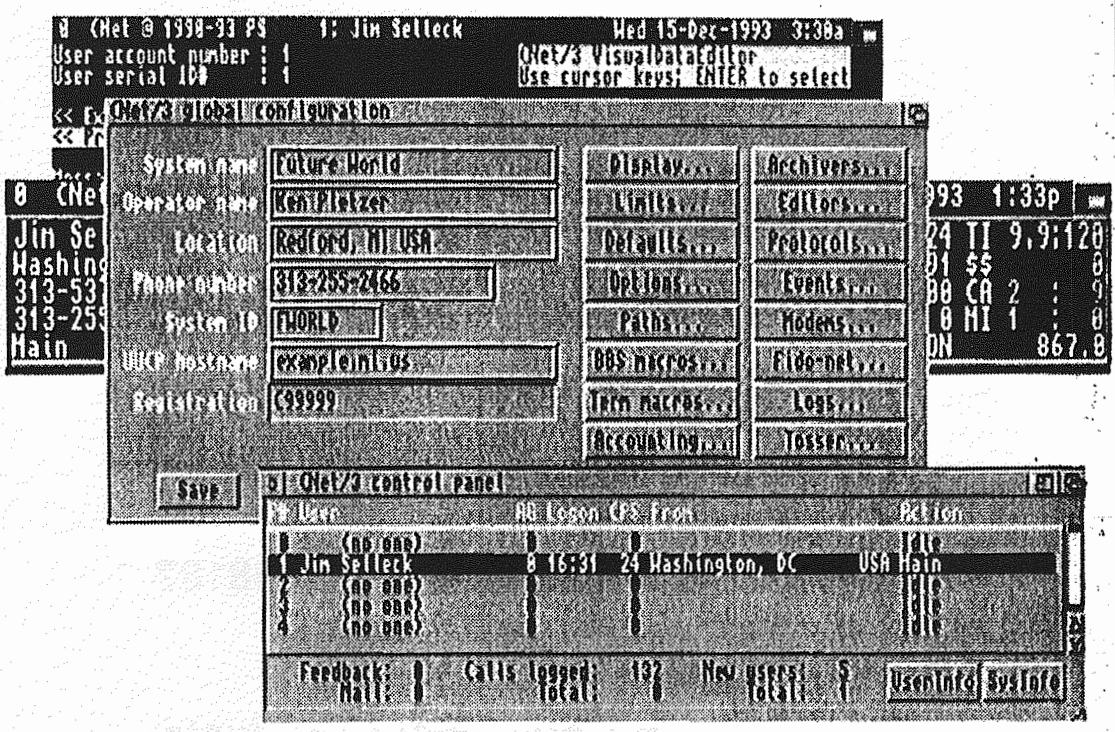
CNet PRO

Bulletin Board System

for Commodore *AMIGA®* computers



Program and documentation written by Ken Pletzer

Perspective Software

Perspective Software
P.O. Box 87175
Canton, Michigan 48187

Sales Information:
Beverly James Products
P.O. Box 40191
Redford, Michigan 48240

Printed in the United States of America

All printed parts of this book and binder were composed and created using Commdore *AMIGA* computers and Professional Page v4.1® Desktop Publishing software from Gold Disk, Inc.

This manual was written by Ken Pletzer, then edited and published by Jim Selleck. If the text contains any errors or ommisions, it is the fault of twelve years of Ronald Reagan and Republican politics in the US government. Yes, its a lame excuse, however the American public has bought it before.

TABLE OF CONTENTS

System Overview and Glossary

Welcome to the exciting world of telecommunications on your Commodore Amiga computer! CNet PRO version 3 for Commodore *AMIGA®* is an extremely powerful program, designed to make optimum use of the Amiga's built-in features. This preface has been added to the CNet manual to help you understand some of the technical terms we will use later. If you are new to computing on the Amiga, or if this is your first time running a Bulletin Board System (BBS), you are invited to peruse this list of terms before you try to tackle the task of installing and running CNet.

If you are already an Amiga "power user" with a thorough understanding of the AmigaDOS command shell, or if you are familiar with CNet from previous experience, you may safely skip this preface and move on to Chapter 1.

Glossary of commonly used terms

The following terms are referenced in the Index at the end of the book for your convenience if you need to look them up again later. Some of the items in all capital letters are AmigaDOS commands which can be used from the Shell or in script files. In general, the computer does not care whether you type them using capital or small letters.

Access

The dictionary defines access as a way to get into or reach a place. In computing, we often say, "I'm accessing my files." to indicate when we are using those files in any way. The CNet BBS allows you to define access groups" which precisely limit and define the places and activities users can reach.

AmigaDOS

DOS means Disk Operating System. AmigaDOS is different from the IBM DOS, which alienates some people who are used to the other system. AmigaDOS and its commands form the interface between the Amiga computer and its disk devices. You will have to learn to use some of those commands in order to install CNet.

ANSI

American National Standards Institute (ANSI) creates standards for computer languages and procedures. CNet AMIGA supports a large number of ANSI telecommunication procedures for sending and receiving text color changes, tabbing, cursor movement, etc. Callers to your system who are using ANSI terminal programs will be able to use and view the BBS much as you see it from your local screen.

Archive

An archive is a single file which contains several other files, usually compressed into a smaller number of bytes, if possible. Several archiving utility programs have been included with CNet and will be installed in your C: directory automatically. Programs which are copied to C: become usable as Shell commands.

AREXX

AREXX is a flexible and easy to use "script" language which is highly recommended for use with CNet. It comes with AmigaDOS 2.x, or is widely available for separate purchase.

Argument

An argument is a piece of information you enter after a command to tell the system exactly how you wanted that command executed.

ASCII

American Standard Code for Information Interchange (ASCII) is a numbered list of the letters, numbers, and symbols we use to communicate. It is the generally accepted standard by which data is transferred from one computer to another.

ASSIGN

This AmigaDOS command allows you to give alternate, shorter names to directories, in effect letting you address them AS devices. This is a VERY important command to master. Devices (such as DF0:, the floppy drive) are always addressed with a colon (:) after their names. Thus the command "DIR DF0:" will cause the system to look for a disk in the internal floppy drive and tell you what is on it. By issuing the command:

```
ASSIGN MYFILES:  Work:JimStuff/misc
```

you create a pseudo-device called "myfiles:". Then if you command "DIR MYFILES:", the system will give you the contents (if any) of the subdirectory on your hard drive at the end of the path you specified. (It has to exist!)

Baud Rate

The speed of data transfer in BPS (bits per second).

C Language

CNet AMIGA is written entirely in C language and much of the Amiga's own operating system is also written in C. If you learn C, you can create your own add-on modules to enhance and modify CNet's operation.

CD

This AmigaDOS command changes the Current Directory

(or storage device) being used by the command Shell, and by the programs you launch from it.

CLI

Command Line Interface: the same as the Shell. "CLI" is the original name for the Shell used in earlier versions of the AMIGA and its DOS.

COPY

This AmigaDOS command copies files from one place to another. If files being copied are inside a subdirectory structure, the necessary subdirectory(s) are automatically created on the destination device.

Default

Many system commands and functions have an action they take "by default" if no argument is given. For example, if you enter the Shell "DIR" command by itself, a directory of the files on the current active directory (CD) will be displayed. To see the contents of the RAM: device instead, you would supply the argument: "DIR RAM:". Commands and utilities which REQUIRE arguments will generally either give you an error message ("missing device name") or a quick list of the required arguments. Utility programs in C language often will print out a lengthy "help" text message if you type their name ONLY without arguments. Most of the archiving programs (like ZIP) included with CNet will do this. You can send that help text to your printer by using a "redirection" argument, like this:
"ZIP › PRT:"

Device

A hardware "device" is anything the computer can send or receive data to or from, like a disk drive, modem, printer; even the screen and keyboard are devices. Amiga devices

are always addressed with a colon (:) after their name, as in DF0: or PRT:. The Amiga also uses SOFTWARE devices. This is an EXTREMELY powerful feature, too involved to be explained here. CNet comes with a special "device handler" which allows AmigaDOS functions to be used over the modem. See also the ASSIGN command for a description of how you can create device names for any disk partition or subdirectory.

DIP Switch

A group of tiny switches placed together in a row of (usually) from 4 to 12. Often DIP switches are found on the backs or inside printers and modems. Each switch controls an operating function as defined in the instruction manual for that device.

Directory

A listing of the names of all the files in a disk storage area.

Download

You are downloading when you transfer data INTO your computer from an outside source. This contrasts with uploading, where you send data OUT to another destination.

DTR

Data Terminal Ready (DTR) is the name given to one of the wires in the cable between your computer and the modem. Most new modems support "DTR Hangup", which simply means that the modem will instantly disconnect the phone call in progress if you turn the DTR signal off for a second and then turn it back on again. Many modems have a status light which reflects the current DTR (or TR) on or off condition. You must be using a fully wired modem cable in order to use this function. See your computer dealer if you are not sure.

