Cable-Modem-mini-HOWTO

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이 문서는 케이블 모뎀이나 케이블 인터넷 서비스 업체에 당신의 리눅스 박스를 연결하는 법에 대한 기초적인 질문에 답하기 위해서이다.

목 차

제 1 절 소개

이 문서의 주 목적은 당신의 시스템이, 케이블 모뎀과 인터넷 서비스 제공업체(이후 ISP)에서 제공하는 케이블 인터넷 연결 서비스를 이용하게 하는 것이다. 섭섭하지만, 케이블 모뎀 서비스를 제공하는 ISP들 대부분이 윈도우나 맥용 프로그램만을 제공하고 있다. (국내의 경우, 두루넷이 이 서비스를 제공하며, 하나로통신은 내년 4월에 경쟁에 참여하게 된다. 현재로는 MS사의 프로그램만을 제공하고 있는 실정이나, 맥이나 리눅스등에서 쉽게 사용할 수 있을 것이다.)

이 문서는 리눅스로 케이블모뎀과 인터넷 서비스를 설치하는 법, 잘 작동하게하고 작동이 중단되지 않는 트릭을 설명하고자 한다. 이 문서가 당신에게 도움이 되었으면 하나, 이 문서에 있는 내용에 대해 보장하지는 않는다.

1.1 이 문서의 새 버전들

이 문서의 새 버전들은 주기적으로 *comp.os.linux.answers*에 게시된다. 또한, 다음 사이트를 포함한 여러 anonymous FTP 사이트에 올려지게 된다:

더불어, 아래 사이트를 통해 리눅스 문서 프로젝트에 이문서를 찾을 수 있다:

1.2 피드백

피드백은 이 문서에 대한 최대의 찬사이다. 당신의 제안과 참여없이는, 이문서는 존재할 수 없다. 그러므로, 당신의 기여와 멘트와 비판등을 `vuksan@veus.hr` 로 보내주시기 바랍니다.

1.3 기여자들

다음 사람들이 이 mini-HOWTO 에 중요하게 기여한 분들이다.

- Dan Sullivan, dsulli@home.com
- Andrew Novick
- Michael Strates

1.4 표준 보장 기피

이 문서의 내용에 대한 보장은 없다. 이러한 개념들, 예와 다른 내용들을 사용하는 것은 당신 자신의 책임이다. 이글이 문서의 새 버전이듯이, 에러와 부정확한것들이 잇을 수 있으며, 이것들이 당신 시스템에 해를 입힐 수 있다. 주의하며 다가가시고, 비록 그럴 경우가 별로 없겠지만, 나는 이에 대한 어더한 책임도 지지 않는다.

또한, 이문서는 공식적인 정보가 아님을 명심하시기 바란다. ISP를 통해 공식적인 정보를 얻는 것은 대부분의 경우 불가능하다. 이 문서의 많은 부분은 많은 디들이 작동된다고 추정된 것들이다. 이 정보들을 쓰는 것은 당신 몫이다.

1.5 판권 정보

제 2 절 이더넷 카드 설치하기

아래의 설치는 이더넷 카드(네트웍 카드)를 이용하여 당신 시스템을 인터넷에 연결하는 것을 알려준다. 이는 왜 처음으로 당신의 이더넷 카드가 리눅스에서 사용될 수 있고 제대로 작동하는 것이 점검하는 것이 필요한지를 말한다. 이에 대한 포괄적인 이더넷 HOWTO 는 이다. 당신이 원한다면, 이 문서를 읽어라.

리눅스로 부팅하는 동안, 아래와 같은 메세지를 보게되는데...

```
eth0:  3c509 at 0x300 tag 1, 10baseT port, address 00 20 af ee 01 23, IRQ 10.
3c509.c:1.07 6/15/95 becker@cesdis.gsfc.nasa.gov
```

(역자주: 이해를 돕기위해 위의 메세지를 해석하면,

이더넷0번: 3com사 3c509카드, 입출력주소 300번지 사용, 10메가 속도의 연결, 하드웨어주소가 00 20 af ee 01 23 - IP 주소와 달리, 네트웍 카드제조사에서 전세게 고유의 네트웍 주소를 할당하는데, 이 주소이다 –, IRQ - 주변기기간의 선택을 위해 쓰는 선택키라고 보면된다– 를 10번 쓴다.)

