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## Point to point protocol connections to CedarNet for Windows 3.x systems

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## Point to point protocol connections to CedarNet for Windows 3.x systems

### Abstract

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Point to Point Protocol Connections to CedarNet for Windows 3.x Systems

Michael J. Dargan

University of Northern Iowa

May 6, 1996

Running Head: CONNECTING TO CEDARNET

This Project by: Michael J. Dargan

Title: Point to Point Protocol Connections to CedarNet for Windows 3.x Systems

has been approved as meeting the research requirement for the Degree of Master of Arts in Education.

June 3, 1996  
Date Approved

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### Abstract

The project allows NEIRLS affiliated libraries to connect with the Internet so that they might use the SILO Locator instead of the CD-ROM based system. Important terms used in the project and paper are defined. The methodology follows the ASSURE approach to analyze the learner, state objectives, select media and materials, utilize materials, require learner participation and to evaluate and revise the project. The project is briefly described and judged to be effective but probably will be soon superseded by advancing technology.

## Point to Point Protocol Connections to CedarNet for Windows 3.x Systems

### INTRODUCTION

This project provides an inexpensive means for small to medium sized libraries served by the Northeast Iowa Regional Library System (NEIRLS) to gain high quality access to the Internet. It's obvious that putting libraries directly on the Internet will improve their ability to provide information services to their patrons. However, the specific motivating factor for this project is the desire of NEIRLS consultant Ken Davenport to replace the current CD-ROM based "Locator" system with Internet access to the SILO (State of Iowa Libraries Online) Locator. The current system requires each library to own and maintain this database of materials available via inter library loan on CD-ROM media. The database is now so large that it consumes four CD-ROM drives which are expensive to own and operate. Beside the expense, it's impractical to update the contents of the database more than twice a year. The SILO project, on the other hand, now has the Locator available online from its website. This database immediately reflects additions and deletions to the system's holdings so that libraries using the online Locator are getting the most up-to-date information possible.

Davenport is convinced that using Internet access to the SILO Locator is cheaper and more effective than the current system of maintaining the database on CD-ROMs. His district serves 84 libraries, each of which uses four CD-ROM drives to service the Locator. While the installation of modems, software, and training necessary to put these libraries online will involve some expense and effort, it's likely to be far less than the cost of creating and distributing 672 CDs each year. Moreover, the CD-ROM based Locator becomes obsolete the day that it's mailed; the Internet based Locator is updated instantly for

everyone. If this project is successful, it will be offered to the other (500+) libraries served by the other Iowa Regional Library Systems thereby replacing the need for some 4,000 CD distributions annually.

As a bonus, each library will be given the opportunity to place a home page of their own on the Iowa Literacy Resource Center (ILRC) server housed in the Waterloo Public Library building. The libraries may use the sample template to provide the basic information about their library's services. If they wish, they may be customize their home page to include local community based information. Since most public libraries rely heavily upon their local communities for their support, the ability to provide local service and government groups access to a visibility on the Internet will be a boon to their efforts to better serve their patrons.

### **Important Terms:**

#### **Browser**

Client software that permits the user to navigate the World Wide Web.

#### **CedarNet**

A community based freenet that provides free Internet dialup access and a website to the Cedar Valley area of Iowa.

#### **Client Software**

Software which allows a computer to use a server. Examples include Telnet, browsers, FTP.

#### **DOS**

Disk Operating System.

## EWAN

Excellent Without A Name is a freeware Telnet client program which emulates a DEC VT100 terminal.

## FTP

File Transfer Protocol. A program which allows one computer to transfer software to another over the Internet. An example of an FTP program is the freeware WS\_FTP.

## Freeware

A type of software which may be freely distributed and used without license fees.

## GUI

Graphical User Interfaces allow computer operators to use graphics and “pointing and clicking” rather than command prompts to operate their software programs.

## Home page

An HTML file which provides a starting point for information that a person or an entity wishes to make visible on the WWW.

## HTML

Hyper Text Markup Language. This method of marking ASCII text and graphics makes the display of files on the WWW platform independent. It is a derivative of SGML (Standard Generalized Markup Language) developed by IBM in the 1960s.

## ILRC

Iowa Literacy Resource Center



## JPEG

A format for saving a graphic as a file. In the DOS environment JPEG is denoted by the \*.jpg file extension.

## Modem

Short for MODulate/DEModulate. The modem is a device which translates binary data to a form which can be transmitted over an ordinary phone line.

## NEIRLS

Northeast Iowa Regional Library System

## PKWare

Peter Katz Ware is the company provides which the data compression shareware used to automate the installation of the software suite which the project distributes.

The pkzip.exe component catalogs the directory structure of the suite and compresses it into a file that spans two diskettes. The pkunzip.exe component restores the directory structure and decompresses the software to the hard drive of the target computer.

## PPP

PPP stands for Point to Point Protocol that allows a local computer to, via a modem connection, establish a direct connection to the Internet. This connection permits the local use of client software.

## Shareware

Software that may be distributed freely, but the user is obligated to register it and to pay the license fee.

## Socket

A socket is created by the Trumpet Winsock connection. This socket may be used by any of the PPP client software.

## Telnet

This software allows a local computer to log onto a host computer. Once the telnet session is established, the local computer to act as a terminal on the host.

## TCP/IP

Transmission Control Protocol/Internet Protocol is a commonly agreed upon method for transmitting information via the Internet. The shareware program Trumpet Winsock establishes a TCP/IP connection via a modem.

## Terminal emulation

When conducting a telnet session it is necessary that the terminal established emulate a terminal type which the host computer recognizes. The commonest emulations include those established by DEC (Digital Equipment Corporation) such as VT100/102, VT220, etc.

## Trumpet Winsock

A shareware program which uses TCP/IP to make a PPP socket connection via a modem connection.

## URL

Uniform Resource Locators (e.g., <http://www.uni.edu/dargan>) act as addresses for the WWW. They contain the protocol://machine.domain/directory of a home page.

### Web site

A directory on a computer equipped with Internet server software (e.g., Netsite).

This is the physical location of HTML files and typically contains many home pages.

### Windows 3.x

This refers to the Microsoft Windows program versions 3.1 or 3.11 or Windows for Work Groups. Windows is a GUI for running other software programs.

### WWW

World Wide Web is an agreed upon set of protocols which allows computers to use client software to browse the Internet. The WWW was developed by the Particle Physics Laboratory of Cern Switzerland in the early 1990s.

## METHODOLOGY

The ASSURE model, as described in Heinrich, Molenda, Russell, and Smaldino's *Instructional Media and the New Technologies of Instruction* 5<sup>th</sup> edition provided the paradigm for this project. Texts by Dick, W. & Carey, L., (1990) and Hannafin, M.J. & Peck, K.L. (1988) were also consulted for insights on instructional design and selection of software respectively. PKZ204g is accompanied by a 150 page ASCII manual which was consulted for advice on compressing and restoring software. The CedarNet website was contacted for CedarNet PPP settings.

### Analyze the learners

The learners are librarians who staff the 84 libraries served by NEIRLS. Ken Davenport, who has provided technical consulting services for these librarians, provided an overview of the knowledge, attitudes, needs, and abilities of these librarians. By far the majority of these libraries are equipped with Windows 3.x based machines which are

currently operating the CD-ROM based Locator system. While their ability to function in the Windows 3.x environment varies widely, most librarians should be capable of installing software if given adequate instructions. Davenport says that most of the libraries already have high speed (9600+ bps) modems or can easily get them.

### **State objectives**

Upon completion of the instructions provided by this project, librarians will be able to:

- Copy the software files to their computer's hard drive
- Install and Configure the software to run under Windows
- Make a PPP connection with CedarNet using Trumpet Winsock
- Use Netscape to browse the WWW
- Use Netscape to contact the SILO Locator
- Edit a sample home page (written in HTML) with the Notepad text editor
- Make a VT100 terminal connection to CedarNet with a Telnet program (EWAN)
- Transfer files to CedarNet using WS\_FTP

The goal of the project is to get NEIRLS library on the Internet quickly and cheaply.

### **Select media and materials**

Media selection was based upon several constraints. In order to serve the largest number of libraries, the project's documentation needed to be inexpensive, easily reproduced, and simple to create. Therefore, the media for the project is paper based text and graphics as well as 3.5" high density diskettes. The paper contains the instructions while the diskettes contain the actual software as well as batch files which decompress and copy

files to the library's computer. PKWare version 204g is the software used to compress, copy, and decompress the software.

The materials (the software) used in this project meet the following criteria:

- Windows 3.x compatible
- Shareware or Freeware
- Easy to install
- Easy to operate
- Meet the requirements of the project objectives.

The software programs chosen as the project materials are

<u>Software type</u>	<u>Software name/version</u>	<u>Source</u>
Browser	Netscape 1.22	<a href="http://www.netscape.com">http://www.netscape.com</a>
Winsock	Trumpet Winsock	<a href="http://www.trumpet.com.au/wsk/winsock.htm">http://www.trumpet.com.au/wsk/winsock.htm</a>
Telnet	EWAN	<a href="http://www.lysator.liu.se/~zander/ewan_dl.html">http://www.lysator.liu.se/~zander/ewan_dl.html</a>
FTP	WS_FTP 16	<a href="http://TOOLS.ofthe.NET/windex.htm">http://TOOLS.ofthe.NET/windex.htm</a>
Graphics	LView Pro	<a href="http://world.std.com/~mmedia/lviewp.html">http://world.std.com/~mmedia/lviewp.html</a>
Compression	PKZ204g	<a href="http://www.jumbo.com">http://www.jumbo.com</a>
HTML Editor	Notepad	Windows applet

### Utilize media and materials

It was decided early on to automate the dialup Trumpet Winsock connection. This was done having computer consultant Steve Wells of Cedar Falls customize the LOGIN.CMD script so that it would respond to the CedarNet prompts with appropriate answers.