ENDCLI

This AmigaDOS command exits the current Command Shell and closes the Shell screen window.

EXECUTE

This AmigaDOS command causes the system to open a script file containing other AmigaDOS commands and execute those commands in order. After the commands are completed, control will return to the process from which the EXECUTE command was issued.

Extract

When you encounter an archived file which contains one or more other files grouped and compressed together, the process of taking those files apart and reconstituting them in their original form is called extraction.

Feedback

A private message to a BBS system operator.

Fido

An international networking system (FidoNet). CNet PRO includes a FidoNet message packer and tosser system, and needs only the addition of a "front end mailer" (usually "TrapDoor") program to make full use of FidoNet.

File

A collection of information stored under a single title (filename), usually on a storage device such as a disk. Files can be simple data, such as a text message, or a file can be a program or executable script which makes the computer perform a task.

File Transfer Protocol

A special program designed to send or receive information between two computers. Most protocols automatically detect errors and re-send data until it is confirmed to be correct. This helps insure 100% accurate transfers over the modem, even if line noise causes problems. The computers at both ends of the file transfer MUST be using compatible file transfer protocol software.

Font

The style of type and character set you select to see on your local screen. Changing your font will NOT make any difference on the screen of a remote (modem) user.

Gadget

The little boxes, arrows, screen sizers, etc. that you can manipulate with your Amiga's mouse are called gadgets.

Gfiles

CNet AMIGA maintains an area for your users where you may make text and/or graphic files available for them to read. Gfiles is short for "General Text Files".

Handle

An assumed name used by a BBS user.

Hayes

A manufacturer of computer modems. The Hayes modem command set has become the standard in the telecommunications industry. Modems which conform to that standard are said to be "Hayes Compatible".

Icon

A small picture on your workbench screen which will usually activate a program or open a screen window when you click with your mouse pointer on it.

Iconify

Some programs (like CNet's "Control") can close down their screens to save memory while remaining active in the background. A special icon is created to allow you to bring the program screen back.

Interface

Two different programs which pass data between them are said to interface together. Also, a device to allow two or more pieces of hardware to communicate with each other is called an interface.

Kilobyte

1,024 bytes.

Libraries

The Amiga uses collections of special short programs (called functions) to perform special jobs (such as mathematical operations). These collections are called libraries and can be found in the LIBS: directory. CNet uses special library files for file transfer functions. The included libraries will be automatically installed when you set up the BBS. It is possible to install additional file transfer libraries. Many of CNet's most frequently needed routines are stored in the file "libs:CNet.library".

Line Noise

Static or other interference on the phone line which introduces spurious "garbage" characters into the data being sent over the modem.

Local

BBS operations which are performed or apply ONLY to the local console and keyboard are referred to as being local. This contrasts with online or remote operations. When you activate Local Mode with a user online, input and output from the modem are suspended so the user cannot see what you are doing.

Logical Name

A name which the system can use to locate a place it would need to send or receive data to or from. Logical names can be assigned to devices, subdirectories, or even files. Hard drive partitions are addressed using logical names.

Logical Unit

When a hard drive partition is assigned a logical name so the computer can address it as though it was a separate hard drive unit, that partition is sometimes referred to as a logical unit.

Logon

A user "logs on" to a BBS when they connect, give their password, and are allowed to enter the system.

Macro

A string of characters which can be entered by typing only one key or key combination. Also, AREXX language script files are often called macros.

MAKEDIR

This AmigaDOS command is used to create a new subdirectory on a disk drive. Subdirectories on the Amiga are also called "drawers", and can be nested inside each other.

Megabyte

1,048,576 bytes.

News

On CNet BBS the SysOp may post news bulletins for users to read when they enter the system. News files can be made mandatory (non-abortable), and/or recurring, so the user sees the same bulletin every time they call. Normal news files are displayed only once and can be aborted if the user is not interested.

Online

System operations which are conducted from a remote computer over the modem, are referred to as online operations. This contrasts with local operations which are conducted from the console keyboard and screen only. Also, when you connect your computer to an active phone line and make it ready to take BBS calls, you are said to be putting your BBS online.

Partition

A separate area on a hard drive. Most hard drives can be divided into several partitions for convenience in keeping files and data isolated. Partitions are generally addressed by the Amiga as though they were completely separate drive units. Each partition may have its own directory and subdirectories.

Pfiles

CNet allows you to set up a special area where users can make use of additional, external program modules called Pfiles. These can be games, utilities, or even extentions of

the BBS itself. Almost any CLI (Shell) based executable file written in C language, AREXX, or AmigaDOS script can be used as a Pfile, as long as its input and output can be diverted over the modem by CNet.

Pixel

A single dot on the screen. Usually the smallest screen area the computer can address.

Port

A place where the computer communicates with peripheral devices. The modem is generally connected to the serial port, which is set up as a 25 pin connector called an "RS-232" port If you wish to operate more than one phone line on your CNet BBS, you will need to add more serial ports to the Amiga. This can be accomplished by using a multi-serial port card such as Commodore's 2232 card.

Prompt

A place where the system stops and waits for input from the user. Most prompts are in the form of a short text message describing what kind of information is required.

Protocol

A formal set of communication procedures between two different systems. See also: File Transfer Protocol.

RAM

Random Access Memory. The kind of memory that your Amiga uses to run programs and store data. You may have to add more RAM to your system by purchasing either more chips to plug in, or a separate memory expansion card. Also, the "RAM:" device is a simulated disk drive which uses RAM only for data storage. It is very fast and

is often the best place to store data which is replaceable but needed often.

RESIDENT

If you have enough RAM memory on your Amiga, some programs (like CNet) can be made resident by using this AmigaDOS command. That means that they are stored in memory all the time so the system does not have to take time to go back to the disk drive every time they are needed.

RS-232

The standard by which the serial modem port is wired.

Run

This AmigaDOS command is used to start a program from the CLI (Shell). The main advantage of of using the RUN command over simply typing the name of the program, is that a new window is created, allowing you to go back to the Shell if necessary and type more commands.

Script File

A text file containing a list of AmigaDOS (or AREXX) commands to be executed in the order given. Script Files are started using the Execute command.

Serial Port

(See Port) The place on the back of the Amiga where you plug in the modem cable. The computer sends and receives data "serially" here, or one bit at a time. That contrasts with the parallel port where data is transferred several bits at once.

Shell

The Shell is a window into which you can type AmigaDOS commands, many of which are mentioned in this glossary. You will have to have a Shell window open at all times in order to run CNet BBS.

Startup-Sequence

This is the name of a text file you will find on the S: directory of your hard drive. It is an AmigaDOS script file which contains a list of steps the system must perform in order to start itself up. AmigaDOS 2.x users will generally NOT add modifications to this file but will change the S:User-Startup file instead.

Subboard

In CNet you will allowed to establish separate areas for both public messages and file transfers. Each of these areas is called a subboard, and each can be set up with its own set of restrictions and attributes.

SubOp

A system user who has been given access to special maintenance commands on one or more subboards is called a SubOp, or Subboard Operator.

SysOp

As main BBS System Operator, you are the SysOp. You will want to set up a special access group for yourself only, containing all of the special reserved maintenance capabilities. Also, you will need to log on to the BBS as the FIRST New User before you actually place the system online. That will define your account as the first one in the system user file.

Terminal

A program that allows your computer to communicate with another computer, usually over the telephone line via modem. Anyone wishing to call your BBS will have to be running a terminal program on their computer. CNet includes a simple terminal program for your convenience should you wish to call out to another computer without taking the BBS down.

Text Editor

A program which allows you to create new text files, or edit existing ones. In general a text editor differs from a word processor in that the text editor will save "raw" text without any special formatting characters added. While many word processors have "save text only" modes, it is SAFEST to use a simple text editor when you are creating or editing CNet files.

Upload

You are uploading when you send data OUT from your computer to an outside destination. This contrasts with downloading where you are transferring data IN to your computer.

UseNet

An international networking system originating on UNIX.

User

A member of your BBS who calls in via modem and participates.

User-Startup

A text file which can be used by AmigaDOS 2.x systems. As noted in the CNet installation instructions, AmigaDOS

1.3 users will make the indicated changes to their S:Startup-Sequence file. 2.x users will make the changes instead to S:User-Startup.

UUCP

Another name for UseNet, the UNIX network.

Validate

New users to the system are allowed limited access. As SysOp you will validate users by confirming their identity and assessing their desirability, then assigning them a higher access group accordingly.

Workbench

The Amiga's powerful icon based Graphical User Interface (GUI). This is the screen where all the disk icons appear and can be selected using the mouse. Workbench is actually a program itself, which is started in the Startup-Sequence file by the command "LoadWB". Since CNet is operated from the Shell, you may wish to eliminate Workbench entirely in order to save memory. That can safely be done by removing the "LoadWB" command from the Startup-Sequence.