만약 이를 못 보았다면 dmesg를 쳐보라.

설정한대로의 메세지를 보았다면, 다음 단계로 갈 수 있다. 아니면, 두가지 가능한 경우가 있는데, 당신의 이더넷 카드가 PNP 이고 이를 인식시키기 위해 isapnptools 같은 도구를 사용할 필요한 경우이다 (이에 대해 나는 확신이 없는데, PNP 카드가 하나인 경우가 없어서 이다). 다른 경우는 당신의 카드를 수동으로 설치할 필요가 있다.

오늘날의 대부분의 카드는 설치에 DOS 프로그램을 사용한다. 나의 3COM 3c509 카드의 예를 들면, DOS로 부팅하여, 카드의 조정에 필요한 프로그램을 사용하였다. (역자주: 흔한 카드로서 3Com을 사용하고 있으며, 저가용의 대만/국내산 카드도 있다. 역자의 경험으로는, 이 카드들도 마찬가지로 DOS 유틸리티 프로그램으로 설정할 수 있다. 물론, NE2000 호환으로 설정하여야 한다. 또한, 랜카드설치시 에러가 많이 발생하는데, 이는 사운드카드등의 부가장치가 많으면 더욱 그럴 확율이 많아진다. 이때도 이러한 방법으로 조정할 수 있다). 여기에는 자동 조정이라는 옵션이 있다. 이것으로 해결이 되지 않으면, 같은 유틸리티를 사용하여 IRQ 를 바꾸라. 나는 IRQ의 값을 10, 11, 12 중에 사용한다. 이러한 방법으로 해결이 되지 않으면, 위에서 언급한 이더넷 HOWTO 문서를 읽거나 comp.os.linux.setup 나 comp.os.linux.networking 같은 뉴스그룹에 글을 올리기 바란다.

제 3 절 당신의 ISP

카드를 인식시켰다면, 이제 당신 ISP 에 연결하는 것이 다음 단계이다. 이 설치는 대부분 ISP 에 따라 다르므로, 여기에 ISP에 따라 정보를 정리했다.

(역자주, 국내의 경우, 아직 이 리스트에 추가되지 않았으며, 해외의 경우에 대하여 번역은 하지 않는다. 국내의 케이블 ISP 인 두루넷과 하나로통신이 국내 리눅스 사용자들의 시장 규모를 이해하고, 이에 대한 설명이 추가되길 바란다. 두루넷의 경우, 역자가 원도우에서 사용해보고 있는데, 리눅스에서의 사용 경험은 없다. 아직 검정된 것은 아니나, 3.1의 MediaOne Express와 같은 DCHP 로 하면 될 것으로 본다. 그러므로, DHCP mini-HOWTO 문서를 참조하시길....

3.1 MediaOne Express

MediaOne Express 는 MediaOne에서 제공하는 케이블 모뎀 연결 서비스이다. 10BaseT (UTP-45) 케이블을 사용하는 이더넷 카드에 연결되는 Lancity 나 General Instruments 사에서 만든 케이블 모뎀으로 하드웨어가 구성되어 있다. IP 주소와 다른 메트웍 정보의 할당은 동적 호스트 조정 프로트콜인 DHCP를 사용하게 된다. 당신이 해야할 것은 단지 DHCP mini-HOWTO 문서를 읽고 당신의 시스템을 적절하게 조정하는 것이다. 여기에는 다른 조정이 필요하지 않다. DHCP mini-HOWTO 문서는 다음에서 찾을 수 있다.

MediaOne 사의 서비스에 대한 정보는 아래에 있다. .

(역자주: 이하에는 번역하지 않는다. MediaOne 사의 경우를 참조하고, 국내 ISP들의 서비스가 제공되면, 그 내용을 추가하면 될 것이다.)

3.2 @Home

@Home uses a similar setup to 3.1(MediaOne). However, there are a few fundamental differences, outlined by contributors. Since @Home spans different geographic locations you might get assigned different kind of equipment and have slightly different kind of setups.

Before you try anything, go to control panel, network, and properties for your network card. Write down all of the information. You will need it later.