The graphics were collected by using Windows 3.1 "print screen" captures to the clipboard. These captures were then pasted to an LView screen, cropped, and saved as JPEG files. Microsoft Word 7.0 was then used to create text based instructions. Those instructions were then illustrated with the JPEG files. The software to be distributed was

then placed in the following directory structure:

```
C:\NWEB
C:\NWEB\EWAN
C:\NWEB\FTP
C:\NWEB\LVIEW
C:\NWEB\NETSCAPE
C:\NWEB\SAMPLE1
C:\NWEB\TRUMPET
```

Then, two 3.5" diskettes (1 of 2 and 2 of 2) were prepared. The following files were then placed on diskette 1 of 2:

INSTALL.BAT

```
c:
cd\
md c:\nweb
copy a:go.bat c:\windows
go
```

GO.BAT

```
copy a:pkunzip.exe c:\windows
copy a:readme.doc c:\nweb
pkunzip -d a:pack.zip c:\nweb
copy c:\nweb\trumpet\*.* c:\windows
type c:\nweb\readme.doc | more
cd\
```

README.DOC

and

PKUNZIP.EXE

The "INSTALL.BAT" program creates the directory C:\NWEB on the library's computer.

It then copies the batch file "GO.BAT" to the C:\WINDOWS directory of the library's computer. The "GO.BAT" copies the "PKUNZIP.EXE" file to the C:\WINDOWS

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<sup>1</sup> The SAMPLE directory contains some template files derived from the Janesville Public Library home page. These files can be edited with Notepad to reflect the information of other libraries.

directory of the library's computer as well as README.DOC to the directory C:\NWEB.

"GO.BAT" then restores the compressed files in PACK.ZIP to the C:\NWEB directory and finishes by displaying the file "README.DOC" which advises the user that the copying is complete and that they should use their paper based instructions to complete the configuration.

In order to create the PACK.ZIP file, after logging onto C:\NWEB, C:\NWEB's directory structure, file names, and files were compressed by using the following command:

```
PKZIP -&RP A:PACK.ZIP
```

The program PKZIP.EXE, on the computer and in the "path" stored the directory structure, file names, and made a compressed file which spanned diskettes 1 of 2 and 2 of 2. This completed the creation of instructions and the configuration of the software.

### **Require learner participation**

Four people tried out the instructions and software.

- Beth Ann Scott of the Janesville, IA Public Library
- Ai Wang of the University of Northern Iowa Computer Applications in Education graduate program
- Ken Davenport, consultant for NEIRLS
- Dr. Fred Hallberg, Professor of Philosophy, University of Northern Iowa

Each of the participants attempted to install the software using only the paper based documentation and the software on the two diskettes. They were observed and notes were taken directly on the instruction sheet drafts.

## Evaluate and revise

The following improvements or changes, based upon my observations of the participants, were made:<sup>2</sup>

- Originally, all of the installation commands were contained on the batch file INSTALL.BAT which ran on the A: drive. While this worked on my computer, it caused the Janesville computer to crash. The problem was corrected by creating the “GO.BAT” file which is copied to C:\WINDOWS directory so that it can run locally.
- In a related problem, the batch file was originally used to delete itself from the C:\WINDOWS directory upon completion. This caused the computer to return a “batch file missing” command at the end of the decompression. This proved confusing to the users, so I decided to leave the file in place. It’s very small and probably harmless.
- Participants were confused by the decompression program’s request that they exchange diskettes. Therefore, an explanation of the decompression function was given in the over view of the instructions and within the instructions users are now advised to follow the command at the bottom of the screen.
- The Netscape and EWAN installer utilities prompt users to make decisions about accepting defaults (e.g., installation directory) and participants were uncertain about the meaning of default and whether they should accept. The instructions were changed to include advice to always accept suggestions from the installer programs unless they have a specific reason to not do so.

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<sup>2</sup> Only major changes are noted here. Be assured that several proofreading errors were found and corrected.



- One participant was confused by the “F7” command during the transfer and deletion of the EWAN program. A definition of the key stroke was provided in the text of the instructions.
- The original draft of the instructions advised users to “Start Windows” before each new section. This was changed to “Windows is running.”
- The original project included the HotDog shareware dedicated HTML editor. The copy in use expired after 30 days and it was deemed too expensive to buy a registered version. It was replaced by a template file and Notepad.
- The placement of the graphics and instructions was standardized. There originally had been places where the final commands (e.g., “strike OK”) had preceded the graphic. Participants agreed that it was wiser to place this after the graphic.
- The original instructions included an updated graphic depicting the Netscape group’s appearance after each installation. The accompanying text said that the group “would look like this.” This was changed to “would contain these icons.” The rationale was that sometimes different installers would create larger or smaller groups which would display slightly differently than the graphic.
- A short list of conventions for the instructions for installation was created and included.
- Users were advised to read all instructions prior to attempting the instruction.
- The automatic login script was abandoned and the instructions were rewritten to show manual login only.

## THE PROJECT

The project consists of 26 pages of illustrated instructions for installing a two diskette suite of software. Once installed, the suite will allow libraries to

- Make PPP connections to Cedarnet
- Browse the WWW using Netscape
- Transfer files via FTP
- Create a home page using HTML
- Establish a terminal connection using a Telnet client
- View, create, or convert graphics

Once the librarians have this ability, they will be better able to serve the needs of their patrons and will be able to expand services to other parts of the community.

## CONCLUSIONS AND RECOMMENDATIONS

This suite of software and instructions will be useful to librarians who have the necessary equipment (i.e., a Windows 3.x based system) and a CedarNet account. Based upon my observations of the four alpha testers, most users will be able to successfully install the software and will be able to connect with the SILO Locator. Of those who do have difficulty, the standardization resulting from this suite's automated file copying and consistent instruction protocol will make it fairly simple for the NEIRLS consultant to troubleshoot problems over the phone rather than by personal appointment. The cost savings will be great and service (the up-to-date Locator) will be improved. Librarians who wish to use resources other than SILO will have good access to the Internet via FTP, Telnet, or the WWW.

Despite the usefulness of this project, its value, or utility, will never be greater than it is today; we must expect its usefulness to decline as new technology is developed. Since the introduction of Windows 95 in August of last year the expectations of Internet users have grown tremendously. If, in fact, we are in the midst of an interface shift, this project's materials will soon become obsolete. Despite this concern, the cost of the project is so slight—30 pages of photocopies, two diskettes, and an hour of staff time—and the benefits so great—SILO Locator access—that even if this approach is superseded in six months or a year its implementation must still be considered worthwhile.

This project focuses upon getting libraries to make dialup connections to CedarNet. In many cases this is the most effective and economical method for them to get online access to SILO, even considering the cost of long distance charges. However, this situation appears likely to change very soon. The number of local “mom and pop” Internet service providers is growing rapidly and it's possible that some libraries might find it more economical to connect from a local vendor. Or, it's even possible that phone companies will be offering inexpensive dialup Internet access. If either of these scenarios should occur, we must presume that the local vendors will provide the software and instructions necessary for the connection and that this project will become superfluous. However, if they do not, the standardization (and the use of manual login rather than a login script) offered by this project will make it fairly simple to help librarians to alter their Trumpet Winsock settings to match those of a new vendor by phone or by a short set of paper instructions.

## Bibliography

CedarNet PPP instructions: <http://www.cedarnet.org/cninfo/ppphelp/index.html>

Dick, W. & Carey, L. (1990). *The Systematic Design of Instruction* (3<sup>rd</sup> ed.). New York: Harper Collins Publishers.

Hannafin, M.J. & Peck, K.L. (1988). *The Design, Development, and Evaluation of Instructional Software*. New York: Macmillan Publishing Company.

Heinrich, R., Molenda, M., Russell, J.D., & Smaldino, S. (1993). *Instructional Media and the New Technologies of Instruction* (5<sup>th</sup> ed.). New York: Macmillan Publishing Company.

Netscape search engine for software: <http://home.netscape.com/home/internet-search.html>

PKZ204g online documentation

Point to Point Protocol  
Connections to  
CedarNet  
for Windows 3.x Systems

Prepared for the  
Northeast Iowa Regional Library System

by

Michael J. Dargan

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## Overview

Libraries are finding that access to the Internet helps them to quickly, easily, and cheaply provide information to their patrons. In particular, Iowa's libraries can now get access to their regional library system or the state library via the Internet. While some libraries will be able to afford direct connections to the Internet, many will connect via modem to an Internet service provider. Once on the Internet, they can use the World Wide Web (WWW) to reach their destinations.

Modem connections to an Internet service provider can be made in several ways. The simplest to install and operate is a terminal connection which uses the service provider's client software to actually access the Internet. The major advantages of such a system are low cost and simplicity. A usable terminal connection can be made with any computer capable of supporting an RS232C serial port and running software capable of TTY terminal emulation. Systems as primitive as CP/M or Commodore can therefore make perfectly functional terminal connections. However, the disadvantages of such a connection include the need to rely solely on ASCII for data communication and the inability to use client software other than that provided by the service provider.

The Point to Point Protocol (PPP) connection requires more modern equipment and is somewhat more difficult to establish. However, this connection establishes a direct link between your computer and the Internet via the service provider. Once accomplished, this connection allows you to use client software locally and also permits the transmission of graphics and sound. These instructions and software will enable you to establish and use a PPP connection to browse the WWW, to transfer files, to login to other computers, and to create your own WWW home page.

The programs included with this package are

- Netscape 1.22. This graphical WWW browser is free to libraries and librarians. This version may be updated directly from the Netscape site.
- Trumpet Winsock. This shareware program dials the Internet service provider and establishes the PPP connection. Users must register this program if they intend to use it regularly.
- EWAN Telnet Winsock. This freeware telnet client allows users to login to other computers via their PPP connection.
- WS\_FTP. This freeware File Transfer Protocol (FTP) client allows users to transfer files via their PPP connection.
- LView. This shareware graphics program can be used as a viewer, and editor, or a graphics file converter. If you choose to use it beyond the brief examination period you must register it.