System storage areas Used by CNet BBS

When you install CNet following the procedures in this manual, several special storage areas for the use of the Bulletin Board System will be automatically created on your hard drive. This is a summary of those areas.

CNET:	The main directory which usually contains all the other BBS files, including:
News:	Where system news bulletins are stored.
Gfiles:	General text files.
Pfiles:	Games and utilities in 'C', AREXX, or AmigaDOS
Mail:	Private mail between system users.
UDBasex:	File transfer/message base area. (x = 0-23)
Basex:	Message/file transfer base area. (x = 0-23)
SysData:	Data files about the system and your users.
SysText:	Storage for text files displayed on the BBS.

If you follow the normal setup instructions, these areas will be created on your hard drive. After you install CNet, pointers to these storage areas are set up automatically every time you turn on or reboot your Amiga. A series of AmigaDOS ASSIGN statements does the job. The intallation utility program adds the necessary assigns and many other important lines onto the end of your s:User-Startup file. You may use a text editor to carefully change these lines at any time.

ONWARD!

It is hoped that this opening chapter has helped clarify some terms and concepts you will encounter later. It is not meant to take the place of more detailed texts about AmigaDOS and the Amiga computer.

Mainly, this is simply the glossary that I wish had been provided for *me* when I first started out in computing and telecommunicating.

Good Luck, and I'll see you on the nets!

Jim Selleck
June 16, 1992 for Version 2
Revised and updated December 25, 1993 for Version 3

Logic is the beginning of wisdom, not its end.

-Spock (paraphrased from Star Trek VI)

Notes:

CHAPTER ONE - Welcome!

Welcome to CNet version 3, the most complete and comprehensive Bulletin Board System (BBS) software available for the Commodore Amiga line of personal computers. CNet is the product of several years of continuous, constant, and determined software engineering. CNet has been and always will be an ongoing project--many exciting features and enhancements still await future versions of CNet!

Don't be fooled, running a BBS is hard work. You have to spend long hours maintaining a computer system that may be in constant use by hundreds of people, maybe several at a time. You may have to listen to their complaints, cater to their needs, and even entice them to use your BBS instead of "the competition." And then there is the "small" matter of the phone bill!

All that aside, running a BBS can be one of the most rewarding activities you have ever undertaken. A BBS can be a very social place--innumerable friendships, and even marriages have resulted from people "meeting" on these electronic hang-outs. If you run your BBS as a hobby, it will provide you with hours of entertainment. Instead of calling as many other BBSs as you may have, your own users will bring conversation and computer programs right to your fingertips. If you run your BBS for profit, CNet will provide a courteous and professional interface to your business. Your BBS may even provide a valuable community service.

About your CNet documentation

It is our goal to make CNet quick and easy to initially install. Whether you are new to CNet, or if this is your tenth update, carefully follow the instructions in the installation chapter. Then, once you have CNet up and

running with a minimal configuration, this manual is intended to be used as a "reference tool" to expand your system and to learn about and to take advantage of the many advanced features that CNet has to offer.

The manual is organized by "topic," not necessarily strictly by command menu and prompt. This makes learning about specific topics easier than having to reference commands and data fields located throughout different chapters. The index at the end of the manual provides an easy way to locate exactly what you are interested in.

One thing we have learned over the years of writing these CNet instruction books is that different people learn technical stuff in different ways and at different speeds. We can only present the information here one way, so we have to decide which method will reach the most readers. Alas, however, we cannot reach every reader with every example. Please be patient with us and with yourself. Make sure that you have learned all you can about your Amiga computer first before you try to tackle installing CNet. It is beyond the scope of this manual to show you how to invoke and use the Amiga's "Shell" Command Line Interface to directly type commands. But it will be necessary for you to USE the Shell occasionally to install and administer your BBS.

If you simply cannot find the answer to a question here in the book, take heart! You may call our 24 hour customer service BBS, called Future World. See the paragraph titled "Getting Help" later in this chapter.

System requirements

CNet will operate on any model of Amiga personal computer running the AmigaDOS Operating System version 2.04 or newer. CNet requires at least two (2) Megabytes of RAM for a minimal configuration. More

memory is recommended for a multi-user BBS and to improve system efficiency. CNet requires installation onto a hard drive (of any capacity). CNet will work with all "Hayes-compatible" modems.

New features of version 3.0

If you have used earlier versions of CNet, you will find many improvements in version 3.0. These improvements include new commands and programs that make using the BBS easier and more efficient. Version 3.0 includes the following new or improved features:

- Account locking to maintain user data integrity on busy multi-user systems
- All new and more powerful event scheduler
- Use up to 100 ports
- Many improvements to Join and JoinLink, including automatic JoinLink dial-ups
- TermLink allows "restricted" dial-out
- Commands like EL, EA, EG and AT take RANGES of items to make changes to multiple items at once
- Caller-ID has been more fully integrated
- The visual editor has a fully-featured and expandable spell checker
- A built-in ANSI-sequence editor
- Support for access groups 0-31
- Executables to import and export UUCP mail and UseNet newsgroups
- Complete Fido-Net netmail support
- A "cnet.library" to hold commonly called routines
- The DOS interface has been replaced with Matt Dillon's FIFO routines
- CD-ROM support has been more fully integrated
- Users may batch upload short description files
- XPR-TASK is GONE! Use of Machine Language allowed transparent coding of this file
- The BBSList has an auto-purge feature
- CNet has a FAST integrated FidoNet tosser/packer

Getting help

If you have a question about CNet, first consult this guide. For information not available in time to be printed in this guide, a "support" directory exists on the CNet distribution disks. This directory contains text files of documentation updates, tips, helpful hints, and answers to commonly asked support questions.

Perspective Software and Beverly James Products operate Future World, a 24 hour customer support BBS. This CNet BBS operates with six high speed modems, five of them v.32 and one an HST dual standard. Future World's primary dial-up number is currently 313-255-2466. Our current FidoNet address is 1:2410/215. Hundreds of other CNet sysops call this BBS, and it is an excellent source of help, encouragement, and support. Future World is the primary source for CNet updates and news--as a registered owner of CNet, you are entitled to download all version "3.X" updates for free! Hundreds of program files ("doors") and other enhancements are also constantly available and being updated on Future World.

If you wish to write to us, the address is:

Perspective Software
P. O. Box 87175
Canton, MI 48187

If you have suggestions for the further improvement of CNet, please do not hesitate to write or to share them with us online at Future World. CNet has been built upon the ideas and suggestions of its sysops and users.

The Registration Card

It is very important that you fill in your registration card and mail it back to us. This card will allow us to mail you

notifications of upcoming releases and CNet related activities. It also serves as a proof of purchase so that you may obtain support and full access to Future World BBS.

Perspective Software License Agreement

IMPORTANT--READ CAREFULLY BEFORE OPENING SOFTWARE PACKET(S).

This is a legal agreement between you (either an individual or an entity) and Perspective Software. BY OPENING THE SEALED SOFTWARE PACKAGES AND/OR BY USING THE SOFTWARE YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, PROMPTLY RETURN THE UNOPENED DISK PACKAGES AND THE ACCOMPANYING ITEMS (including written materials and binders) TO THE PLACE YOU OBTAINED THEM FOR A FULL REFUND.

1. GRANT OF LICENSE. This License Agreement permits you to use one copy of the enclosed Perspective Software program (the "SOFTWARE") on a single computer. The SOFTWARE is in "use" on a computer when it is loaded into temporary memory (i.e., RAM) or installed into permanent memory (e.g., hard disk or other storage device) of that computer.

2. COPYRIGHT. The SOFTWARE is owned by Perspective Software and is protected by United States copyright laws and international treaty provisions and all other applicable national laws. Therefore, you must treat the SOFTWARE like any other copyrighted material (e.g., a book or musical recording) except that you may either (a) make one copy of the SOFTWARE solely for backup or archival purposes, or (b) transfer the SOFTWARE to a single hard disk provided you keep the original solely for

backup or archival purposes. You may not copy the user documentation provided with the SOFTWARE.

3. OTHER RESTRICTIONS. You may not rent or lease the SOFTWARE, but you may transfer the SOFTWARE and user documentation on a permanent basis provided you retain no copies and the recipient agrees to the terms of this Agreement. If you transfer the software, make sure to send a note to Perspective Sofware including the serial number, the CNet version, the new owner's name and address, and the transfer fee of $15.00 (US). You may not reverse engineer, decompile, or disassemble the SOFTWARE. If the SOFTWARE is an update or has been updated, any transfer must include the most recent update and ALL prior versions.

If you acquired this product in the United States, this Agreement is governed by the laws of the state of Michigan. If this product was acquired outside the United States, then local law may apply.

Contact Perspective Software if you have any questions about this Agreement.