TCI, the company that runs @Home issues a Etherlink III 3c509b NIC for all of their customers. What TCI does not tell you is that when they install your ethernet card, it is in PnP mode. Now in Slakware, if you uncomment the proper line for this card, everything will appear to be working fine. There will be no system problems, but the 'PC' light on your CyberSURFR modem will never turn on. If you are using Slakware, and are having this problem, reboot in DOS and skip the next paragraph.

In RedHat5, your system will have some trouble autodetecting the card. If you try to pass the paramaters manually, the system will hang. This should be obvious that your card is not setup properly. Before wasting anymore time, reboot in DOS (This is a must because as of 12/25/97, there is no utility written for Linux to turn off PnP and turn on ISA.)

TCI does not give out a utility disk for your ethernet card, so you must download the utility from one of 3Com's sites. Here is a link to 3COM's page for driver download.

Once you have downloaded your driver files you will need to run them and disable the PNP mode of your network card.

What you've now done will make your ethernet card 'broken' in Windows 95. You'll need to go to Control Panel, Network, and remove the network card and the adapter. Reboot your computer, and again go back to control panel. Go to add/remove new hardware, and have it autodetect. It will automatically setup the correct i/o address for you. You will most likely need to reboot again. Now you should be in Windows 95, with the 'PC' light on your cable modem on. You will also notice that none of your internet applications seem to work, you can't ping, and you can't resolve DNS. You now must go back to control panels, network, and click on properties for your network card (not the adapter). Re-enter all the data you wrote down, and reboot.

With a little luck, your ethernet card should be working in Windows 95, and ready to rock in Linux.

If you live Hampton Roads, VA you should read a little note from Mark Solomon

With the @home service in Hampton Roads, VA, it is absolutly neccessary to run dhcpcd-0.70 (or higher) that supports the "-h" option to specify the hostname of your computer. Without this switch the @home dhcpcd server will not assign addresses.

More information on setting up dhcpcd-0.70 and @Home service with Intel Ether Express cards can be found at

Notes for Baltimore, MD and Colleyville,TX:

In Baltimore subscribers are issued Intel Ether Express Pro 10 nics and a static IP number.

Information about @Home Service can be found at .

3.3 RoadRunner

RoadRunner is an Internet cable service provided by Excalibur Group (Time Warner). The hardware setup consists of a cable modem produced by Motorola and Toshiba which plugs into an ethernet card using a 10BaseT (UTP-45) cable. From what I can gather RR uses DHCP for IP assignment. In order to set up Linux to use DHCP you need to read the DHCP mini-HOWTO and configure your system appropriately. DHCP mini-HOWTO can be found at

If this doesn't work out for you you should check out for Akron, Ohio and for San Diego, California. It might help solve your problem.

Information about RoadRunner Service can be found at .

3.4 Rogers Wave

The hardware setup consists of a cable modem produced by LanCity which plugs into an ethernet card using a 10BaseT (UTP-45) cable.

When the cable modem is installed by Rogers Wave technicians you are assigned a static IP address. They should also provide you with information on your subnet mask, router (gateway) numbers and DNS numbers. For additional info please visit .

Other information about Rogers Wave Service can be found at .

3.5 Sunflower Cablevision

This information is provided by Andrew Novick:

"I recently saw your cable modem howto and I have an addition. Sunflower Cable is a company stricly in Lawrence KS, however we have a rather large Linux community because of the University of Kansas. On our local LUG mailing list, we are starting to get more and more questions on how to configure their linux machine for the cable modem. It is just regular static addressing, and the modem is made by Zenith."

To configure your Linux box make sure you get all the pertinent information from the Cablevision tech support or use these.

- IP address: Assigned by SunFlower Cablevision
- Subnet mask: 255.255.255.0
- Gateway (router) address: 24.124.11.254
- Hostname: Assigned by SunFlower Cablevision
- Domain name: lawrence.ks.us
- Primary DNS server (nameserver): 24.124.0.1
- Secondary DNS server (nameserver): 24.124.0.6

Have all those numbers written down before you proceed. To register, visit

To register in the lawrence.ks.us domain contact Stephen Spencer at

`gladiatr@artorius.sunflower.com`

Under RedHat use Control Panel and Network Configuration to put in these numbers. Just say Add Interface, Device type=Ethernet, Device name=eth0 (this is zero not O in eth0) then fill out all the fields. Then click activate.

In Slackware type netconfig. When you are finished reboot and you should be up and running.