## Installation of software:

The software is compressed onto two diskettes using PKWare program, PKZip. This software may be installed by placing the diskette 1 of 2 into the A: drive and then running the INSTALL.BAT batch file. This batch file presumes the following about your computer:

- Your computer system uses Windows 3.1 as its operating system.
- You are somewhat familiar with Windows 3.1.
- Your computer has a C:\Windows directory which is in the DOS path.
- Your computer has a 3.5" high density diskette drive designated "A:"
- Your computer has a hard drive designated "C:"
- Your computer has a high speed (14.4 or better) modem.
- You have an active CedarNet account

If your computer doesn't meet the drive letter criteria, you may manually unpack the file A:PACK.ZIP to your hard drive and then proceed to install and configure the software. To manually unpack,

- 1 Copy the file A:PKUNZIP.EXE to a directory in the path.
- 2 Create a directory on the hard drive called /NWEB
- 3 Type

```
PKUNZIP -d [d]:PACK.ZIP [d]:<ret>
```

The "-d" (lower case!) restores the directories.

The [d]: denotes the drive letters on your system. For example, if your 3.5" drive is B: rather than A:, the [d]: would mean B:

Upon completion of the installation the following programs will be available:

- Netscape
- Trumpet Winsock
- WS\_FTP (file transfer protocol)
- EWAN (telnet)
- LView (graphics editor)

Before you attempt this installation, backup your entire hard drive. It would also be wise to read all of the instructions before making any installations.

Some conventions used in these instructions:

What you see

What you do

LETTERS IN ALL-CAPS

You type those letters

<ret>

Strike the carriage return key

<alt>

Strike or hold down the <alt> key

^

Hold down the control key

F7

Strike the function key F7

None of these commands are case sensitive.



**PART ONE: Copying the software on your computer.**

- 1 Start your computer.
- 2 Exit Windows (<alt>F4 and <ret>).
- 3 Place diskette #1 of 2 into the A:\ drive
- 4 Type (at the DOS prompt)  
A:INSTALL<ret>
- 5 Follow the instructions as they appear on the screen. You will be prompted (read the line at the *bottom* of the screen) to swap diskettes several times.<sup>1</sup> Take care to follow instructions exactly. If an error occurs, hold down the control key and type the letter "C" to abort the attempt. Once aborted, try the installation again.

If the preceding procedure was successful, you now have the following directories on your C: drive:

```
C:\NWEB
C:\NWEB\EWAN
C:\NWEB\FTP
C:\NWEB\LVIEW
C:\NWEB\NETSCAPE
C:\NWEB\SAMPLE
C:\NWEB\TRUMPET
```

PKUNZIP.EXE and the entire contents of C:\NWEB\TRUMPET have been copied to your C:\WINDOWS directory; this will place them in the "path."

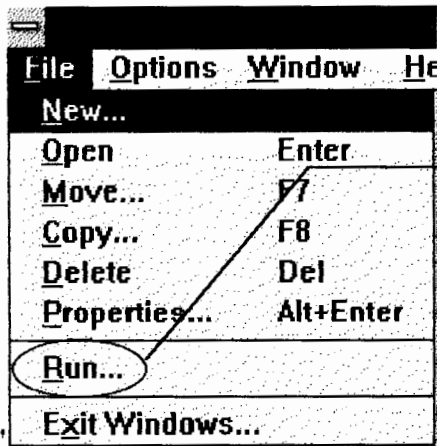
---

<sup>1</sup> The software files have been compressed into the PKWare file pack.zip. Since the file spans two diskettes, a catalog file containing the information necessary to restore the files is stored on the second diskette, the "last file of the backup set." Therefore, when the program Pkunzip is prompted by the go.bat to restore the files contained in pack.zip, the program will prompt the user to insert the last diskette of the backup set so that it might see the catalog. Once the catalog is read into memory, the user will be prompted to reinsert the first diskette so that restoration may proceed.

PART TWO: Installing the software to be run under Windows.

I. Netscape

- 1 Start Windows
- 2 In the Program Manager select "File" and then "RUN

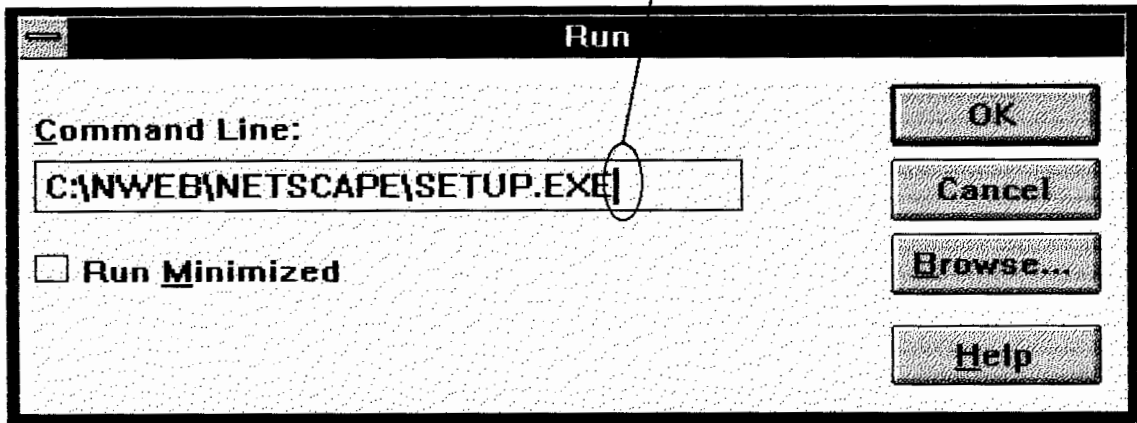


Select "Run"

Ignore the vertical line. It's the cursor.

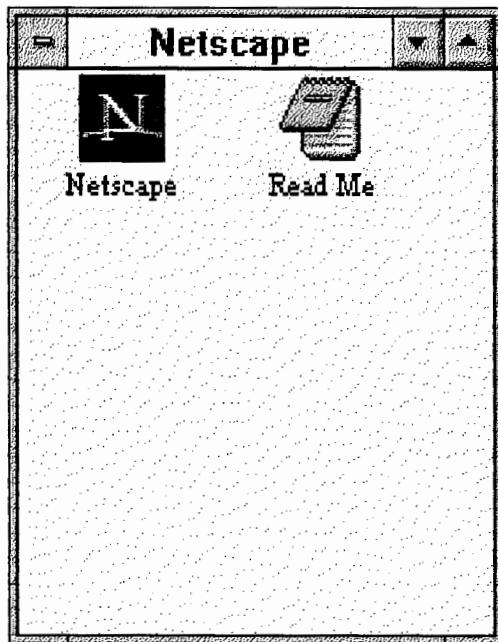
- 3 In the "Command Line" box type

C:\NWEB\NETSCAPE\SETUP.EXE



Click "OK" and follow the Netscape installer "onscreen" instructions. It's usually best to accept the Netscape defaults. (By "default," we mean the methods or procedures suggested by the Netscape installer. In other words, when given a choice, usually you'll want to choose "OK" or "Yes.")

When the Netscape installation is complete and you've exited (choose "File" and "Exit") Netscape's readme file, you should have the Netscape group on your desktop.



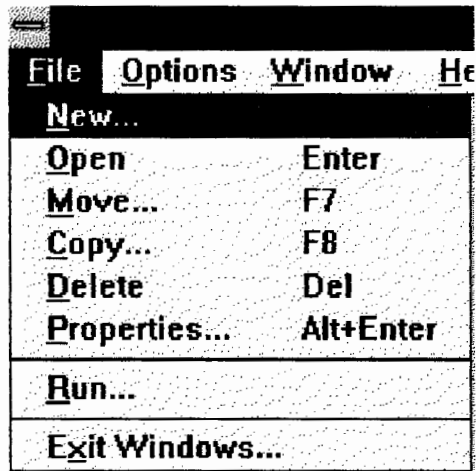
As you install other programs you'll add the icons to this group. It's not essential that all of the programs be placed in one group. However, if you follow these instructions it will be easier for us to help you over the phone if you get stuck. Subsequent sections of these instructions will also make more sense.

Your Netscape group may not always look exactly as the does the group pictured in these instructions. However, it should have the same number and type of icons. If you can't see all the icons that you think you should, and there's a "scrollbar" on the right hand side of the program group, scroll up and down to make sure that the icon isn't hidden.