Limited warranty

LIMITED WARRANTY--Perspective Software warrants that the hardware (disk media) on which the SOFTWARE was supplied will be free from defects in materials and workmanship under normal use and service for a period of ninety (90) days from the date of receipt. Perspective Software makes no warranty concerning the SOFTWARE. The SOFTWARE is provided "AS-IS" without warranty of any kind.

CUSTOMER REMEDIES--Perspective Software and its suppliers' entire liability and your exclusive remedy shall

be, at Perspective Software's option, either (a) return of the price paid, or (b) repair or replacement of the SOFTWARE or hardware that does not meet Perspective Software's Limited Warranty and which is returned to Perspective Software with a copy of your receipt. This Limited Warranty is void if failure of the SOFTWARE or hardware has resulted from accident, abuse, or misapplication. Any replacement SOFTWARE or hardware will be warranted fro the remainder of the original warranty period.

NO OTHER WARRANTIES--TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, PERSPECTIVE SOFTWARE AND ITS SUPPLIERS DISCLAIM ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH REGARD TO THE SOFTWARE, THE ACCOMPANYING WRITTEN MATERIALS, AND ANY ACCOMPANYING HARDWARE. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, YOU MAY HAVE OTHERS WHICH VARY FROM STATE TO STATE.

NO LIABILITY FOR CONSEQUENTIAL DAMAGES--TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT SHALL PERSPECTIVE SOFTWARE OR ITS SUPPLIERS BE LIABLE FOR ANY DAMAGES WHATSOEVER (INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, OR ANY OTHER PECUNIARY LOSS) ARISING OUT OF THE USE OF OR INABILITY TO USE THIS PERSPECTIVE SOFTWARE PRODUCT, EVEN IF PERSPECTIVE SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH

DAMAGES. BECAUSE SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

If you acquired this product in the United States, this Agreement is governed by the laws of the State of Michigan. If this product was acquired outside the United States, then local law may apply.

CHAPTER 2 - Installation

If you are updating from another version of CNet, the first thing to do is to BACK UP your current system. If something goes wrong, you can temporarily return to your old configuration.

Manual or Automatic?

CNet PRO version 3 is the first incarnation of CNet to come with an automatic installation utility. Previous versions all had to be installed using Copy commands from the AmigaDOS Shell prompt. This was done because BBS operators were assumed to be computer "hackers" who would be more comfortable with the "command line" interface than with pointing and clicking on little graphic boxes. In fact, there are computer people out there to this day who refuse to touch a mouse unless as a last resort.

However, as CNet and Bulletin Board Systems in general have become more popular, we have had in increasing number of requests to move to the GUI (Graphical User Interface) to make the system accessible to casual Amiga users as well as those rugged pioneers who bravely navigate the command line frontier.

This movement into the point-and-click realm has resulted in CNet becoming more powerful than ever, and even the old hackers have to admit that system setup is now 1,000 times faster and easier.

Having said all that, we have decided to include a section on manual installation and updating just in case it is needed for Amiga systems having very unusual configurations where the automatic installation utility might to too generic to use.

For 999 out of 1,000 systems out there, all you have to do is insert CNet PRO BBS disk #1 and double-click on the Install_CNet icon! Follow the instructions as they come up. Don't expect to have a fully operational BBS up and online in just five minutes. This is an extremely powerful system, and it is not unusual for system operators to continue tweaking and modifying their CNet configurations for many months. In fact, thats part of the FUN!

Note for Updating CNet SysOps

Those updating from CNet 2.x can use the automatic installer too! Your BBSMENU and BBSTEXT files will NOT be touched so that you can transfer any changes and modifications you have made into the new 3.0 files. Please use the detailed instructions later in this chapter to determine which files from the Updating directory you will have to run in order to convert your 2.x BBS data files over to 3.0 format. AND MAKE CERTAIN YOU HAVE A COMPLETE SYSTEM BACKUP before converting, just in case something goes wrong!!

What to do next

If you carefully followed the instructions in this chapter, congratulations! Chances are that you now have an operational BBS (local mode only). The default configuration in place is minimal--use of only one hard drive partition and no modems.

Before expanding the BBS configuration, take some time to become familiar with CNet in local mode. Read the control panel and BBS GUI chapter. Then, work your way up to the CONFIG program. From the CONFIG program, you can change many defaults and options. Modem ports may be added and configured from the CONFIG program.

In no time at all, you will be ready for your first caller!

Manual Installation Procedure

All installation described in this chapter is done from the Shell prompt. If CNet is currently running, quit from it.

Modifying your startup-sequence file

The default AmigaDOS 2 startup-sequence file contains lines to "loadwb" and then "endcli." In a BBS environment, you will NOT want to do this. It is advisable to keep the original "background CLI" open during BBS operation. Using a text editor like MicroEMacs or CygnusEd, edit the file "s:startup-sequence." Add a semicolon (;) to the beginning of each of the "loadwb" and "endcli" lines to nullify them. Then, at the end of the file, add this line:

```
execute s:startup-cnet
```

Installation of system files

Insert the CNet distribution disk with the "workbench" directory. From the Shell, use the CD command to make the workbench directory the "current" directory. Use the following commands to install the system files:

```
copy C C:
copy L L:
copy S S:
copy LIBS LIBS:
copy fonts fonts: ALL
```

Choosing a location for CNET:

Create a directory on your hard drive for CNet by first using the CD command to make your hard drive the "current" directory (eg., "cd dh0:"). Then, use the command "makedir cnet."

If you have more than one hard drive, or more than one partition, you may install CNET: onto one of the smaller ones. Most sysops prefer to reserve the larger hard drives or partitions for strictly file transfers.

Modifying your startup-cnet file

Use a text editor like MicroEMacs or CygnusEd to edit the "S:startup-cnet" file. The first "assign" command has a path for the "cnet" directory. If necessary, change this path to reflect the path to the directory you just created (eg., "dh1:cnet" or "dh2:cnet" etc.).

If you have more than one hard drive or partition for the BBS, additional assignments may be added to this file later after you have read the "partitions" section of the subboards chapter.

Installation of CNet files

Insert a CNet distribution disk with a "cnet" directory on it. Use the CD command to make the floppy drive the "current" directory.

NOTE: Some of the directories MAY contain files which have been "archived" together (such as SYSTEXT:) to save space using the LhA archiver. You will have to UNPACK those files after they are copied!

Use the command "copy cnet dh0:cnet all" to transfer the CNet files to your hard drive. Change the "dh0:" in the above command to reflect the hard drive that your "cnet" directory was created on. Repeat this procedure for each CNet distribution disk that has a "cnet" directory on it (there will be at least two disks that do).

If this is your first CNet installation, you are ready to re-boot your machine and check your installation. If everything was installed correctly, you should see the control panel open, load port 0 (configured as a local mode only port), and then iconify.

Updating from version 2.X

You only need to read this section if you are currently running CNet version 2 on your system. NOTE if you are running CNet version 1, conversion programs from version 1 to 3 are not available at this time.

Before continuing, please double check that you have followed the above instructions and that all version 3 executables and configuration files are in their correct directories. As before, CNet should NOT be running at this time.

There are a varying number of steps involved in the conversion from version 2.X to version 3, depending upon what the 'X' in "2.X" is. Make a note of what your current version number is (as displayed when you first connect to the BBS), and then read and execute the following instructions with care.

If you are updating from 2.20d or earlier,

```
delete vote:#? all
makedir sysdata:vote
makedir sysdata:bbslist
rename sysdata:bbslist.index sysdata:bbslist/index
rename sysdata:list.#? sysdata:bbslist/#?
```

If you are updating from 2.37z or earler,

```
rename "systext:sys.new user" systext:sys.nuser

makedir pfiles:data
rename pfiles:_Items2 pfiles:data/_Items2
```

```
rename pfiles:_dirinfo pfiles:data/_dirinfo
rename pfiles:_sys.start pfiles:data/sys.start
rename pfiles:_sys.exit pfiles:data/sys.exit
```

repeat the last 5 commands for gfiles:, news:, and all subdirectories in these areas (like pfiles:maintenance now contains pfiles:maintenance/data, etc.).

If you are updating from 2.39z or earlier,

```
delete cnet:bbsed
delete cnet:bbsproto
delete cnet:bbsarc
delete cnet:bbsport#?
```

If you are updating from 2.40d or earlier,

```
delete cnet:bbslog
delete cnet:bbscolors
delete cnet:bbscharges#?
```

If you are updating from 2.40z or earlier,

```
delete sysdata:passwords
delete cnet:bbsevent#?
```

If you are updating from 2.58z or earlier,

```
delete sysdata:vote/#? all
delete cnet:bbscontrol3
```

The following files are obsolete, and should be deleted:

```
delete cnet:xx
delete cnet:yy
delete cnet:xpr-task
delete cnet:bbsconfig
delete cnet:bbscontrol
delete systext:sys.conf.noises
delete systext:sys.passwords
delete sysdata:bbs.alpha
delete L:cnetaux-handler
delete LIBS:xprzmodem*.library
```

Next, you must run a combination of data conversion programs, depending on this version you are updating from. These programs are located in the "updating" directory on the CNet distribution disks. NOTE that all programs here should be used from the Shell, and WITHOUT CNet running!

