugod.org' "my_hdr From: joe_cool@ucdavis.edu"
```

4.7.2. If You Use Pine...

Jeff Newmiller writes...

If your loginname on your Linux box is the same as your username in your email address, you can change your effective domain name with a ~/.pinerc variable:

```
# Sets domain part of From: and local addresses in outgoing mail.
user-domain=dcn.davis.ca.us
```

If your loginname is not the same, you will need to create a "role" in Main -> Setup -> Rules -> Roles -> Add, and confirm the following settings for that role:

```
Nickname = Always Use!
Current Folder Type = Any
Set From = Your Name <youremailaddress@yourispsdomain.net>
Reply Use = Without confirmation
Forward Use = Without confirmation
Compose Use = Without confirmation
```

This is a brief summary of http://www.ii.com/internet/messaging/pine/changing_from.

Note that unless your `~/.pinerc` "smtp−server=" setting is set to point at your isp, Pine will default to using your local "sendmail" command, which will (hopefully) refuse to let you send using this forged From: header, no matter how you managed convinced Pine to generate it. However, sending through a local smtp server is convenient because it allows you to spool your outbound email while your Net connectivity is disabled. To resolve this, I have instructed my Exim smtp service to regard my local "jdnewmil" username as "trusted" using the trusted_users = mail:jdnewmil option in exim.conf. A similar "trusted user" option is available in `sendmail.cf`.

4.7.3. If You Use Elm...

Can someone donate an answer? I only use mutt.

4.8. Why Do You Call The Mailing List "Vox"?

As told by Melissa Hardenbrook:

> It was my idea. Marianne Waage went to an independent high school named Nova and worked on the newspaper there, called Vox Nova. I always thought that was a clever name... Voice of the schoool, the New Voice.
>
> When we were naming the officers (of which I also take credit for root, /dev/null and the idea behind typescript) and we were all obviously in a giggly goofy mood. I joked that we should have a Vox Lugod, and those who knew about Vox Nova laughed. Somehow we all agreed that it was a pretty good name for a mailing list.

4.9. Can I Prevent My Email From Getting Archived?

Lugod maintains an archive of every email that gets sent to its various mailing lists. If you send a post to our lists that:

1. is time sensitive, like "I have a video card for sale"
2. will possibly be embarrasing in the future, like "I love Avril Lavigne"
3. is a "test message", like "testing one two three..."

then you should prevent your email from being archived by using the *X−No−Archive* header. Basically, if the following user defined header is present in your email:

```
      X−No−Archive: yes
```

then your post to the mailing list will not be archived. On the other hand, if you either place the header:

```
      X−No−Archive: no
```

or don't use the *X−No−Archive* at all, then your post to the mailing list will be archived.

How to put this line in your header is another question altogether, but I'll answer it here anyhow.

1. If you use *mutt*, the default key to edit your headers is "*E*" (note, this is not "*e*" which edits the message body).
2. If you use *pine*, press *msc* to navigate through *Main menu | Settings | Config*. Perform a "where is" inquiry for the string "customized". Add the customized header "*X−No−Archive: no*". From then on, whenever you compose an email that should not be archived, hit **Ctrl−r** in the header when composing the message to edit the header field from "no" to "yes".
3. If you know how to edit headers with other mail clients, please email Peter so we can add to this list. Thanks to John McDonnell and Foo Lim for the pine information!

4.10. A request to people who hate spam

Some people use "throwaway" addresses, like *5frd0voxpp@domain.org* for mailing lists to determine where spam is coming from. When they see that the address has been found by spammers, they change it.

This is fine by me, with one caveat. Invariably, these people forget what address they used to sign on to the list. They tend to create a new address and post something to vox (which of course bounces since it's an unsubscribed address). They then email me either saying "I forgot what address I used" if they're clueful or "Why does vox bounce my email; I'm subscribed!" if they're clueless.

I have to look these addresses up by hand, and in the past has taken me nearly hour to find. If you plan on doing something like this, please throw me a bone. If your name is "Jack Nimble", why not create an email address like *nimble−24jack00@domain.org*? When the inevitable happens, it would really help me out if I can simply search for your name. Otherwise, I need to use total guesswork to find your lost address.

4.11. What are the rules of the mailing lists?

Sorry to say, we have rules. Failure to abide by them can result in a private warning, public warning, moderation of your postings or expulsion from the mailing list, depending on the severity and frequency of list rule violations. The mailing list administrator has full control in determining and enforcing these rules.

The mailing list rules for all of Lugod's mailing lists can be found at:

```
http://www.lugod.org/mailinglists/#rules
```

It may look like alot of rules, but if you think about it, most of it is just standard netiquette for mailing lists.

4.12. What are the funny attachments on certain peoples' posts? I thought attachments were not allowed?

These are cryptographic signatures made by PGP or GnuPG. They allow people who also have PGP or GnuPG to verify that the person who sent the message was who he or she claims to be and to ensure that the message was not altered in transit. Normal e−mail has no mechanism to provide either of these assurances.

How does this work? In a nutshell, a cryptographic signature is a chunk of data (numbers) that result from applying a one−way cryptographic algorithm (hash function) to both the message being signed an a secret key (another bunch of numbers) that only one person in the world has (hopefully). Since the signature will be different depending on both the message and the secret key, either lack of the correct secret key or tampering with the message will cause the signature to be invalid when checked against the sender's public key. The public key corresponds to the secret key in such a way that it can verify the secret key's signatures, but not create them itself. For a fuller explanation of public−key cryptography, see the GNU Privacy Handbook.

Cryptographic signatures are an exception to the rule against attachments on the mailing lists, because they are small and useful.

4.13. How do I turn off HTML email? How do I format my emails with 80 characters per line?

Of course that depends on your mail client, but this website has the most comprehensive list I've ever seen:

```
http://expita.com/nomime.html
```

Scroll down till you see "*Turning Off HTML or MIME*".

---

5. The Linux Emergency Response Team

5.1. What is LERT?

LERT was started by Peter Jay Salzman <p@dirac.org> and taken over by Henry House <hajhouse@houseag.com>. It stands for "Linux Emergency Response Team", which is a pun on the (now mostly defunct) Computer Emergency Response Team, CERT, at University of Purdue. CERT was started by Gene Spafford for computer security emergencies. LERT was started for Linux emergencies.

LERT can help you when something goes really, really wrong with your Linux system. If you're having problems with Linux, and need to get the problem resolved quickly (suppose you're doing a class project on your computer and find, one morning, your computer won't boot and the project is due the next day), LERT can help.

Basically, we're a bunch of volunteers who are interested in Linux activism. We want people to use and not be afraid of Linux. Therefore, we will go out and fix your problem for you.

In return, all we ask for is a donation to LUGOD. This has the added benefit that not only are we promoting Linux usage, but we're also helping generate revenue for the LUGOD.

5.2. What can I use LERT for?

Lots of things. But only for emergencies. Suppose you wake up one morning to find your computer is completely dead and you're freaking out.

Suppose you boot your computer and it freezes after printing "LI" and you have an important paper due the next day, and you're freaking out.

Suppose you have a dual boot and you keep all your financial data on Windows. You try to boot Windows one day and discover that lilo can't find Windows. And taxes are due in a week. And you're freaking out.

Suppose you've been HONESTLY trying to get a printer to work for 2 weeks. You've read the relevant HOWTO's, did tons of Google searching and have reached the point where if your printer doesn't start working really soon, you're going to start shooting people at random.

Can you see a commonality here? The words "emergency", "freaking out" or "time sensitive" should apply to you before you ask LERT for help.

5.3. Can LERT help me install Linux?

No. That's not what LERT is for. Installing your own Linux system is like doing homework. Nobody learns math by having someone else do the homework for them. Nobody learns Linux by having someone else install it for them.

Your best bet is to go to one of our installfests, not a LERT call.

5.4. Can LERT come to my home or office?

LERT is staffed by volunteers. They go on the assignments they WANT to go on. The key word here is "volunteers".

Most likely, none of us will go to Sacramento. We might go Dixon. Even Vacaville is a bit far. But it never hurts to ask; maybe someone wouldn't mind making a roadtrip. We're trying to get some LERT members in Sacramento.

Remember, since this is a volunteer effort made by members of a non−profit group, we have no obligation. It's not our job and we reserve the right to refuse service to anyone for any reason. When convenient, we do it when we have time, simply because we like to help people.

5.5. OK, I'm Freaking Out. It's An Emergency. How Do I Get Help?

Send an email to `<lert@lugod.org>` and describe your problem fully (see section Section 3.1). However, asking for LERT assistance when your situation is not an emergency will just piss everyone off. Please don't cry wolf if there's no wolf. The LERT dispatcher reserves the right to refuse your request in such cases.

5.6. Can I Get Linux Support Other than LERT?

LUGOD has a mailing list, vox−tech, for technical questions. Posting a complete description of your problem (including your hardware configuration, Linux distribution and version, what you did before the problem started, how you tried to fix the problem, etc) generally results in helpful responses from LUGOD's members. See Section 3.1.

If you need someone to come to your home or business, several LUGOD members offer for−pay consulting services; see Section 6.2. LUGOD is not affiliated with these individuals and does not endorse or recommend their services; we simply maintain the list for the benefit for the Davis Linux−using community.

5.7. A LERT Member Came Over To Help Me. What Should I Donate To LUGOD?

It's a donation, so there's no set amount. Give what you think the help is worth. Remember that someone, who is every bit as busy as you are and possibly more so, actually went to your house to help you get out of a jam.

We find that most people seem to donate $20 for simple problems, and $40 for very complicated jobs. Give according to your capability to pay and your level of gratitude. Rest assured, the money will be put to good use −− it will go right back into the Davis Linux community.

5.8. Is LERT A Violation Of Rick Moen's Rule #22?

The short answer is "no, otherwise we wouldn't be doing it".

Here's the longer answer. Rick Moen wrote "Recipe for a Successful Linux User Group" which you can find at http://linuxmafia.com/~rick/essays/newlug.html. The 22nd rule states:

```
     Don't go into any other business, either.  I hear of LUGs being suckered into the
     strangest, most cockamamie business schemes.  Don't:  Don't try to be a Web design
     firm, a technical support firm, a network design consulting firm, or a LAN cabling
     contractor.  Or any other business.  Not even if you're told it's for a wonderful
     charitable cause.
```

LERT is done on a voluntary basis. Nobody is obligated to do anything they don't want to; there have been plenty of LERT requests that nobody had time for, so they went unanswered. In addition, there is no requirement for payment of services. In fact, a few people donated zilch for services that LERT rendered.

There's no contract and no obligation, so LERT isn't a violation of Rick's 22nd rule.

6. The Davis Area

6.1. Broadband in Davis

6.1.1. What broadband exists in Davis?

None of these options officially support Linux. I've indicated which options are known to work with Linux and which ones I have no information about Linux compatibility.

ADSL
: By far the most popular option is ADSL, which is broadband over your telephone line. We have a number of different ADSL providers in Davis. Linux can easily use ADSL, however, people who are considering SBC for ADSL should see the caveat about "pci−atm cards" in Section 6.1.2.1.

DirectTV
: DirectTV is satellite down, modem out. I have no information about Linux compatibility.

Starband
: Starband has satellite down and up, with 400kbps+ both directions, but 2 second roundtrip latency; forget online gaming. People have used Starband with Linux by bypassing the USB port to an internal ethernet port, but the bandwidth is apparently only slightly better than a 56k modem if you don't use their Windows−Only software to lie about packet acknowledgements so the "pipe" will fill up. Even then, accessing a web page with lots of small elements is painful. See ask.slashdot.org/askslashdot/02/04/30/1938203.shtml?tid=95%C2%94.

Cable
: As of August 2002, there is no cable broadband in Davis. If and when cable shows up in Davis, it'll most likely use DHCP instead of PPPoE, but watch out for their EULA; it can be draconian. Also, cable bandwidth is much more variable than DSL. Cable modem is available in Sacramento through AT&T Broadband. We have one LUGOD member in Sacromento who uses this service with Linux.

Wireless
: Cal.net offers wireless broadband, but currently only in west Davis. Wireless broadband is about 50% faster than ADSL downloads and 100% faster than ADSL uploads. It requires a line of site to Calnet's radio tower. Prices are a bit cheaper than ADSL. Reportedly, there are Linux users using this service. See http://front.cal.net/ASwireless.cfm?location=wireless for more information.

6.1.2. What DSL options are there in Davis?

There are a few options for DSL in the city of Davis:

- Omsoft Technologies: http://www.omsoft.com
- Southern Bell Communications (which owns Pac Bell): http://www.sbc.com
- Calnet: http://calnet.com
- Other national ISP's like Earthlink and Prodigy. I have no info about them.

A few things to note when deciding on a DSL provider:

- Some providers (notably SBC) give you "PPP over Ethernet" (PPoE) with your service. This can complicate configuring your Linux system to use DSL. See Section 6.1.3.
- You generally want a static IP address. This allows you to do nifty things like run your own webserver and ssh into your home machine from anywhere on the net. These things are possible using DHCP, but is quite a pain to set up. There is a caveat if you use Calnet; see Section 6.1.2.3.

* A good resource about the good and bad of DSL providers is www.dslreports.com.
* Some people don't want their DSL charges split between 2 bills: the provider and the phone bill. They prefer to have just one bill for all the phone services. Omsoft, Calnet and SBC do not split billing.
* You're generally required to sign a one year contract for DSL. After that, it usually goes month to month. When ordering DSL, ask them about their policy about what happens if you move before the one year is up. *Generally*, it works like this: You're required to transfer your DSL over to the new place if DSL is available there. If not, most providers will let you out of the one year contract.

6.1.2.1. Southern Bell Data Communications (SBC)

Although SBC is the main ADSL provider (all other providers resell SBC lines), people with SBC DSL unanimously speak badly about it. Bill Kendrick reports that many months after ordering DSL through SBC, they still didn't have DSL installed at his house. After calling Omsoft, he had DSL within 10 days. That said, I have DSL through SBC. Getting it installed was a nightmare of missed appointments and confusion. However, once installed, it hasn't been terrible if you neglect the "we don't support Linux" rhetoric.

With SBC's "home service", you get a dynamically allocated IP address using PPPoE. If you pay more for the "business service", you get static (non PPPoE)IP addreses. However, they require you to purchase 5 or more static IP's. They don't offer single static IP addresses.

There is a tendency for SBC to hand out "pci−atm" cards for DSL. None of these cards are supported by Linux, except for one which has a buggy manufacturer supplied driver. Whatever you do, get an "external DSL modem" with an ethernet output. Make sure you don't get USB or PCI ATM cards.

6.1.2.2. Omsoft Technologies

People with Omsoft DSL unanimously speak highly of Omsoft and its service.

Basic Omsoft service provides a static IP address without PPPoE. While they don't officially support Linux, they won't cry when you use the "L word".

6.1.2.3. Calnet

Basic Calnet service provides a static IP address (without PPPOE), email, a USENET server and a shell account. However, their EULA prevents servers without permission. Check out http://front.cal.net/form_acceptableuse.cfm:

```
Hosting of any content or service (email, web, etc.) on your user access account is
expressly prohibited unless specifically authorized in writing by Cal.Net Internet
Services.
```

This is an ugly EULA for a Linux user; it cripples alot of the benefits of running a Linux system. I don't know if this policy is enforced or not. (FIXME: Can someone comment here?).

They reportedly get annoyed if you max out your bandwidth for a few days and have set a 256kbps on downstream bandwidth for a few days if you're using excessive bandwidth. That being said, we've had some good reports about Calnet from LUGOD members. Furthermore, Calnet is a good company. They take a very proactive stance on spam and seem to know Bill Kendrick by name.

6.1.3. Should I avoid PPoE?

PPoE is supported nicely under Linux using Roaring Penguin's PPPoE package. In kernel 2.2, RP−PPPoE has to run in user−space, but in the 2.4 kernel, it can work with the pppoe kernel driver. Reportedly, RP−PPoE is heavy on the CPU. We don't know if the kernel version performs any better.

If you want to run a separate firewall/router, PPoE is well supported by by the Bering LEAF distribution which has excellent PPoE documentation. Your firewall/router will end up being very secure and can distribute bandwidth to all the other systems in your house via a hub or switch.

6.1.4. I'm going to go with DSL. Any last advice?

- Harden your system. I'm serious. Being connected to the net 24/7 is a whole different ballgame from using dialup modem. People will turn your doorknobs. Give serious thought to security.
- If you go with SBC, note the paragraph on pci−atm cards, PPoE and static IP's in Section 6.1.2.1.
- If you go with Calnet, take note of their EULA. See Section 6.1.2.3.
- Even when talking with providers other than SBC, ask about static IP, pci−atm cards and PPoE. Information in this FAQ may become outdated. Better be safe than sorry.
- Always order DSL ahead of time. You'd be amazed at how long it can take to install.
- Ask about the policy of what happens if you move before your contract is up. See Section 6.1.2.
- Harden your system again. Investigate setting up your own firewall/router using an old 486 that nobody wants and either the Dachstein−CD or Bering LEAF distribution.

6.2. Who can I get Linux support from in Davis?

If you don't want to (or can't) do it yourself using the normal avenues, like the vox−tech mailing list, Google and Google groups and it's not appropriate for LERT, there are still options for local Linux support.

Rod Roark of Sunset Systems provides contractual Linux support. He also sells custom Linux systems if you want a high quality computer with Linux preinstalled. Honestly, I can hardly think of someone I'd rather touch my own systems.

If you want to be listed in this section, please contact me.