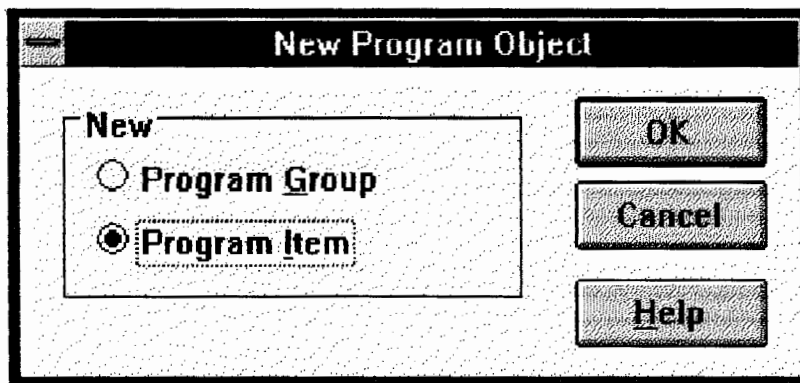
## II. TRUMPET (the dialer--shareware)

In order to make your client software (e.g., Netscape, FTP) connect to CedarNet, you will need to establish a PPP (Point to Point Protocol)

- 1 The Windows program is running
- 2 The "Netscape" program group is active (the bar across the top of the group is dark)
- 3 Select "File" and "New"



- 4 Choose "Program Item" and "OK"

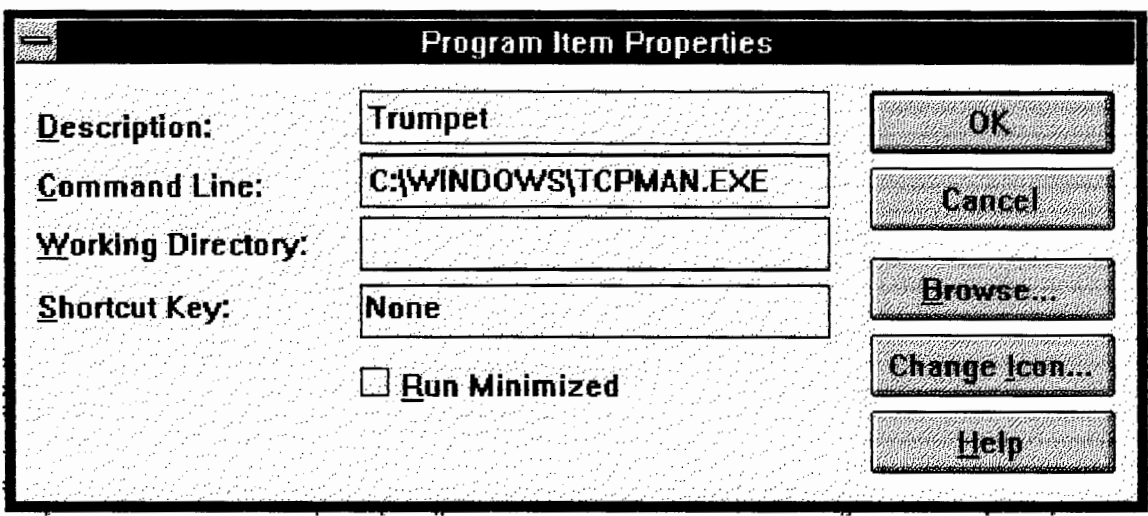


5 In the "Description" box type

TRUMPET

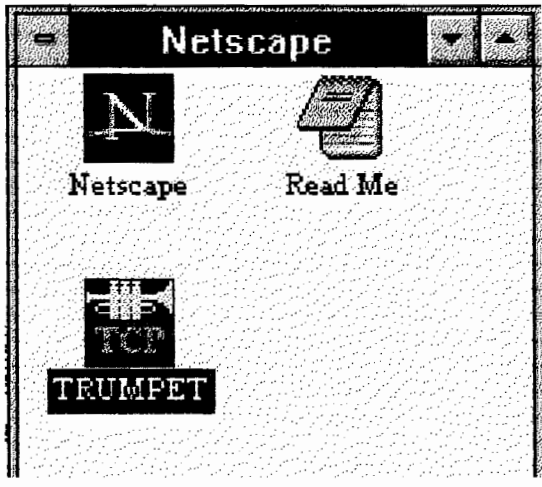
6 In the "Command Line" box type

C:\WINDOWS\TCPMAN.EXE



and select "OK"

When the Trumpet Winsock is installed, the Netscape group should contain the TCP icon.



### III FTP (File Transfer Protocol--freeware)

Eventually, you will create HTML files which you will want to upload to your WWW server site. FTP (File Transfer Protocol) will allow you to quickly and easily transfer both binary and ASCII files.

- 1 The Windows program should be running
- 2 The "Netscape" program group should be active
- 3 Select "File" and "New" (see steps 3 and 4 in the Trumpet instructions)
- 4 Choose "Program Item" and "OK"
- 5 In the "Description" type

FTP

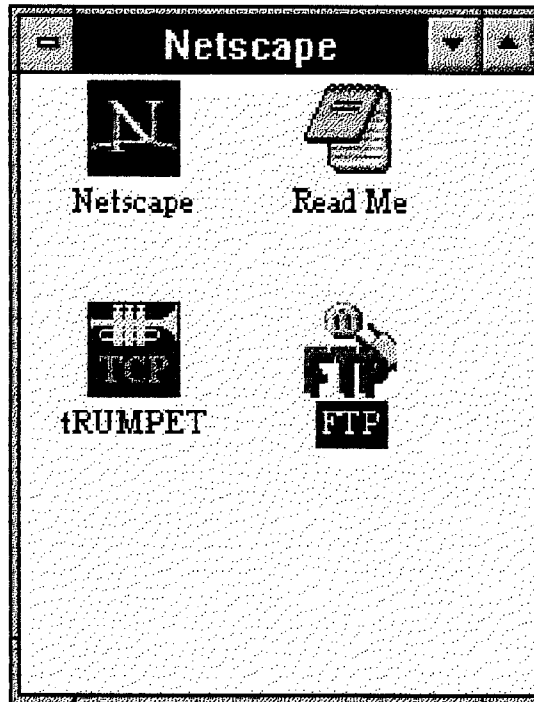
- 6 In "Command Line" type

C:\NWEB\FTP\WS\_FTP.EXE

and then click "OK"



When the installation is complete, the FTP icon will be in the Netscape group.

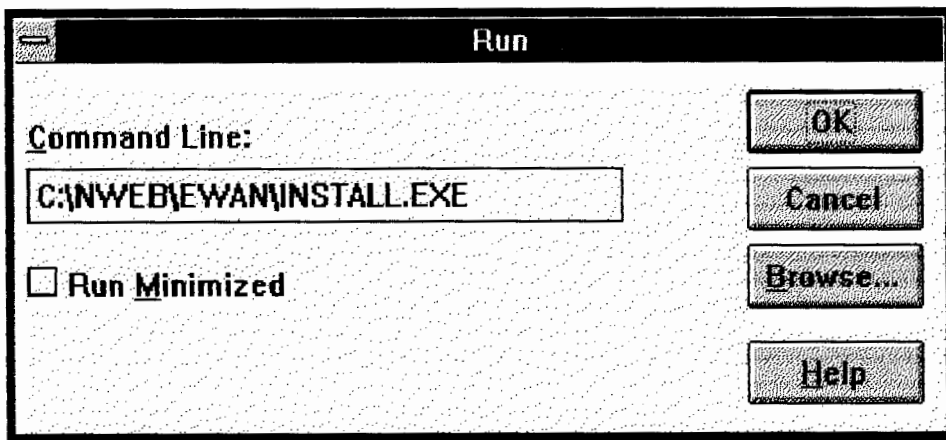


## IV EWAN

Most of you have probably been using a terminal program and modem to dial into CedarNet to check your mail, use Lynx, etc. The freeware Telnet program EWAN will allow you to establish a text only connection to CedarNet through your TCPman connection.

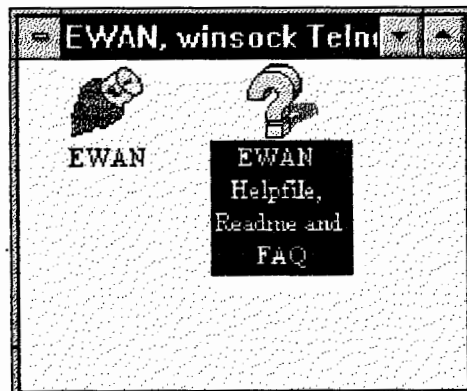
- 1 The Windows program should be running
- 2 From the Program Manager menu select "File" and then "RUN" (see step 2 in I. Netscape)
- 3 In the "Command Line" box type

C:\NWEB\EWAN\INSTALL.EXE



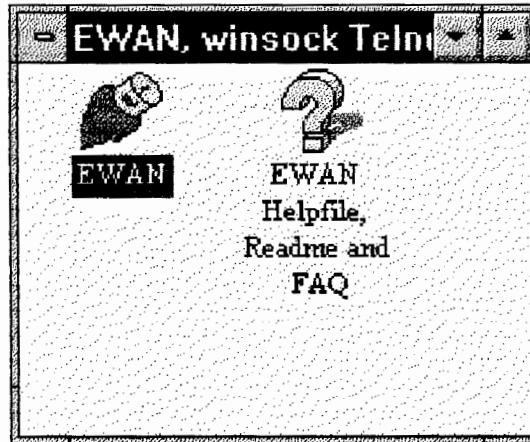
click "OK"; click "OK" again, and follow the EWAN installer's "onscreen" instructions. The EWAN installer sometimes finds duplicate files and asks if you'd like to overwrite. I haven't found any problems with doing so.

This should result in the Program Group "EWAN" which contains the "EWAN" and "EWAN Helpfile, Readme and FAQ" icons. For the sake of convenience you'll want to move these icons to the Netscape group and delete the EWAN group.

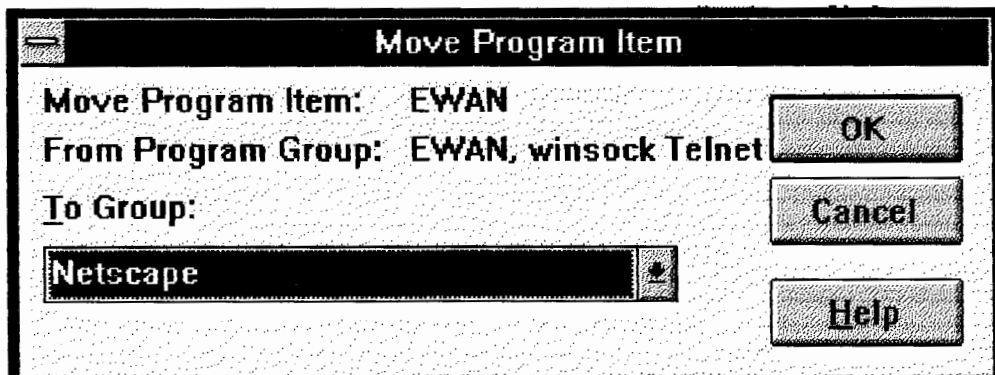




- 4 Select the EWAN icon (click on it once to activate it) and strike the F7 key.