Updating from	Conversion programs necessary, in this order:
1.98 -- 2.14z	NEWBASE,NEWUSERS2,NEWUSERS4,UP225, UP250,UP300
2.15 -- 2.16z	NEWBASE,NEWUSERS3,NEWUSERS4,UP225, UP250,UP300
2.17 -- 2.18g	NEWBASE,NEWUSERS4,UP225,UP250,UP300
2.19 -- 2.19z	NEWUSERS4,UP225,UP250,UP300
2.20 -- 2.24z	UP225,UP250,UP300
2.25 -- 2.42e	UP250,UP300
2.42f-- 2.72	UP300
2.73 -- 2.99z	NOTHING!

(Note: CNet version 2.63 was the LAST legally released version! All versions between 2.63 and 2.99z were BETA TEST only, and were NOT for general use. If you are running one of those versions, it would have to have been obtained from some pirate source and MAY not be reliable, or could even contain some kind of virus or "back doors" installed by the pirate. We WILL not take any responsibility for problems caused by use of pirated beta test versions of CNet.)

If everything was successful, you should now be able to run CNet ("run control"), load your ports, write your control panel configuration, and then logon using the TAB key. Once you reach the Main prompt, you should run the version 3 POINTERS program and AMAINT program:

```
run pfiles:maintenance/pointers
run pfiles:bbs/amaint
```

You should use the EG command to view the many new user privilege flags. After making appropriate changes, you should use the pfiles:maintenance/transpose pfile to make changes into individual user accounts. If you require explanation of any flag, see the "access group and user account" chapter.

If you are updating from 2.37z or earlier, you should EL your subdirectories and direct exchange subboards to give each of them a "unique dirname." The Base and UDBase have built-in unique dirnames of "main." And for EVERYONE updating, be aware that entry and exit file paths for these areas changed twice as follows (makedir the appropriate directories and rename the sys.entry and sys.exit files):

version 2.37:	base0:sys.entry.main
version 2.38:	base0:main/sys.entry
version 3.00:	base0:main/data/sys.entry

Repeat the directory creation and file renaming (if necessary) for all subdirectories and direct exchange subboards, in both the Base0: and UDBase0: areas.

If you are already running version 3, and receive a version 3.X update, always be sure to check the "updating" subdirectory on your new CNet distribution disks. This directory will contain files describing what is new, and any special updating instructions.

Notes:

CHAPTER 3 - The Control Panel and BBS GUI (Graphical User Interface)

The control panel provides the sysop with the ability to conveniently monitor BBS activity from one workbench window. It also serves as a handy point-and-click method for launching the CNet's global configuration program "CONFIG", launching ports, and setting or changing port variables.

It is the control panel's job to remember the system's environment or "setup" once you have defined it. This consists of remembering which ports are launched, which port screens are open, what those screens look like, and how the pull-down menu options are set. Whenever you use the control panel pull-down menu option "Write setup", the control panel stores the setup information in the file "cnet:bbscontrol3."

Running CNet

NOTE: At the time of this writing, the first release version of CNet PRO 3 can ONLY be started using a typed command. In future, an icon may be provided which will allow you to open the CNet Control Panel by clicking with the mouse.

To run CNet, you must use the following command from the Shell or from your startup-sequence (the words in {braces} are OPTIONAL parameters):

RUN CNET:CONTROL {NOICON} {NOCONFIG} {VERBOSE}

NOICON: By default, the control panel "iconifies" into a tiny window containing a large letter "C" on the workbench window. Use the NOICON parameter to leave the control panel window open.

NOCONFIG: By default, the control panel reads the file cnet:bbscontrol3. To prevent this from happening, include the NOCONFIG parameter.

VERBOSE: By default, the control panel redirects all input and output to the Amiga's NIL: device. Include this

parameter if you want to see debugging information in the Shell window.

Once the control panel has loaded, it will "iconify" (unless you've used the NOICON parameter). This feature allows you to place the control panel icon anywhere on the workbench screen you desire, out of the way of other workbench applications. Also, the efficiency of the system is maximum when all port screens are closed and the control panel is iconified.

To open the control panel, double click on the large letter "C." To close the control panel (removing it and all ports from memory) click the icon window's close gadget.

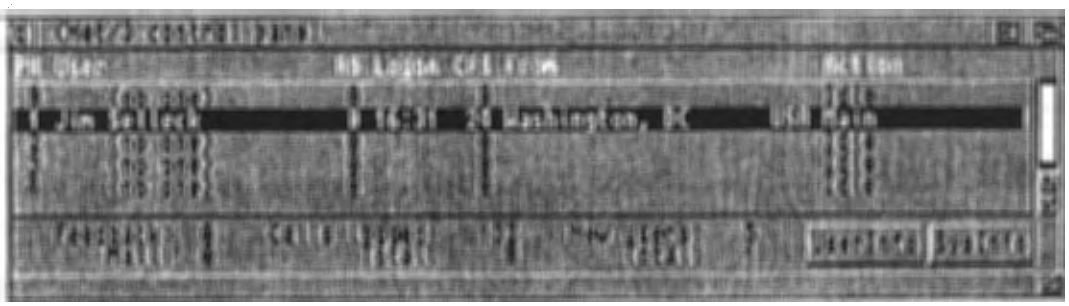
Problems Loading and Running Control Panel

If for any reason the control panel appears to fail to open properly, it is possible that the information held in the cnet:bbscontrol3 file has become corrupt. You may delete it and re-boot the system, or run CONTROL using the NOCONFIG parameter.

CONTROL may also fail to load if it is unable to find libs:cnet.library. Make certain that this file has been properly installed, and that when updating CNet it has been replaced with the latest and newest version.

Another reason for CONTROL to fail is that there was not enough RAM memory. If your Amiga is short on RAM, make sure that you are NOT loading the Workbench (the "LoadWB" command) in your s:Startup-Sequence.

Getting to Know the Control Panel



Once the control panel is open, you can make it any size you wish by using the window sizing gadget. The control panel has numbers running down the left side of the

window. These numbers correspond to port numbers. The control panel will display as many port numbers as possible based on the window's size. Using the proportional drag bar gadget and arrow gadgets on the right side of the window, you can view any portion of the control panel's 100 port numbers (0-99).

To re-iconify the control panel, click on the window's close gadget. There are also options on the control panel's first pull down menu to iconify and to immediately quit the control panel (all ports will be closed).

To "select" a port, use the mouse to click once anywhere to the right of the port number in the control panel window. To unselect all ports, use the mouse to click once anywhere below the last port number displayed in the control panel window. The control panel will show you that a port is selected by changing the color of the port's line to be reverse that of the others.

To launch a port, double-click anywhere to the right of the port number in the control panel. The message "Loading..." will appear. The message will then read "Setting up..." and finally, if successful, "Idle." If an error occurs, the message will flash "Failed" and then disappear. A port will fail to load if there is not enough memory or if it was unable to open a serial device (if one was ever configured for that port). If there was an error opening the serial port, you may wish to return to CONFIG to review your serial port configuration. For convenience, there is an option on the control panel's first pull down menu to run CONFIG.

Saving the Control Panel Configuration

Once you have configured the control panel and ports as you like them, you may select the pull down menu option "write setup" to write the cnet:bbscontrol3 file. When you next RUN CNET:CONTROL, the control panel will automatically configure the ports as they were when you last used the "write setup" option.

The control panel has a built in security feature which allows you to LOCK the control panel, preventing any changes to be made to the configuration. To activate this

function, select the pull down menu option "lock/write setup." To unlock the control panel, use the command CNET:UNLOCK from the Shell. It is possible to attach a password to the UNLOCK program--this will be explained in another section.

Control Panel Menu Options

The control panel's second pull down menu affects the currently selected port only. If there is no selected port, this menu will affect ALL ports. The first five options on this menu are "flags" that are either check-marked (active) or not. The remaining options are functions. The menu's options are as follows:

SYSOP IS IN: Activate to tell users that you are available when they use the Chat command. Otherwise they will be told that you are out and offered a chance to send you a feedback message.

NO NEW USERS: Activate to turn off the "NEW" option at logon. This restricts entry to the system to users who already have accounts.

UDBASE CLOSED: Whether or not to allow users in the Uploads area of the BBS.

PFILES CLOSED: Whether or not to allow users into the Program files area of the BBS.

BASE CLOSED: Whether or not to allow users into the Message area of the BBS.

CLEAR LINE: If there is a user online, immediately hang-up.