If this doesn't work make sure you do network card troubleshooting from the beginning of this document.

3.6 Jones Intercable

This information is provided by Bob Kimble:

Jones Internet Cable supplies a Hybrid cable modem that connects to your machine / network via 10BaseT ethernet. They provide you with a static IP address for your machine, and another static IP address for the modem. The modem acts as a gateway to their network. Your IP address and the modem IP address are on the same network and have the same network mask (in my case 255.255.255.0 – 24 bits). They also provide two DNS IP addresses which you enter into your configuration. I just entered the numbers when I installed Red Hat Linux 5 and it worked like a champ from the beginning. Since then I have configured my Linux machine to enable IP masquerading and domain name services, and it now acts as a router for my entire private network. My other machines are connected via a private network using the addresses 192.168.0.x. They are running Windows 95, Windows NT (Intel and Alpha) and OS/2. My Linux machine has two IP addresses – the one from the cable company and one from the 192.168.0.x private network. Everything works like a champ. All six machines can browse the web simultaneously. My kids are even able to connect to their favorite game site, "The Realm" from Sierra.

3.7 GTE Worldwind

This information is provided by Mike Hughes:

The information you provided for Rogers Wave works for GTE WorldWind cable modem services also. However, GTE's service is EXTREMELY slow, barely faster than ISDN. more information at

3.8 SpeedChoice, Phoenix, Arizona

According to Micah `peenchee@asu.edu`:

Just thought I'd let you know that in my area (Phoenix, AZ, usa) there is a company called speedchoice that provides cable modem service. The service uses a hybrid cable modem and the set up is almost identical to that of Jones intercable described in the howto. See 3.2(Jones Cable). For any other issues mail Micah.

3.9 Cedar Falls Cybernet, Iowa

This information is provided thanks to Joe Breu `breu@cfu.net`

We are an ISP in Cedar Falls, Iowa that uses the Zenith HomeWorks Universal over our own Hybrid Fiber/Coax system. Our system uses no proprietary connection software and is straight TCP/IP connections. We do use DHCP, but will offer static IP addresses to customers requesting them because they cannot use DHCP.

3.10 Telstra Bigpond Cable, Australia

This information is provided by Geoff Conway `gconway@vic.bigpond.net.au`

Disclaimer:

The information contained herein is in no way the responsibility of Big Pond Cable, Telstra Multimedia, Telstra, IBM Global Services Australia or any related company. Any loss or consequential damage associated with the attempted installation of the Big Pond Cable Linux software is the PERSONAL responsibility of whomsoever follows these instructions.

Big Pond Cable does not currently support Linux - so do not report faults to them regarding any aspect of the Linux installation and/or operation.

Big Pond Cable Linux Installation Notes. V 1.1 (12/03/98)

Change Note 1.1 12/3/98 - Corrected spelling of dhcpcd & rrdhcpcd

Linux is not officially supported by Big Pond Cable. However, the TMM cable infrastructure does allow Linux to be used - with the appropriate login client. The following installation notes should allow you to install the Linux software without too many difficulties.

The full client distribution of rrclientd was obtained from:

I am running RedHat version 5 of Linux - but the documentation indicates that it will work with other releases.

Note that there is also more information in the rrclientd release than is documented here.

Procedure:

- Copy the distribution file rrclientd-1.3.tar.gz to your Linux PC.
- Login as root for all of the following :-
- Expand the distribution (with gunzip) & then untar it.
- In directory rrclientd-1.3/bin you will find all the executables that you need: fetchmail (not used) kdestroy kinit rdate rrclientd rrdhcpcd rrpasswd
- Rename /sbin/dhcpcd to /sbin/dhcpcd.orig. Copy & rename rrdhcpcd to /sbin/dhcpcd

- Copy kdestroy,kinit,rdate,rrclientd,rrdhcpd,rrpasswd to /usr/local/bin
- Set up your ethernet card to use dhcp & restart the system. If the dhcp configuration is ok - an IP address will be assigned - with the details being places in /etc/dhcpc/hostinfo-eth0 & /etc/dhcpc/resolv.conf You may see a startup warning about not finding dhcp.conf - this doesn't seem to matter.