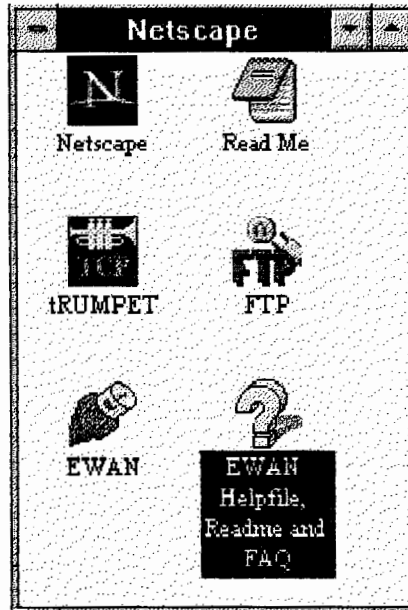
- 5 Step four should have revealed the “Move Program Item” box. Use the “down arrow” cursor key to select the group “Netscape.” Then strike the <ret> key.



- 6 The “EWAN Helpfile, Readme, and FAQ” icon should be selected; strike the F7 key.
- 7 Step six should have revealed the “Move Program Item” box. Use the “down arrow” cursor key to select the group “Netscape.” Then strike the <ret> key.

- 8 The EWAN program group should now be empty and selected (the bar across the top of the group should be blue). Strike the <del> key and then click “Yes” to “Delete the group EWAN Winsock and Telnet?”

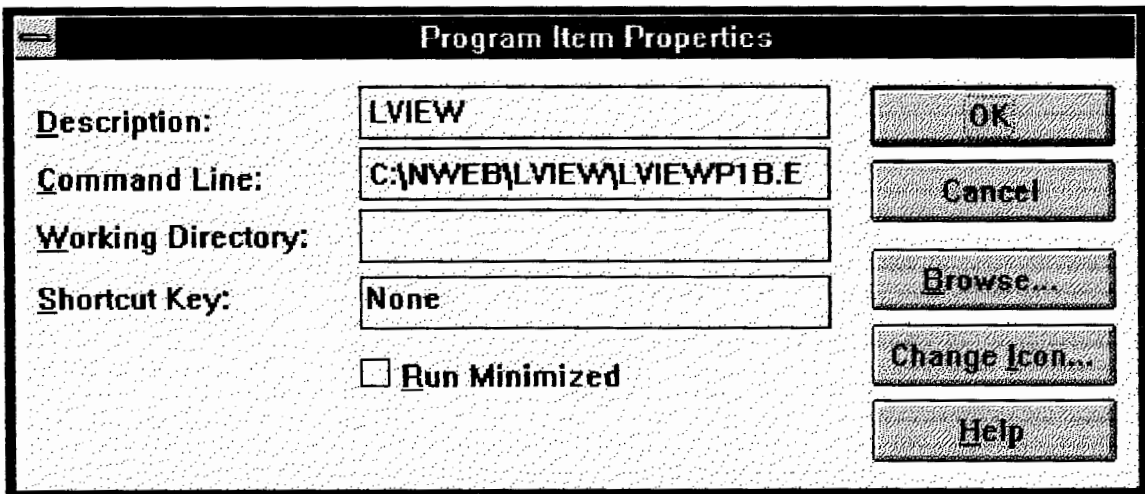
After installing EWAN and moving the icons, the Netscape group should contain these items:



## V. LView

Eventually, you may wish to create a graphic for your library's home page. LView is a simple, yet powerful graphics editor which will allow you to create attractive GIF or JPEG images. Or, you can use it to edit or convert existing graphics. If you choose to keep it, you are obligated to pay the shareware license fee.

- 1 Windows should be running
- 2 The "Netscape" group should be active
- 3 Select "File" and then "New"
- 4 Select "Program item"
- 5 In "Description" type  
LVIEW
- 6 In "Command Line" type  
C:\NWEB\LVIEW\LVIEWP1B.EXE  
and then click "OK"

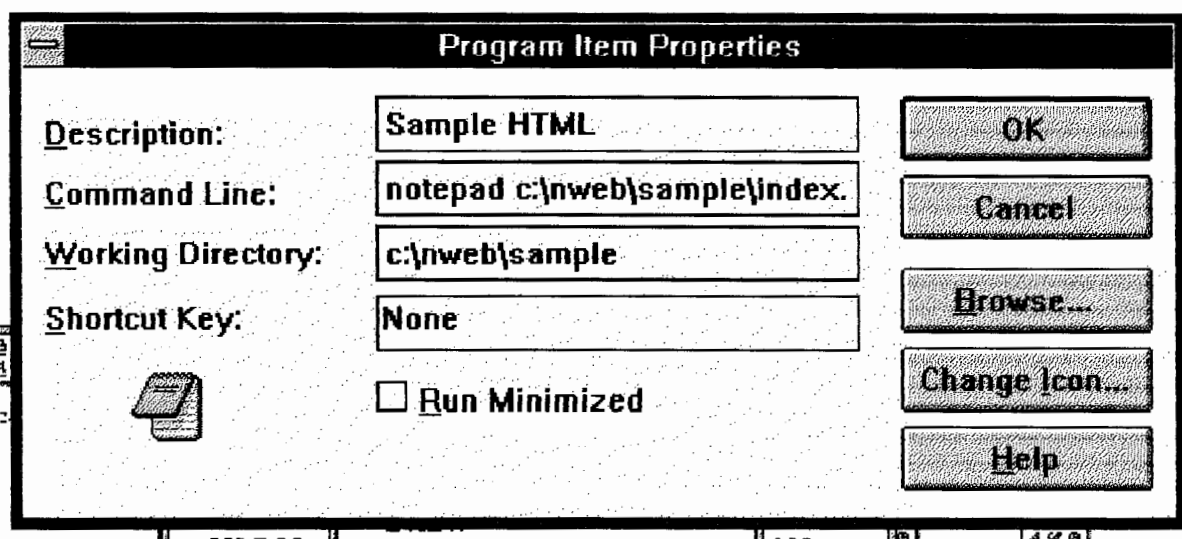


This should result in the "LVIEW" being placed in the "Netscape" program group.

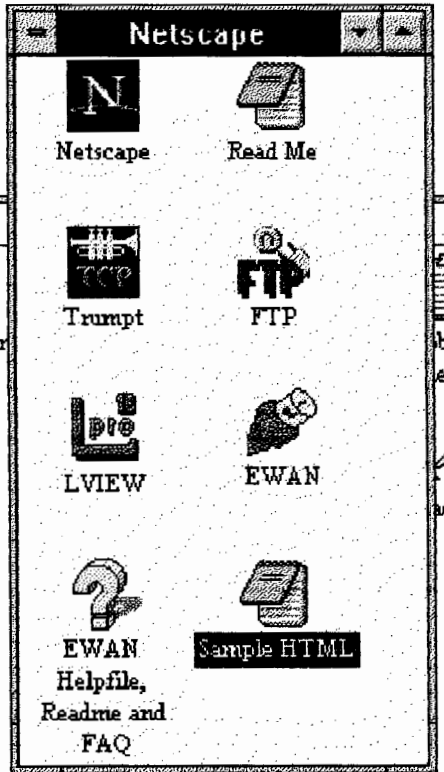
## VI Sample HTML

These instructions will not attempt to teach HyperText Markup Language. However, they do include advice on how to use the sample HTML files installed on your hard drive to create a simple home page for your library with your library's information.

- 1 Windows should be running
- 2 The "Netscape" group should be active
- 3 Select "File" and then "New"
- 4 Select "Program item"
- 5 In "Description" type  
SAMPLE HTML
- 6 In "Command Line" type  
NOTEPAD C:\NWEB\SAMPLE\INDEX.HTM
7. "Working Directory" type  
C:\NWEB\SAMPLE
- 8 Click "OK"



Sample HTML is your final installation. Your Netscape group should resemble the one below:



This completes your installation. After you've used the programs for a while and are certain that the installation was successful you may delete the following:

C:\NWEB\NETSCAPE\\*. \*  
C:\NWEB\EWAN\\*. \*

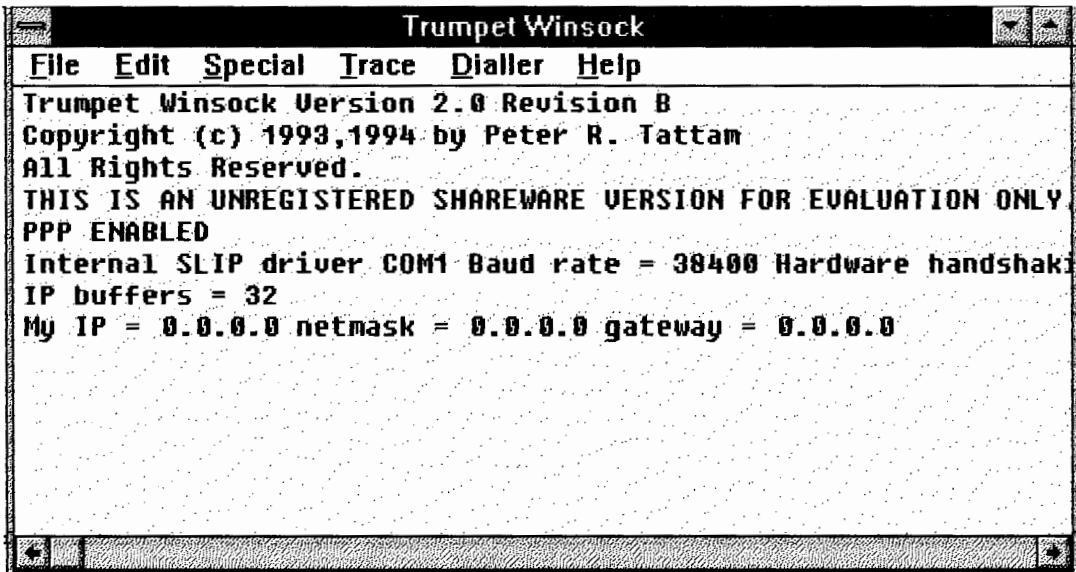
DO NOT DELETE THE  
FOLLOWING FILES:

C:\NWEB\LVIEW\\*. \*  
C:\NWEB\SAMPLES\\*. \*  
C:\NWEB\FTP\\*. \*  
C:\NWEB\TRUMPET\\*. \*

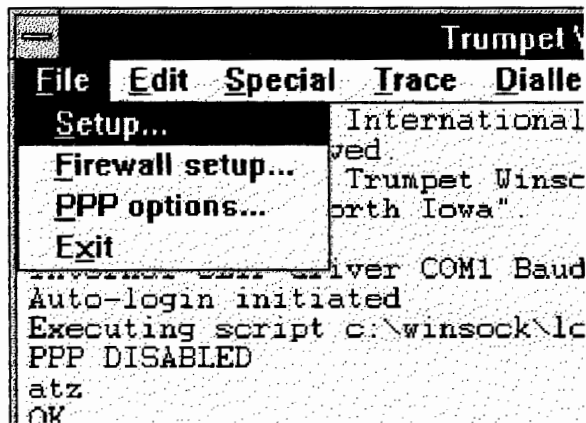
### PART THREE: Connecting to Cedarnet

Your next task is to connect with CedarNet via PPP (Point to Point Protocol).

- 1 You must have an established CedarNet account.
- 2 Go to the "Netscape" program group and double-click the "TCP" icon and you'll see the following screen:



- 2 Choose "File" and then "Setup"



- 3 The CedarNet settings are already entered. You need only to set your "port" your "speed," then click "OK".

**Trumpet Winsock Setup**

IP address	0.0.0.0		Default gateway	0.0.0.0	
Netmask	0.0.0.0		Time server		
Name server	206.29.224.1		Domain suffix	cedarnet.org	
Packet vector	00	MTU	576	TCP RWIN	1008
				TCP MSS	212
Demand load timeout (secs)	5			TCP RTO MAX	60

Internal SLIP    Internal PPP

SLIP port: 1  
 Hand rate: 38400  
 Hardware handshaking  
 Van Jacobson CSLIP compression

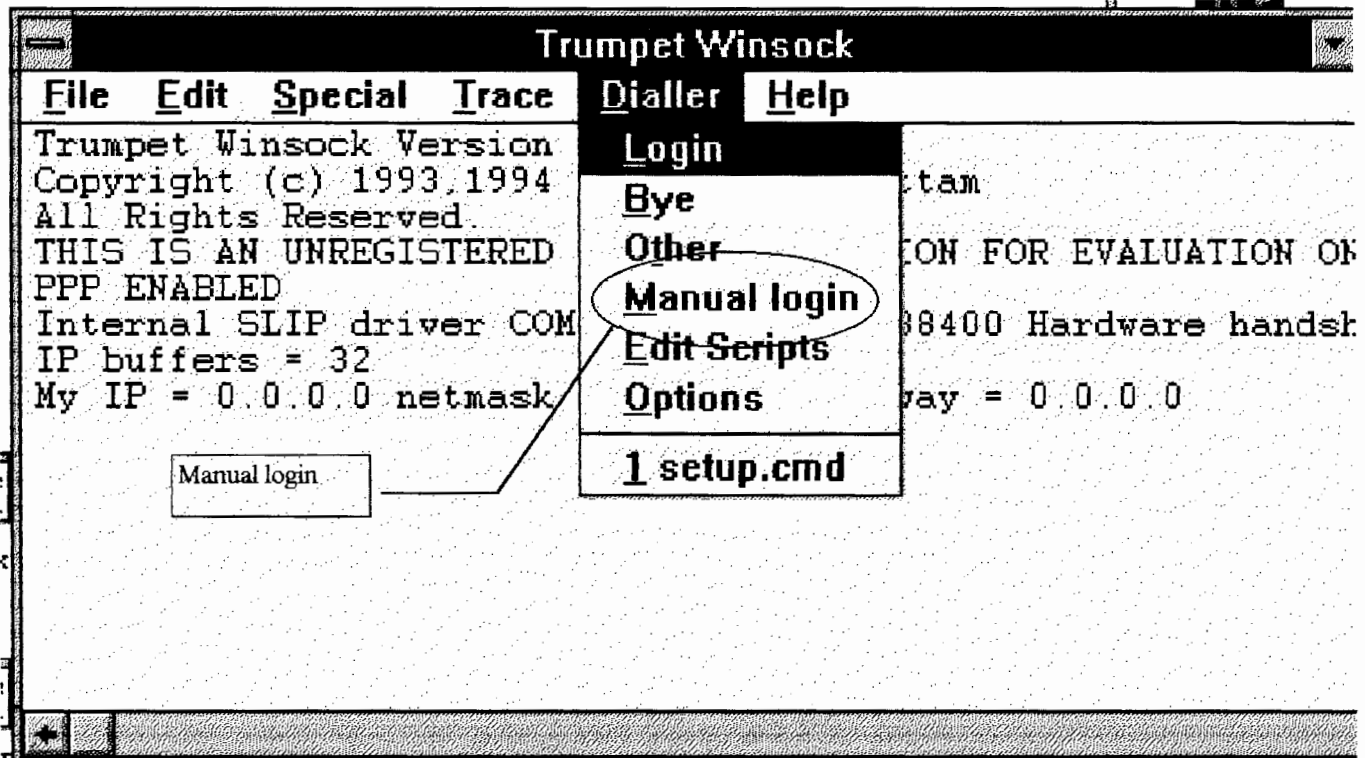
**Online status detection**  
 None  
 DCD (RLSD) check  
 DSR check

The COM port to which your modem is assigned (e.g., 2, 1, 3, or 4) goes here.

Enter the highest speed (e.g., 9600, 19200, 28800) at which your modem can operate here.

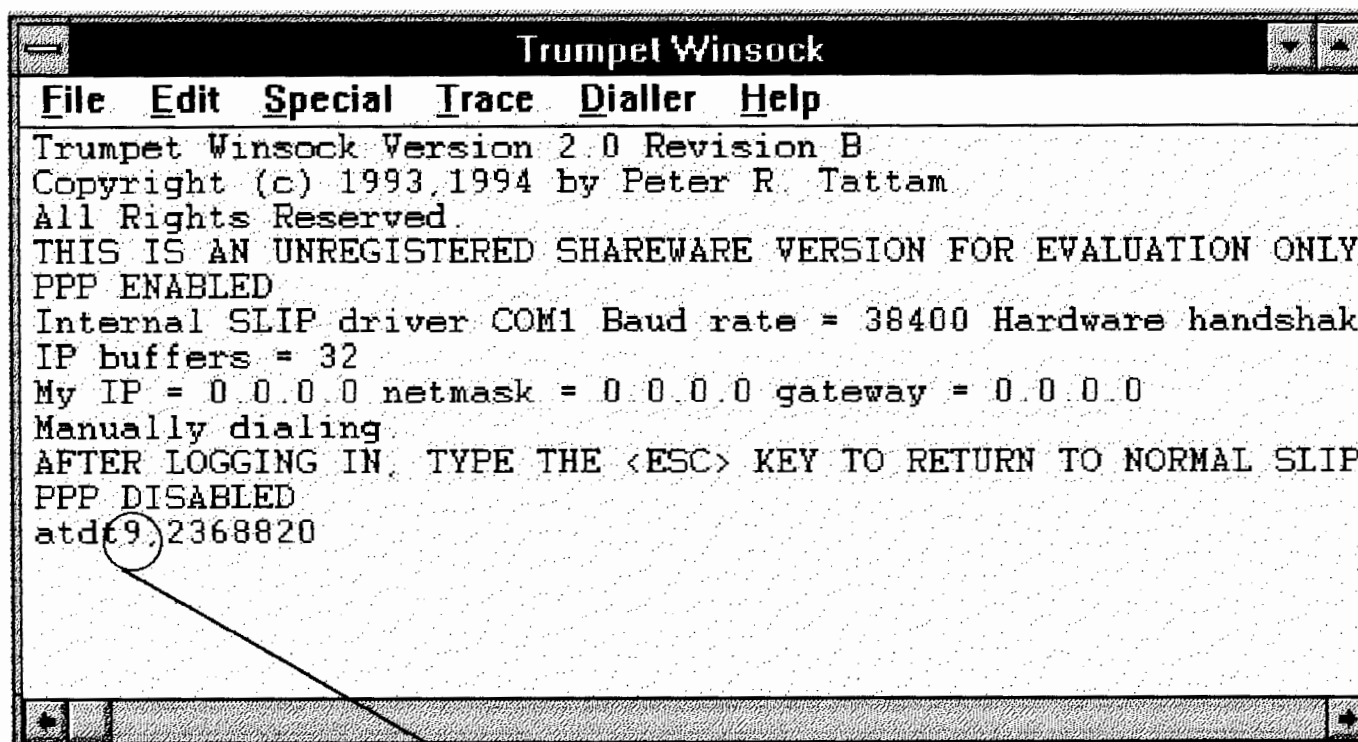
- 4 Select the "Dialer" menu and then "Manual login".