CLOSE PORT: Bring the port down, removing it from the control panel. If there is a user online, immediately hang-up.

SEND OLM: If there is a user on the port, enter a short message (On Line Message) to be displayed on the user's screen.

CANCEL CHAT: When a user chats, his chat message is displayed in the control panel window at regular intervals, replacing the normal control panel information. This function will stop the control panel from displaying the chat message.

Other Control Panel Gadgets

There are two other push button gadgets on the control panel.

The "UserInfo" button is functional only when a port is selected, and a user is online on that port. A window will open to display the user's vital statistics. Use the window's close gadget (upper left corner) to remove this window from the screen.

The "SysInfo" button is functional at all times. A window will open to display the system's vital statistics. Use this function to quickly determine drive space, when the next system event will occur, and to view several system activity monitor (SAM) variables. To reset the SAM "period" variables, use SysInfo's pull down menu option "reset period." SysInfo also displays the system activity graph (SAG), showing the relative system activity by time of day. The activity graph is a continuously averaging function, and is only reset using SysInfo's pull down menu option "reset graph." Using these reset options, you are able to monitor system activity over an arbitrary length of time.

There are also several SAM variables displayed directly on the control panel to allow you to determine at-a-glance if there are messages waiting for you. "Mail" refers to messages waiting in the sysop's mailbox (account 1). "Feedback" and "New Users" refer to messages left as feedback and by new users, respectively. "Calls logged" shows the number of calls (successful or not) that the system has saved in the call log. "Total" beneath "calls logged" tells the number of actual complete logins that the system has had to date. Note that this number does not include local-mode calls. "Total" beneath "new users" refers to the number of users currently active (not deleted) members of the BBS.

Opening a Port's Screen

Once a port has been successfully launched, you may open its screen. To open a port's screen, double click anywhere to right of its port number in the control panel. Your port screen(s) do NOT have to be open for users to log on to the BBS, and should usually be left closed to save memory unless you are monitoring BBS activity or logging on to the system yourself.

The BBS GUI--waiting for a call

The port screen title bar contains a copyright message and the current date and time. At the very left of the title bar is the port number. In the middle of the title bar is the account number and handle of the user currently on-line.

There are two pull-down menus available while waiting for a call. Many of the options have Amiga-key equivalents: hold down the right-Amiga-key and press the command letter. A couple of the menu options have "control-key" equivalents. The control key is represented as a "^". Hold down the control (Ctrl) key and press the command letter.

The "Idle" menu contains the following options:

Logon (SPACE bar): logon to the BBS in "Local Mode".

AutoLogon (TAB key): enter "local mode" and automatically logon as account number 1 (presumably, you, the sysop). AutoLogon is not possible if the control panel is locked.

Terminal: a quick and dirty terminal program offering fast file transfers and text capture capabilities. It also offers a high level of ANSI support. The terminal is described in a section later in this chapter.

Answer/ATA: pick up the phone and send the answer carrier. CNet will proceed as if "RING" had been heard from the modem. This option is useful for when you are using the same line for voice and data, and want to immediately connect a modem caller to the BBS.

Offline: if you checkmark this option, CNet will CLOSE the serial port, therefore making it impossible to accept calls. When you remove the checkmark, CNet will resume control of the serial port. This option is useful for when you are using other software requiring access to the serial port, but do not wish to completely remove the CNet port from memory. One example might be the FidoNet mailer program called "TrapDoor". TrapDoor setup is explained in the chapter on networking.

Display (clock, SA monitor, SA graph): select what will be displayed. The clock uses a 128 point font so it can be visible across the room. The SA monitor gives quick stats about what's on the BBS, and what the last caller did. The SA graph gives a graphical representation of system activity versus time of day.

The "screen" menu gives the following options:

Stat window: remove or replace the user status window. The user status window is described in a section later in this chapter.

Half screen: when in "half screen mode" CNet will only use the top half of the screen for text output. This allows you to "layer" more than one screen to see the activity of two users at once. When in half-interlace, half screen mode allows you to layer FOUR screens. There are areas of the BBS which do not allow half screen mode. These are the visual editor and the visual data editor.

Workbench: toggle between a full screen and a window on the workbench screen. The workbench window will use the default workbench colors. Remember that users will always see the colors as configured by their terminal programs.

Close screen: close the port's screen or window. When in workbench mode, you can also click the "close" gadget to close the window. To re-open the port's screen or window, double click in the control panel anywhere to the right of the port's number.

Colors (2,4,8,16): the number of colors used with the

port's screen. Colors are configured using the CONFIG "display..." screen. 2-color mode provides the fastest display, and should be used if you have a busy system, or users experience errors uploading or downloading at high speeds. 8 and 16 color modes slow the processor considerably, possibly making other ports sluggish. REMEMBER that no matter what you have this option set to, remote users will ALWAYS see full-color if their terminal programs are configured that way.

Interlace (off,half,full): with this option set to "half" or "full," CNet will open a screen with double the vertical resolution of a normal screen. In half-interlace mode, CNet will only use the top half of the screen (about 24 lines in NTSC). In full-interlace mode, CNet will use the entire screen (about 49 lines in NTSC).

The BBS GUI--user on-line

The "screen" menu is also available while a user is on-line. The "online" menu contains the following options:

Hangup: immediately cut the user's time to zero and hang up. Just like the "clear line" menu option in the control panel.

Chat mode: enter a one-on-one chat mode with the user. The user will not be able to exit using control-X. You alone may end the chat by again selecting the "chat mode" menu option.

Local mode: place the user on "hold" while you take control of the keyboard and BBS. The user is told "the sysop has entered local mode. One moment..." The user will not be able to see what you are doing while you are in local mode. The port is also temporarily given full maintenance access. Select the "local mode" option again to return control to the user.

Printer: toggle the printer on and off. When the printer is on, CNet will echo all screen output to the printer.

Capture (open, save to file, append file, send to prt:, clear): when the capture buffer is open, CNet will send all screen output to the file "RAM:portX.cap" where X is the port

number. The CLEAR option will reset the length of this file to 0. You may open and close the capture buffer as often as you like. When the capture buffer is closed, you may save the file or send the file to the printer. An "append file" option is included to add the capture buffer to an existing file. The "save to file" option will overwrite any existing file with the same name. There is a user "privilege flag" which will automatically open the capture buffer when the user logs on, and close it when he logs off. If you use this privilege flag, you must remember to periodically CLEAR the capture buffer to prevent your RAM from becoming full.

The user status window

The user status window contains a great deal of information about the user currently on-line, or last on-line. The status window may automatically be closed while a user is on-line according to the setting of the CONFIG "close status window at logon" option. It may be toggled on and off using the "screen" pull-down menu.

The first section of the status window contains user profile information. The user's real name, gender (M or F), city/state, zip code, voice phone#, data phone#, country, and birth date.

AC :the user's access group number, and access group name.
CO :the user's computer type. The three numbers after the computer type show the user's terminal type, ANSI level, and help level.
LC : the user's last call date.
C# :the user's total calls, and the number of calls the system has received in total (not including logins from the local console).

UF : the number of files uploaded.
DF : the number of files downloaded.
UK : the number of kilobytes uploaded.
DK : the number of kilobytes downloaded.

CF : the user's file upload ratio #1, and number of file credits.

DF : shows the user's byte upload ratio #1, and his number of byte credits.

The first "DY" shows the number of files downloaded today, and the total number the user is limited to. The second "DY" shows the number of kilobytes downloaded today, and the total number the user is limited to.

"TI" shows the amount of time the user has left, and the maximum amount allowed per call. "999" indicates unlimited time, and does not decrease. When time remaining is less than 10 minutes, tenths of minutes show. "$$" shows the user's account balance (in cents), not including the charges accumulated for the current call. "CA" shows the number of calls the user has made to the system today, and the total number he is limited to for the day. "MI" shows the number of minutes the user has spent on the system today (not including the time for the current call), followed by the number of minutes per day to which the user is limited.

The bottom line of the control panel shows the current prompt, the last executed command, the baud rate, and the logon time and method (SON for signon, etc). The right side of the bottom line shows the time remaining until the next BBS event for this port. If the BBS event is "late" (that is, of the type "only if system is idle" and its scheduled time has passed), a "!" will show to the left of the time remaining, indicating that an event is "waiting" to happen just after this user logs off. If the user's "sysop comment" field is set, this will be displayed in place of the baud rate and logon time.

You may set many of the status window variables while the user is still on-line. You may set the access group, and all of the credit and time variables. To set one of these variables, use the mouse to click on it in the status window. The field's background color will become purple. Use the number keys to change the displayed value. Use the "." key to reset the value to 0. Use the "-" key to toggle the value negative and positive. Use the ENTER key, or click into another position in the status window when you are finished.

Terminal mode

CNet offers a simple built-in terminal. This terminal provides many convenient features like file transfer, text buffer, and ANSI compatibility. Although we do occasionally make improvements to the terminal, it really was not designed to compete with your favorite full-featured term. It was included strictly for convenience.