  ** At this point you should be able to ping proxy-server successfully.

  (If you can't then you won't be able to login later)
- Copy the krb5.ini file (from your Win95 \netmanag directory) to /etc/krb5.conf You will need to make the following changes (adding 2 new sections)

  The example shown is for the Melbourne krb5.ini file - Sydney users will need to substitute appropriately.

  This is also documented in the distribution's examples/ sub-directories.

```
[libdefaults]
        ticket_lifetime = 600
        default_realm = c3.telstra-mm.net.au

** new *1
       kdc_req_checksum_type = 2
       ap_req_checksum_type = 2
       safe_req_checksum_type = 3
       ccache_type = 2
** end of new *1

[realms]
c3.telstra-mm.net.au = {
        kdc = dce-server
        admin_server = dce-server
        default_domain = c3.telstra-mm.net.au
        }

wfh.c3.telstra-mm.net.au = {
        kdc = wfh.c3.telstra-mm.net.au
        admin_server = wfh.c3.telstra-mm.net.au
        default_domain = c3.telstra-mm.net.au
        }

wfh1.c3.telstra-mm.net.au = {
        kdc = wfh1.c3.telstra-mm.net.au
        admin_server = wfh1.c3.telstra-mm.net.au
        default_domain = c3.telstra-mm.net.au
        }

wfh2.c3.telstra-mm.net.au = {
        kdc = wfh2.c3.telstra-mm.net.au
        admin_server = wfh2.c3.telstra-mm.net.au
        default_domain = c3.telstra-mm.net.au
        }
```

```
wfh3.c3.telstra-mm.net.au = {
        kdc = wfh3.c3.telstra-mm.net.au
        admin_server = wfh3.c3.telstra-mm.net.au
        default_domain = c3.telstra-mm.net.au
        }

wfh4.c3.telstra-mm.net.au = {
        kdc = wfh4.c3.telstra-mm.net.au
        admin_server = wfh4.c3.telstra-mm.net.au
        default_domain = c3.telstra-mm.net.au
        }

wfh5.c3.telstra-mm.net.au = {
        kdc = wfh5.c3.telstra-mm.net.au
        admin_server = wfh5.c3.telstra-mm.net.au
        default_domain = c3.telstra-mm.net.au
        }

** new *2

[domain_realm]
    .c3.telstra-mm.net.au = c3.telstra-mm.net.au

** end *2
```

- Save your existing services file /etc/services to /etc/services.orig Copy the services file from examples/Nassau/services to /etc/services
- Create a new file /etc/rrpasswd - with the contents being your current BPC password
- Change the PATH environment variable as follows `PATH=$PATH:/usr/local/bin ; export PATH` (This is most likely not necessary)
- Login to BPC as follows `rrclientd -u <username> /etc/rrpasswd dce-server`

  so if you're username jsmith

  `rrclientd -u jsmith /etc/rrpasswd dce-server`

  If this is successful you'll see a message in /var/log/messages indicating it was ok.

  `tail /var/log/messages` will display the end of the file.
- Logout of BPC by entering `rrclientd -k`
- To make this automatic - you'll need to set the PATH & invoke rrclientd each time the system boots.
- The rrpasswd command has NOT been tried.
- That's it - setup your Linux Netscape proxies & go for it !!
- According to the documentation the client will logout & then login automatically at 3am. This has not been checked.

Problems

If you don't setup the PATH properly - then the login will fail with GSS_API complaints about non-supported checksum type.

If you don't make the needed changes to krb5.conf you'll also get a similar error.

If you are using your PC to dual/triple boot between W95/NT/Linux - the PC's CMOS clock will be altered by Linux - giving continual Kerberos errors if you try & login using NT. You need to login using Win95 first (which will fix the CMOS clock settings), then you can get in via NT.

Make sure you setup you PC time/timezone correctly in Linux. Note also that the /var/log/messages timestamps are a bit strange :) (possibly referenced to GMT)

3.11 Fibertel, Buenos Aires, Argentina

This information is provided by Pablo Godel

My name is Pablo Godel and want report that I'm using the cable service of Fibertel in Buenos Aires, Argentina and it works perfectly with Linux.

They gave me a static IP. The brand of the cablemodem is COM21 and the model is ComPort.

I connect it to the nic properly, configured in Linux and it worked perfectly.