5 You'll have to enter the phone number of CedarNet. Type

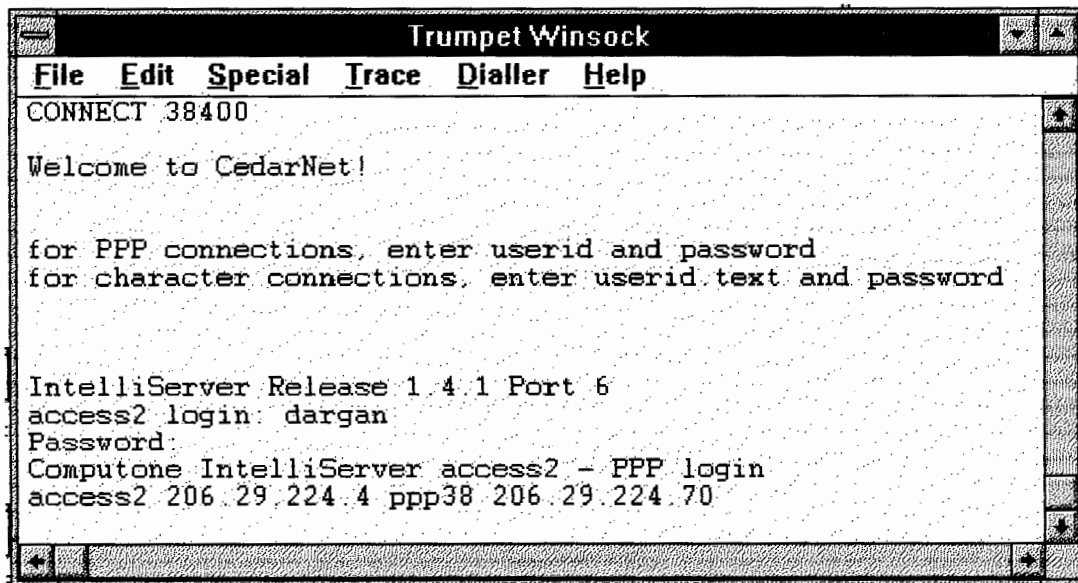
ATDT2368820<ret>



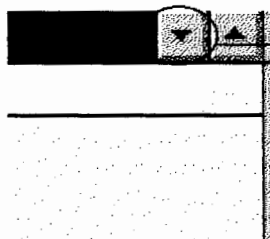
```
Trumpet Winsock
File Edit Special Trace Dialler Help
Trumpet Winsock Version 2.0 Revision B
Copyright (c) 1993,1994 by Peter R. Tattam
All Rights Reserved.
THIS IS AN UNREGISTERED SHAREWARE VERSION FOR EVALUATION ONLY
PPP ENABLED
Internal SLIP driver COM1 Baud rate = 38400 Hardware handshak
IP buffers = 32
My IP = 0.0.0.0 netmask = 0.0.0.0 gateway = 0.0.0.0
Manually dialing
AFTER LOGGING IN, TYPE THE <ESC> KEY TO RETURN TO NORMAL SLIP
PPP DISABLED
atdt9,2368820
```

If necessary, include  
any outside access or  
area codes

- 6 When prompted for “username” and “password”, respond by typing your username and password.



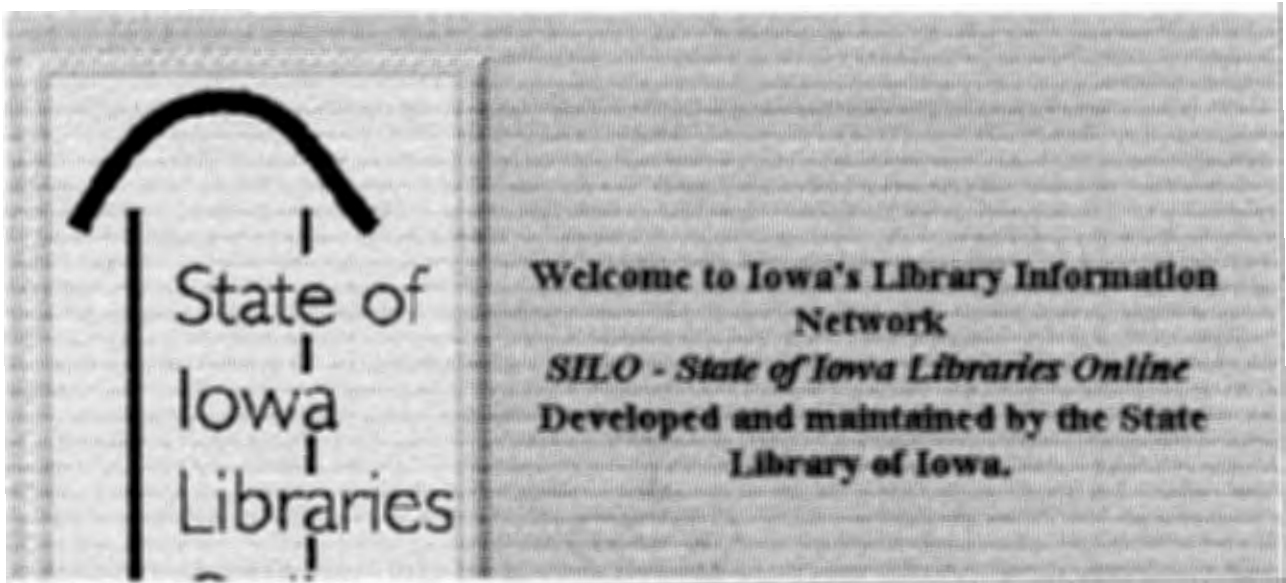
Once you've established a connection (in the example above the IP address 206.29.224.70 was assigned) strike the <esc> key to enable the PPP connection. Iconize Trumpet and you're ready to start using your client software.



Click this button in the upper left hand corner of the Trumpet screen to iconize.

When you want to end your Trumpet session, doubleclick the TCP icon. Then choose “Dialer” and “Bye”.

- 7 The first thing you'll want to run is Netscape. Go to the Netscape group, doubleclick the Netscape icon and you should go to the SILO home page:



## PART FOUR: Creating a home page for your library

Now that you can make PPP connections, you'll want to know how to make an HTML document with your library's information. The package installed on your hard drive contains some HTML template files in the directory c:\nweb\sample. If you'd like to try your hand, click on the "Sample HTML" icon in the Netscape group.

Replace the information within the ovals and brackets [ ] with your library's information. When satisfied, Choose "File" and "Save" (remember to delete the [ ]s).

HINT: Before editing, you might want to save the original file as "index.bak" Then, if you need to start over you can simply copy index.bak to index.htm and you're right where you started.

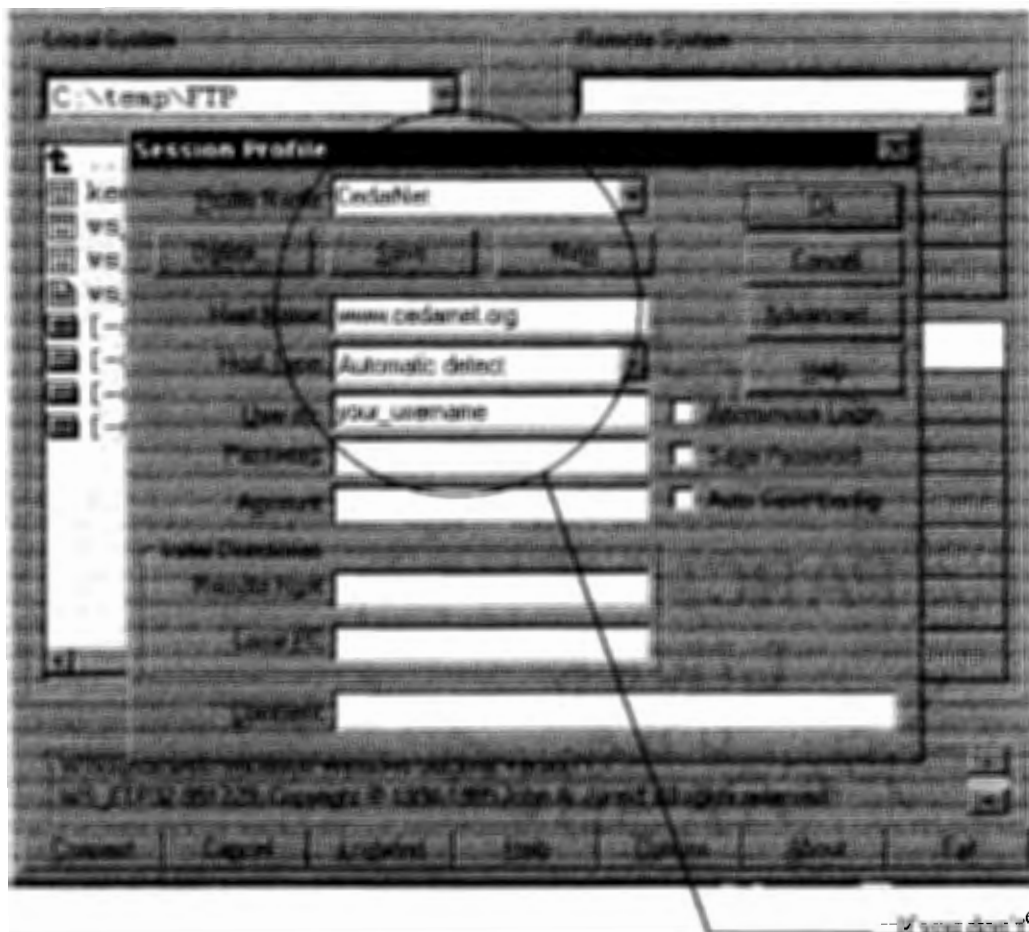
To check your work, go to the Netscape group and start Netscape. After your TCP connection is made, go to "File" and choose "Local File" and then choose the local file c:\nweb\sample\index.htm

The new file with your library's name will (we hope) come up on the screen. If it doesn't look right, use notepad to open the file and re edit it.

## PART FIVE: Moving the files to your CedarNet account

This is the tricky part. CedarNet will assign you an account to which you will upload your files. For the sake of demonstration I shall use my account.