The "online" and "screen" menus are both available while in terminal mode. The "term" menu contains the following options:

Baud: select any of the popular baud rates. You can also control the "locked" baud rate mode.

XPR download: select a receive directory, and a file transfer protocol. You must have the AmigaDOS "asl.library" file in your LIBS: directory to use this feature.

XPR upload: select files to send, and a file transfer protocol. You may select more than one file from the directory to "batch" send. You must have the AmigaDOS "asl.library" file in your LIBS: directory to use this feature.

8 bit word: if unselected, the terminal will chop the "high bit" from each incoming byte. Unselect the "8 bit word" option if you are connected with a system using 7 bit data words (and possibly parity checking).

Reset terminal: clear the screen, reset the ANSI video modes, and send the modem's terminal initialization string.

JoinLink: go to JoinLink mode. See the "inter-user communication" chapter for more information.

Quit/NO CARRIER: if this option is check-marked, the terminal will automatically Quit when it detects loss of carrier. This is a handy feature if you are downloading from a BBS using the auto-logoff feature, and want to reset the port when you are done, but do not want to wait around to do it.

Quit: immediately hang up and return to "idle" mode.

Notes:

The Configuration Editor

CNet's GUI configuration editor is the program that you will use to make changes to your BBS's configuration options. If this if your first time setting up CNet, you will want to first read the "modems" section of this chapter. Additional sections of this chapter describe configuration options which are preset to adequate default values. You may come back to the configuration editor to make changes at any time once you have the system operational.

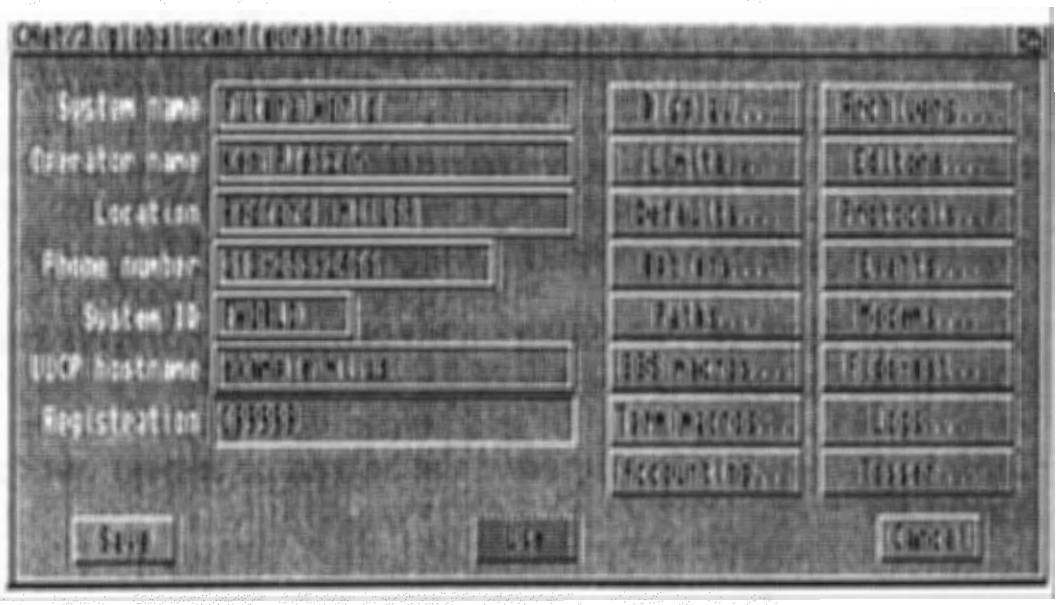
Running the Configuration Editor

From the Shell, use the command

CNET:CONFIG

to run the configuration editor. Once you have the system configured, it is also helpful to know that there is an option from the control panel's pull down menu to run the configuration editor.

If the configuration editor loads successfully, a window will open on your workbench screen with the title "CNet/3 global configuration."



General System Information

Directly on the configuration editor window, you are able to set your system's name, the operator's name (your name), the system's location, the primary BBS phone number, and a short BBS identifier (up to 8 characters).

These data are used by the QWK message packing system, but may in the future be used by other parts of the BBS as well. If you have a UUCP (the UseNet network) address for your BBS, you may specify this here.

Display

From this screen, you may edit the following information:

FONT: By default, CNet uses a special font "cnet21.font" which contains a hybrid of IBM style character graphics and CBM characters. You may specify any font you wish, as long as it is non-proportional, and 8X8 in size. "Topaz.font" is the Amiga's default system font. Note that this configures the font that will be used on your local console BBS port screens only. It does not in any way affect what the remote callers will see.

DEFAULT COLOR: This will specify the color that CNet will "default" to when no other color has been specified. It is, in general, the color of prompt input, and messages in the message base. You are able to choose from the standard 16 ANSI colors.

SCREEN DIM PAUSE: Screen dimming is used to save wear on your monitor screen. When a port's screen is open, and the port is "waiting for a call," CNet will automatically dim the screen after this number of 1/10 seconds have elapsed. The screen will automatically return to full brightness once the mouse is moved, the keyboard is touched, or a call comes in.

SCREEN DIM INTENSITY: This parameter controls the degree to which the screen will be dimmed within a range of 0 to 15. Specifying 0 will make the screen appear completely black, 15 will make the screen to appear not to dim at all.

SCREEN: Your CNet port screens can be viewed from your local console in either 2, 4, 6, 8, or 16 color modes, as determined by the port screen's pull down menu. Use this gadget to select which screen mode's colors will be edited with the Red, Green, and Blue slider gadgets. The Screen gadget will cycle through 2, 4, 8, and 16 color modes. NOTE: The number of colors and their appearance on the

CNet port screens do NOT determine what the user will see. What the user sees depends on his own terminal program configuration. CNet always sends full 16 color text and graphics to the user no matter the number of colors you see on the port screen. These color configuration options are here only to allow you to change the appearance of your port screens as seen from the console.

COLOR: Use this gadget to determine which local screen display color will be changed by the Red, Green, and Blue slider gadgets.

Limits

HIGHEST UDBASEX PARTITION: Set this to ONE LESS than the number of hard drive partitions that you will be using with CNet for purposes of file transfer (uploading and downloading). In order to check free drive space at various points in the BBS operation, CNet needs these partitions to be assigned as UDBASE0:, UDBASE1:, UDBASE2:, etc., each one corresponding to a hard drive partition (eg., DH0:, DH2:, FH2:, etc). If you have only one such partition, you should leave this number at 0. If you have 2 partitions, change this number to 1. This number is by logic, the number of hard drive partitions you have MINUS ONE.

SHORT DESCRIPTION LINES: Each file in the Uploads area may have attached to it a "short" description. This description is 44 characters wide, and may be up to 8 lines long, as you are able to configure here. If you shorten this value after the system has been operating, it will not affect existing descriptions.

MAX PFILES RUNNING AT ONCE: Use this value to control the number of external program file (games and utilities you make available to your users, also called "doors") tasks that you wish to allow to operate at the same time. When setting this value, you really must only consider the amount of RAM memory you have available. You will not need to set this value higher than the number of ports that you are running.

MAX USER ACCOUNTS: CNet will use this value to determine whether or not to accept a new user. Memory is

allocated for the user index files when the BBS ports are loaded. If you change this value, you must close all of your ports and reload them to have it take effect.

MAXIMUM CONFERENCE ROOMS: This determines whether or not CNet will allow the creation of a new conference room in the "Join" inter-user conferencing system. Each room occupies about 20K of memory. This value includes public and private user rooms.

HIGHEST NETWORK JOINLINK ID: When using the JoinLink feature (described in detail in the Inter-User Communications chapter), this value determines the maximum number of systems that are linked together in the JoinLink network. Memory is allocated for this option when your BBS ports are loaded. If you change this value, you must close all of your ports and reload them in order for it to take effect.

MAXIMUM UD/BASE SUBBOARDS: Use this value to determine the maximum number of subboard (Upload areas and Message areas combined) that you will have on the BBS. Also include subdirectories when computing this value. It is OK to over estimate this value, however, remember that each subboard specified here will occupy at least 600 bytes of memory. If you specify a number less than the actual number of subboards that you have, CNet will auto-adjust it higher at load time. When there is no room for a new subboard, the "AL" (Add a new subboard to the List) command (described in the subboard chapter) will fail. Memory is allocated for the subboard structures at load time. If you change this value, you must close all of your ports and reload them in order for it to take effect.

MAXIMUM SELECTED FILES: Users can use the * command to select files for later batch downloading. If the user does not take the selected files right away, the list is "remembered" until their next call. This value determines the maximum number of files that a user may select at once. Memory is allocated for the user select buffers at load time. If you change this value, you must close all of your ports and reload them in order for it to take effect.

