Internet

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Chapter 1

Internet

1.1 Amiga Internet For Beginners - Contents

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Introduction
Terms
Hardware Requirements
Programs To Get
Setting Up Your SLIP Interface
Starting SLIP
Installing An E-Mail Client
Setting Up GUI-FTP
Setting Up A WWW Browser
Setting Up Usenet News
Setting Up IRC
Disclaimers
```

1.2 author

If you have any questions, would like to talk about our favorite computer, or want to contact me for any reason, you can reach me at;

Jason.D.Neus@uwrf.edu

I am also on IRC quite a bit. My nick there is Lutor.

1.3 introduction

For as long as I have been using my Amiga, there has been little or no information, except for some kind folks on the IRC channel #amiga, on setting up SLIP, trouble shooting your setup and using it to its fullest with your Amiga. Although, admitedly, I am no Internet/SLIP/PPP guru, I had to learn from the school of hard knocks to get my SLIP setup running. I had to do it with almost no outside help. In the following article I will review several programs relating to SLIP usage and try to clear up some points that seem to give beginners the most trouble. And remember this; If I Can Set It Up, Anyone Can.

NOTE: You can print out any part of this document by selecting 'Print' from the 'Project' menu.

Also Note: This file is not complete. However, if I get enought e-mail, I will complete it.

1.4 terms

First some terms I may use frequently in this document;

SLIP - Serial Line Internet Protocol

- This is the interface used to communicate between your computer and the remote internet provider.

IRC - Internet Relay Chat

- This is a place where you can have a realtime chat with literally hundreds of users around the globe. There are literally hundreds of channels available. My favorite is #amiga
- Usenet News
- Usenet is a place where you can read up on whats going on with your favorite pastimes.
- FTP File Transfer Protocol
- Use this program to get files of of your favorite remote server.

WWW - World Wide Web

- Just another way to 'surf the net'. WWW Browsers use graphical point and click interfaces. Sound files and graphics files can be accessed by WWW browsers.

SMTP - ????

NNTP - ????

Pop Mail

 If set up, your computer will periodically check your Pop Mail address for new e-mail, and will inform you if there is any.

Gopher

- While getting rather antiquated because of the WWW browsers,

the Gopher style interface is still useful sometimes. Especially when connecting to older style interfaces of some servers.

IP Address -

 This is the numerical address which every server has. You will almost always use a name when connecting to other servers, i.e. FTP.WUSTL.EDU But, you could also connect there by using its equivalent IP Address of 128.225.135.4

1.5 requirements

One of the questions I here most on #amiga and Usenet is "What do I need for hardware to set up SLIP on my Amiga?" Well, the answer is that you can set up SLIP and its related programs (IRC, Usenet News Browser, Mail Clent, WWW Browser, FTP Clent, etc) on any Amiga with a modem. Most (if not all) SLIP providers require at least a 14,400 baud modem. I would recommend at least 1 meg of chip ram and 2 megs of fast ram. KickStart and Workbench 3.1 would be desireable, but not necessary. My system includes;

Amiga 500 (Stock) GVP Impact Series II with 52 meg Hard Drive 1 Meg Chip RAM 4 Megs Fast RAM 1084 Monitor USR 14,400 Sportster KickStart 2.04/Workbench 2.1

Although my system lacks the speed I wish it had, it is useable. Screen redraws can be a little slow when the CPU is being hogged by the modem. I have been using SLIP on this system for just over a year now. With no problems (exept a poorly written program or two)

1.6 setup

Now the real fun begins! Since the only SLIP protocol stack I have experience with is AmiTCP, I will discuss the setup proceedure of that program. Others may be similar. The below setup for AmiTCP is a minimum to just get AmiTCP working. You may change settings as you become more advanced.

First you need to obtain several bits of information from your Internet provider. Get the following info from them;

- 1. Destination IP Address (The IP Address your computer will connect to when you start your SLIP access.)
- 2. Default Gateway (Often the same as the Destination IP address)
- 3. Netmask Address
- 4. Name Servers (Where your computer goes to look up addresses)

- 5. Domain Name (Usually the stuff after your name in your e-mail address. My address is jason.d.neus@uwrf.edu, so my domain name is UWRF.EDU)
- 6. Is the account Dynamic? (By that I mean, does the IP address of your call in account change depending on which line you call in on. If yes, then your account is dynamic)

7. Does the provider have compression on the SLIP interface

8. What is the MTU (Maximum Transfer Unit) size

Next, go ahead and uncompress AmiTCP to the hard drive partition you want it on. This will make installation a little faster, as copies will not have to be made. Once this is done you may want to read the file 'HowToInstall', although this file may just confuse a first timer.

After this, go ahead and select 'Install AmiTCP-4.0' from the AmiTCP-4.0 directory. I will go through what you will be asked to answer one at a time.