More information about Fibertel can be found at

3.12 Videotron, Canada

I don't have much information about Videotron except the fact that they use DHCP for the assignment of IP addresses and other networking information. Just read the `DHCPmini-HOWTO` (http://sunsite.unc.edu/LDP/HOWTO/mini/DHCP.html) and configure your system appropriately. There is no other necessary configuration.

Additional information from Mihai Petre (mihaip@videotron.ca):

Yes they are using DHCP for the tcp settings. They have also included dhcpcd on their ftp server at (). Of course that the tech. support cannot help u for the linux related stuff.

They don't allow setup of any kind of servers on your machine (on ports 80,21,110,25) so the only thing is to use some "exotics" ports.

Information about Videotron can be found at

3.13 Telekabel (Teleweb), Austria

According to Andreas Kostyrka:

- You may want to mention, that the Austrian Telekabel (Teleweb) ISP works with Linux. It seems quite similiar like MediaOne Express (3c509+dhcp, etc.)
- Second there are 3COM configuration utilities for Linux (But don't fool around with them on a busy system, 3c509 may lock the bus if touched the wrong way :( ):

Information about Telekabel can be found at

3.14 Tebecai, Netherlands

According to Frodo Looijaard:

Tebecai is yet another provider which uses a LANcity cable modem connected to a 10BaseT ethernet card. DHCP is used for configuration (see the DHCP mini-HOWTO at http://sunsite.unc.edu/LDP/HOWTO/mini/DHCP.html). A step-by-step guide to install the cable modem under Linux can be found at

(in dutch), but it is really very straightforward. You must only remember that your IP-address is not visible from the Internet (it is on the private 10.x.y.z subnet), so you can not setup a publicly available server.

Information about Tebecai can be found at (in dutch only).

3.15 A2000, Netherlands

This information is provided by Johan List `J.A.List@speed.A2000.nl`:

Basically the way to go is the same as with Tebecai. A2000 provides cable internet access by means of a LANCity cable modem, connected to an 10BaseT ethernet card. This also works well for the "Vortex/Boomerang" cards by 3COM (I've got a 3COM Boomerang Fast Etherlink XL 10/100Mb TX Ethernet Adapter), providing you compile the Vortex/Boomerang drivers. (See the Linux Ethernet-HOWTO)

Setting up access can be done with DHCP (See the DHCP-Mini-HOWTO). A Dutch guide to setting up Internet access for A2000 is available at .

Contrary to Tebecai, your IP-number *is* visible from the Internet, so take your precautions regarding security and safety when setting up a Linux machine using A2000 Internet access!!

3.16 Shaw Cable, Canada

According to Peng F. Mok `pmok@shaw.wave.ca`:

I recently signed up for a cable modem service from Shaw Cable here in Canada, which they have christened 'Shaw Wave'. They also appear to have another service called 'Shaw@Home' which they are using in some locations. Shaw has been upgrading their cable network for about a year and a half now, and now offer cable-modem service to a number of locations across Canada. Information about the 'Shaw Wave' service can be found at while information about the 'Shaw@Home' service can be found at General information about Shaw Cable can be found at

I thought I'd just drop you a line to inform you that your `DHCPmini-HOWTO`, (http://sunsite.unc.edu/LDP/HOWTO/mini/DHCP.html) was very useful in helping me set up Linux to work with my cable-modem service, and that you might want to add 'Shaw Wave' (and perhaps 'Shaw@Home') to your Cable-Modem mini-HOWTO as another entry explaining how to set up Linux with the service. I don't have specific information on the 'Shaw@Home' service yet, but from conversations I've had with Shaw technical support it seems that 'Shaw@Home' is a partnership with 3.2('@Home') and involves the same features and setup procedure as that already described for 3.2('@Home') in the Cable-Modem mini-HOWTO document.

In both services Shaw Cable techs will come over and bring you two pieces of hardware – a Motorola CyberSURFR cable-modem and either a 3Com EtherLink III 16-Bit ISA 3C509B-TPO NIC or an EtherLink XL PCI 3C900-TPO NIC. You have your choice of either an ISA or a PCI card depending on your needs, and these models only have the RJ-45 (UTP) connectors. The ISA cards come with PnP-mode enabled by default, so it may be necessary to boot into DOS, disable PnP operation, and configure the card to some base I/O address and IRQ setting which are available. Once this is done Linux should have no problems detecting the NIC at boot-time. I'm not sure about what needs to be done in the case of a PCI card since I don't currently have a PC which supports either PCI or PnP.