Start your FTP session by going to the Netscape group and clicking the WS\_FTP icon. Your first screen should look something like the following:

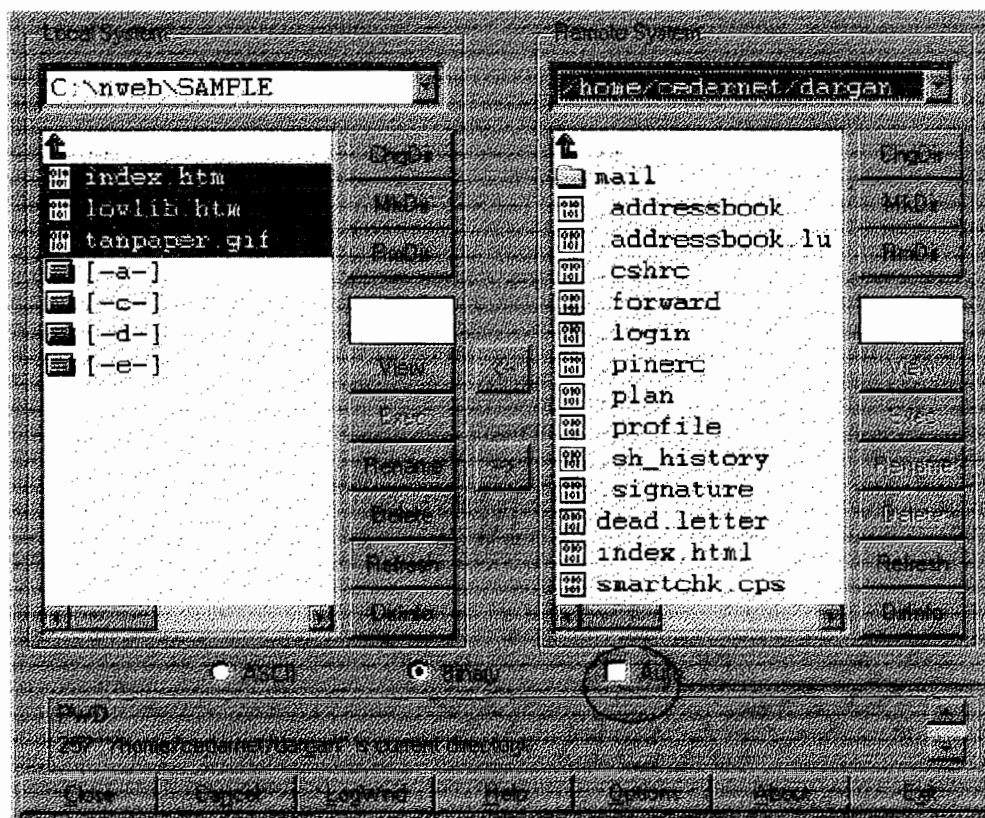


Click on "OK" and WS\_FTP will either find an existing PPP session or start one for you.

these settings, type them in. You may have to choose "New" and recreate.

After the connection is made, you must select and move the files to your account.

- 1 On the “Local System” side, select the path to the directory which contains your html files.
- 2 While holding down the “ctrl” key, click each of the files that you wish to transfer. All highlighted files will be moved.
- 3 To send the files to your account, click the -> (right arrow) button.

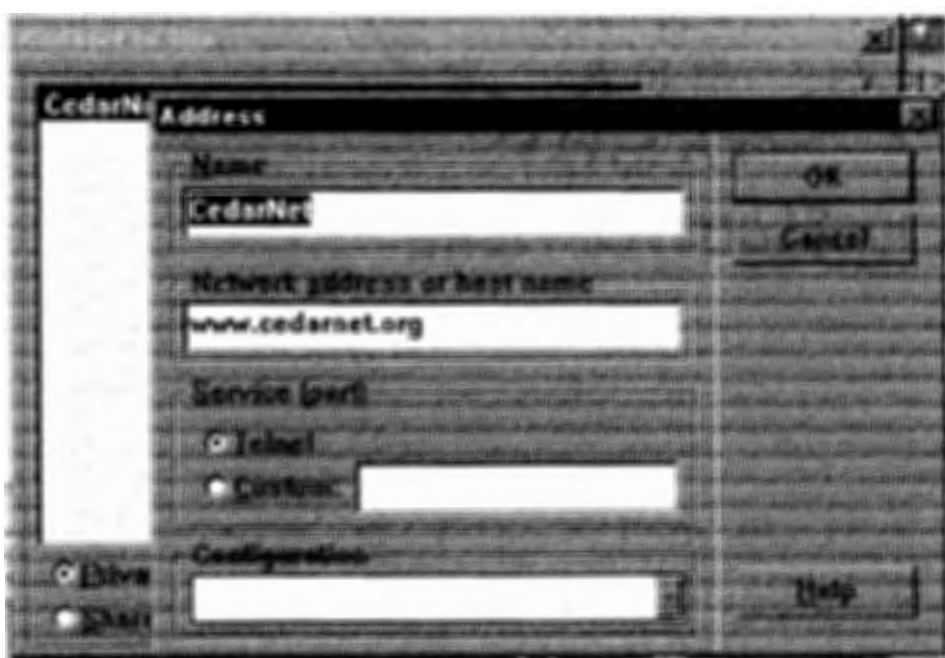
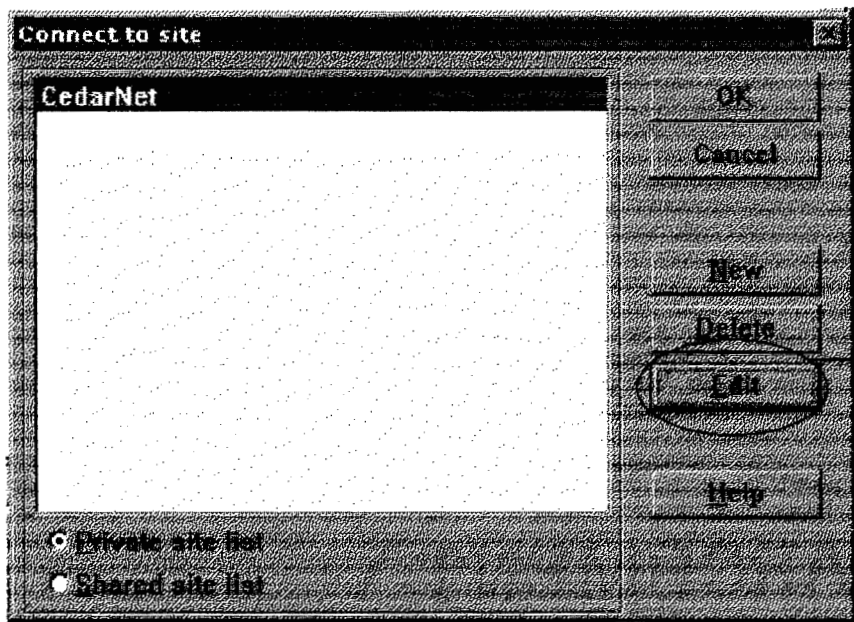


Choose “Auto”

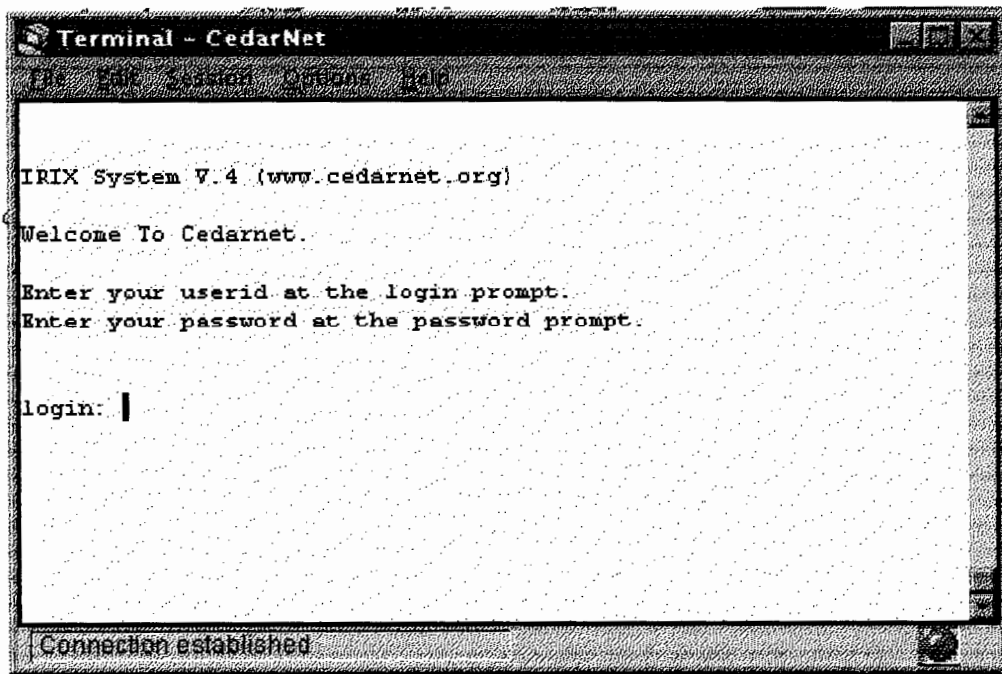
When the transfer is complete, click on the “Exit” button.

## PART SIX: Running a terminal session

There will be times when you'll want to log into your account using a terminal emulator. The EWAN program provided with this package emulates a DEC VT100 terminal. To use your EWAN program, first make a PPP connection with CedarNet. Then, go to the Netscape group and doubleclick the EWAN icon.



After you've filled in your CedarNet settings (they may already be correct), click OK to return to the EWAN directory screen. Then, with the CedarNet session highlighted, click OK to begin your CedarNet session.



This completes our instructions for installing and using the software necessary for a CedarNet PPP connection.