- Select Directory Select the directory where you want AmiTCP to be installed (easy enough).
- 2. Update Sana-II Device Drivers These are the drivers necessary to use the SLIP interface. Select 'YES'. They will be copied to your DEVS: drawer.
- 3. Install Napsa fonts If you plan on telnetting into a shell account, it is probably a good idea to install these fonts (although not necessary). You can then use the NapsaTerm to telnet into shell accounts.
- Default User Name Just enter in any user name you would like to give your self, it can be anything.
- Login Name To make this easier, just enter in the same name you used for the User Name.
- UID (User ID) This is just the ID number you want to assign to this user, go ahead and select the default of 100.
- 7. Group ID This is a number to assign to a group of users. Again, just select the default of 100.
- Real Name Go ahead and enter your real name. This is used for an ENV: setting for some programs.
- Home Directory Select AmiTCP:/bin as your home directory to save problems.

- 11. Enter Password Enter the password you wish to use to login to AmiTCP.
- 13. Domain Name As discussed above, enter your domain name.
- 14. Interface Type If you are a beginner (I'm sure you are, otherwise you wouldn't be reading this file) Select the 'SLIP/CSLIP' option. (CSLIP is the SLIP interface with compression). You can play with PPP and stuff later.
- 15. Default IP Address If your connection is not dynamic, enter you account IP Address here. If your connection is dynamic, enter one of the available IP addresses here. That way AmiTCP has something to fall back on if neccessary.
- 16. Destination IP Address Enter this from the info from your provider.

17. Netmask - Enter this from the info from your provider.

- 18. Select Device Go ahead and select 'serial.device' or an equivalent.
- 19. Select Unit Number Unless you have a multi-serial port card, select '0' for the device number.
- 20. Select Baud Rate Type in the highest baud rate your modem will support. For my 14,400 I have 19200 typed in for this option.
- 21. MTU Size Enter this from the info from your provider.

22. Select Handshaking Type - CTS/RTS is the best choice.

- 23. Default Gateway Enter this from the info from your provider.
- 24. Name Servers Enter this from the info from your provider.
- 25. Domain Names To SEarch Just enter you domain name here.
- 26. Make changes to User-Startup Select 'YES'.
- 27. Start INETD at startup Select 'YES'. INET is needed by some programs, so just have it started at startup.

THATS IT! You should now have a functional SLIP interface. Reboot your computer to allow the changes to take effect.

1.7 starting

Call up your SLIP provider with a terminal program. Once connected you will now need to quit your terminal program. It may be necessary to turn on DTR override on your modem to prevent it from hanging up when you quit your terminal program. You can do this either with the command 'at@d0' or use a dip switch (ala USRobotics).

You will now need to start a new shell. If your account is not dynamic, enter 'startnet'. If your account is dynamic, then enter 'startnet ipaddress', i.e. 'startnet 139.225.4.85'.

The first thing you will see after entering your password is the demo version waiting screen. After the OK button is availabe, go ahead and click on it. If this is your first time running AmiTCP, you should read the copyright info in the waiting window.

Once done loading in (this should only take around 20-30 seconds) you are now at a shell prompt, just like when you call into a shell account. To test to see if it is working correctly type in the following;

ncftp ftp.netnet.net (or any other local ftp site)

If everything is working right, you should see the modem SD/RD lights flicker a couple times and you should soon see the friendly greeting of the NETNET internet site flashing by. If it does't work the first time, try it two or three times. You may simply be getting legitamate time-outs.

If its not working, uh-oh. Go back to the installation and make sure everything is typed in correctly.

1.8 where

Here's what you need and where you can find them on AmiNET to follow my installation proceedures.

- AmiTCP 4.0 Demo aminet/comm/tcp/AmiTCP-demo-40.lha
- Grapevine aminet/comm/net/grapevine.lha 269k
- Gui-FTP aminet/comm/tcp/Gui-FTP.lha 50k
- AMosaic aminet/comm/tcp/Mosaic1.2AmiTC.lha 194k
- MUI-User Library aminet/dev/gui/mui23user.lha 662k
- BBGopher aminet/comm/tcp/BBGopher10.lha 48k

ALynx - aminet/comm/net/ALynx.lha 277k

Pine - aminet/comm/mail/pine391a_all.lha 418k - Pine For 68000
 pine391a_020.lha 397k - Pine For 68020 and Above
 pine391a_base.lha 363k - Required Programs

pinebaseupd.lha - Upgrade For Required Programs

IXemul Library -

AirMail - aminet/comm/mail/AirMail1_2.lha 118k

GRn - aqminet/comm/news/GRn-2.1a.lha 232k

SLIP Scripts - aminet/comm/tcp/SLIPScripts1.3.lha 6k

RXSerial

8n1 - aminet/comm/misc/8n1.lha 27k

1.9 e-mail

Ok, one of the first things you'll want to do is setup and E-Mail client on your computer, right? OK then. For the very first E-Mail program I would suggest using a program called AirMail. Once you get that up and running you can upgrade to a program like Pine.