Note from another user:

Shaw now also issues SMC PCI ethernet cards. They give these out without boxes or manuals. I found out that these are the SMC EtherPower PCI RJ45 card (model 8432T). They use the DEC 21041 chip so the tulip ethernet driver is needed for it.

If you need to set up your POP3 mailboxes you can do that at following URL:

and you can login and setup the POP3 mailboxes that way.

Oh, and for the record, Shaw's technical support is horrendous. The best place to go for information is the athome.users-unix newsgroup (which is not even mentioned by any of the documentation) or please consult

3.17 Cogeco Cable, Canada

This information is provided thanks to Terry O'Grady `togrady@cgocable.net`

I have a Cable Modem through a company called Cogeco Cable located in various parts of Canada. They are part of the "Wave" system which includes Rogers Cable and Shaw Cable. The technical setup is different for each provider though. They supplied me with a D-Link ethernet card (the version of that has changed since then but I believe are still using D-Link) and a Zenith modem. The Ip setup is easy since they use DHCP so all I did was `installthedhcpdaemon` (http://sunsite.unc.edu/LDP/HOWTO/mini/DHCP.html) and that was that. If you like you can list my e-mail address `togrady@cgocable.net` for anyone with questions.

3.18 Optimum Online, New York and Connecticut

This information is provided by Seth Greenfield (`islesfan@nassau.cv.net`):

Optimum Online uses DHCP, and rrclientd in Linux, by John Clark. Check out for instructions on how to set up your service with Linux.

Tell people who had private ips who have public ips now to change their /etc/resolv.conf to look like this... domain nassau.cv.net (or optonline.net depenind on the users mood) nameserver 167.206.112.3 nameserver 167.206.112.4 Other Than that its the same setup procedure note: the rrclientd software will work if you tell it dce-server and you specify the domain as optonline.net

3.19 Singapore Cable Vision, Singapore

This information is provided by Jieyao (`jieyao@letterbox.com`):

SCV provides Motorola Cybersurfer modem connected to the network card via UTP cable. The IP setup is easy since they use DHCP so all you need to do is `installthedhcpdaemon` (http://sunsite.unc.edu/LDP/HOWTO/mini/DHCP.html). If you can't make access the first time, turn the modem off then on again.

3.20 Cable Wanadoo, France

This information is provided by Jerome SAUTRET (`Jerome.Sautret@wanadoo.fr`):

I just read your Cable Modem HOWTO. I live in France, and I use Cable Wanadoo, the cable service of France Telecom, which is the main telecom operator in France. It is available in a few cities in France at the moment, like Angers and Metz. This service provides a dynamic IP address via DHCP. It uses a COM 21 modem plugged in a 10BaseT Ethernet card. The IP setup is easy just read the `DHCPminiHOWTO` (http://sunsite.unc.edu/LDP/HOWTO/mini/DHCP.html).

3.21 Prime Cable Expressnet, Las Vegas, NV

This information is provided by jedi `jedi@penguin.lcvm.com`:

They use the Com21 which can either be connected directly to your 10baseT input or inserted into the downlink input on your router. Static IPs are available for $10 per month and the usual address assignment is through DHCP ( )

More information can be obtained from

3.22 TVD, Belgium

This information is provided by Pierre-Yves Keldermans `pykeldermans@usa.net`:

At home, my cable-TV company is "TVD", it is the first company to offer internet on the cable in Belgium.

Hardware : LanCity cable modem & 10-Base-T NIC (DLink ISA if you buy it from TVD)

Config : DHCP ( )

Prices :

- Cheap : for home use, real IP address but dynamic, DHCP expires every 10 min, 1 user only (theorically ...), no problem with firewall, the web server on my computer is even reachable from outside..., full speed FROM internet, small speed TO internet.
- No so cheap : for small office use, same as 1) but not limited to 1 user and more speed TO internet.
- Expensive : for WWW servers & ... , Static IP addresses and reserved bandwidth TO internet following price.

Speed :

>From TVD's mirror site : up to 250Kbytes/sec, very nice (and YES, they have some Linux mirrors like redhat ... :-)) >From internet : variable but rather good if the remote server isn't overloaded.

For more info : and