```
Before Setting Up E-Mail
Setting Up AirMail
Setting Up Pine
```

1.10 before

Before setting up E-Mail or Usenet you will need to set up a UUCP heirarchy. This is very simple. Make the following directories somewhere on your hard drive;

UUCP UULib UUNews UUSpool

Once you make these directories, add assigns to your Startnet file for each of the new directories. (Amitcp4.0:bin/startnet)

i.e. Assign UUCP: dh1:amitcp4.0/uucp

Also, make a 'mail' directory somewhere for use by E-Mail programs. It is not necessary to assign the mail directory. You will also need to get the address of your SMTP (mail) server.

1.11 airmail

Simply uncompress AirMail and copy it to wherever you want it to reside. Double click on its icon and load it up. Once there simply go to the 'Settings' menu and do the three 'setup' options. Thats it. Click on 'Check Mail' to see if you have any. Try and send yourself a test letter to make sure its set up right.

1.12 pine

The Amiga version of Pine is a conversion of Unix Pine. Many people may already have experience with this program, and I found it much easier to set up than programs like Elm.

Actually, the installation of Pine isn't very hard thanks to the inclusion of an installation program. When downloading Pine, you must download 3 seperate files from aminet;

Pine391a_Base.lha
PineBaseUpd.lha
Pine391a_***.lha (Depending On CPU Type)

Uncompress all the above files and double click on the install icon. Follow the installation process.

Once installed, load Pine and type in your user name and password. Then select S (setup) from the main menu. Once there select C (config). You will now be asked for several settings. The only ones you _need_ are the SMTP server and the INBOX path (see Pine docs for options on the inbox setting) but fill in as many as you can. There you are. You will have to quit and then restart for the new settings to take effect. Try sending yourself some test mail to make sure it's set up right.

You will need IXemul.library to use Pine.

I also have been having trouble with Pine crashing with my stock A500. From what I gather from the docs, IXemul.library was not really written specificaly to be 68000 compatible. However, I have found that having a stack of 35000 helps keep crashes to a minimum.

1.13 gui-ftp

I use a program called GUI-FTP for most of my FTP transfers. AmiTCP comes with ncFTP, but I just prefer the point and click of GUI-FTP. This is another easy to install program. Simply copy the libraries to your libs directory, the fonts to your fonts directory, and the main program to where ever you want it to reside. Set the environmental variable 'host' (see the GUI-FTP.guide on this) and you're ready to go. Simply run it and connect to your favorite FTP host.

1.14 www

I have two WWW Browsers on my computer. ALynx and AMosaic. Both are good programs, the only differnce being that ALynx is unable to display graphics within itself, while AMosaic can (Workbench 3.1 is required for graphics).

Setting Up ALynx Setting Up AMosaic

NOTE: As of the time I typed this, there are at least 2 more WWW browsers on the verge of release;

AMosaic 2.0 IBrowse

1.15 alynx

ALynx is a Unix port of Lynx, a text only WWW browser. ALynx is a very good, smooth, compact program.

Before setting up ALynx, you will need to download AMosaic where} and get the MailCap file from it. The mailcap file contains information on external graphic viewers and external sound sample players.

Uncompress the ALynx.lha file and copy ALynx and Lynx.cfg to your AmiTCP:/bin directory. Use your favorite text editor to edit the lynx.cfg file to the settings you desire. You will also need to edit the MailCap file to your desired settings. See the AMosaic docs for information on editing the mailcap file.

ALynx is very straightforward and easy to use. Even an absolute beginner should get it down in no time.

1.16 amosaic

AMosaic is a decent program, but plagued by some problems. It has a habit of crashing at times. After I went from 2 megs of fast ram to 4 megs of fast ram, the crashes have decreased, but are still there. You will also need Workbench 3.1 to get inline graphics with AMosaic. The one advantage of AMosaic over ALynx is that it has the point and click interface of the more popular WWW browsers.

To use AMosaic you will need to get MUI.library. You must first install MUI. Use the included installation program. It won't work if you only copy the library to your libs.

AMosaic comes with a good installation guide, so I will not go indepth about it's installation.

If you have any questions here, just email me.

1.17 grn

This part is not completed. If there is enough e-mail sent to me I will complete it.

1.18 irc

This part is not completed. If there is enough e-mail sent to me I will complete it.

1.19 disclaimers

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