MAXIMUM UPLOADS PER BATCH: This value determines the number of files that a user may upload at

one time. Memory is allocated only while the upload is taking place. Changes to this value take effect as of the commencement of the next batch upload.

MAXIMUM G/PFILES PER LIST: This value controls the number of GFiles (General text files), PFiles (Program files), or News files that may be contained on one of the respective lists. These file areas are described in a later chapter. Memory is allocated for these lists at load time. If you change this value, you must close all of your ports and reload them in order for it to take effect.

MAXIMUM YANK TASKS: "Yanking" refers to packing messages for download. CNet does this as a background task. This value determines the number of Yank processes that may be allowed to run "in the background" at one time. Each yank task uses a considerable amount of memory, especially if you have the yank work path set to RAM:. Set this higher than 1 only if you know that you have some memory to spare.

MAXIMUM YANK FILE SIZE: This value allows you to limit the amount of messages (in file size) that may be yanked at one time by a given yank task. Having a limit prevents the user from yanking too many messages, resulting in out-of-memory, or creating yank files that use too much disk space. If a yank task is aborted because this limit is reached, the user will be notified of that fact, and will be given the change to yank again, picking up where the previous yank left off.

DAYS TO HOLD USER YANK FILES: Because users can begin yank tasks and then log off, this value was necessary to prevent the accumulation of too many yank files "waiting" for users to return online. The auto-maintenance program ("amaint") automatically searches and purges old yank files.

MAXIMUM LOGON ATTEMPTS: This value controls the number of ID and password attempts that a user may make before the system will deny him access.

LOGON TIME: This value (in 1/10 minutes) determines the amount of time that a user has from the moment of

modem connection until he must be successfully logged on.

MAXIMUM YANK FILES PER USER: This value determines how many times a user may run the yank task before downloading the results from the previous run(s).

BBSLIST AUTO-PURGE: This values determines how long an entry is kept in the BBSLIST program. This feature forces users to edit or re-add BBS's to the list on a constant cycle in order for systems to remain on the list. This prevents "old" systems from remaining on the list.

Defaults

DEFAULT COUNTRY: Used by the New User program and the BBSLIST program. This will be the default country name the user is prompted with when asked to enter their own.

DEFAULT AREA CODE: Used by the New User program and the BBSLIST program.

DEFAULT PROTOCOL: Used by the new user program to determine which file transfer protocol to assign to new users. Use only the one character IDENTIFIER associated with that protocol. Users can change this at any time when beginning a file transfer.

YANK PREFIX: These characters will appear as the first two characters in the filenames of Yank files.

DEFAULT GAME POINTS: Used by the new user program to assign a value to the user's game points variable. This variable is not used directly by CNet, but may be used by third party game software.

DEFAULT BALANCE: If you use the accounting system, the new user program will give users a balance as you specify here (in cents).

DEFAULT TIME FORMAT: Used by the new user program to set the user's default time display format. Users can change this at any time by using the EP command.

DEFAULT NET CREDITS: Used by the new user

program to assign a value to the user's network credits variable. This variable is used by the NETMAIL feature, described in a later chapter.

DEFAULT BYTE CREDITS: Used by the new user program to assign a beginning balance of file exchange (per byte) credits to the user. The credits system is described in considerable detail in another section.

DEFAULT FILE CREDITS: Used by the new user program to assign a beginning balance of file exchange (per file) credits to the user.

DEFAULT JOINLINK ID#: JoinLink is a special CNet feature which allows two or more multi-line BBS's to combine their conference areas. Each BBS participating in a JoinLink must be assigned an ID number. If you use the JoinLink feature, you must select a number here not greater than the "maximum number of JoinLink IDs" that you set in the "Limits..." screen. You must also select an ID number for your BBS that does not match any of the JoinLink IDs used by other systems in your JoinLink network. JoinLink is described in the inter-user communication chapter.

JOINLINK PASSWORD: JoinLink may be made completely automated. Specifying a password here allows users and BBSs to automatically invoke your JoinLink from remote.

Options

ALLOW FEEDBACK AT LOGON: If a user exhausts the maximum number of logon attempts when trying to logon to your BBS, this option determines whether or not he will be given the opportunity to leave you feedback before being disconnected.

ALLOW WHO/USERLIST AT LOGON: If you run a completely private system, you may not want to enable this option. Otherwise, if enabled, this option allows callers to use the WHO command at the logon prompt to see who is currently online. It also allows a user-search prompt to appear if the user enters a handle or name which is not recognized by the BBS.

ALLOW GUEST USERS: If enabled, users will be able to complete the new user program, but WITHOUT selecting a password. This makes the user's stay on the BBS "temporary" and the user is immediately auto-deleted when he logs off (or at auto-maintenance if the system crashes while he is online). Guest users are indistinguishable from other normal users while they are online. A sysop may edit the account of a guest user while he is online, give a password, and thus prevent the user from being deleted.

STATUS WINDOW OFF AT LOGON: If enabled, the status window (window containing user information) at the top of each port screen will be closed (invisible) when a user is online. It can be manually re-opened by using the pull-down menu option on each port screen. Note that this applies to remote logons ONLY. The status window always defaults to OFF for local console calls.

KEEP USER CONFERENCE PREFS: A user may custom configure a great deal of information concerning the inter-user conference Join program. If this option is enabled, this information is kept on disk file. Doing so occupies about 500 bytes of disk space per user.

FEEDBACK GOES TO USER 1: If you like to read only one set of mail, enable this option. Normally, feedback goes to a separate mailbox, and must be read by using the VF command. You can override this, however, and have feedback sent directly to your mailbox.

INDENT MESSAGES ONE SPACE: In the messages base, it often looks "cleaner" to have messages indented as they are read, to set them off from the message headers and other informative text. If, however, you operate with an extreme amount of "cursor dancing" type messages, it may be a good idea not to enable to this option in order to prevent those messages from being somewhat garbled.

USE MULTIPLE TEXT SETS: CNet has the ability to operate with more than one language or "style" of text and menus. Text for the default language or style is stored in the files CNET:BBSTEXT and CNET:BBSMENU, and inside the directory SYSTEXT:. You may create additional BBSTEXT, BBSMENU, and system text files sets. Use

this option to specify whether or not you intend to use the multiple language/style feature. You can set this option to "user selectable" or "port specific." If you specify user selectable, users will be asked when they first log on "new" to select a style from a list, and may change their selection at any later time by using the EP command. If you select port specific, each port on the system is "bound" to a specific language or style, beyond the user's control (you may have one English port, and one German port). Much more will be covered about this topic in the System Extensions and Modifications chapter.

VALIDATE NEW USERS WITH CALLER ID: If you have caller ID on a line, and a new user logs on with a caller ID signal which matches the data phone number they enter, this option will automatically raise the user's access level from 0 to 1.

SKIP HANDLE PROMPT WITH CALLER ID: If a caller ID signal is detected, and the user's phone number matches one or more accounts in the user database, this option will cause the logon procedure to skip directly to the "enter password" prompt. If the user's phone number matches more than one account, CNet will search those accounts for the one with the matching password. By hitting RETURN at the password prompt, the user will be returned to the "enter handle" prompt, in case he is calling from a line that is not his own. Many caller ID security features are supported by CNet, and are configurable for the users' individual accounts.

DON'T ANSWER WITHOUT CALLER ID MATCH: This security option prevents CNet from even answering the phone if the user calling is not in the user database. There are many other possible uses for this feature, such as using CNet to operate a small private system on a voice line.

SKIP IDLE PORTS ON WHO DISPLAY: When a user does a WHO command (to find out who else is online) if you have a large number of ports, you can save the user time and screen space by only listing the ports which are currently in use. If you have a small number of ports (a display that will not fill a screen), then you might not want

to skip the idle ports, just to show the users that you have more available ports.

DELETE UUCP MESSAGES WHEN KILLED: If you run UUCP (The UseNet network) through CNet, and have this option enabled, messages in the UUCP directories will be killed whenever their headers are killed anywhere in CNet. This helps to clear out un-used UUCP messages from your UUCP areas. You may not want to enable to this option if you have other software that also relies on the UUCP messages to be there.

Paths

OLM TEMP: When users write inter-user On-Line Messages, they must be temporarily stored somewhere. Usually RAM is a convenient place, as these files do not get very large, and are quickly deleted.

ARC EXAMINE TEMP: When users use the Examine command to view the contents of an uploaded archive (several files bundled together and compressed into one file), the output must be temporarily stored somewhere. Usually RAM makes a quick and convenient place, as these files do not get very large, and are quickly deleted.

YANK/QWK PACKING: Yank tasks are very disk-intensive, and are therefore a LOT faster in RAM if you can spare it. Select this option carefully. To estimate how much space you will need, referring to the "limits..." screen, take the number of "yank tasks simultaneously" and multiple that by the "maximum yank size" and then multiply that by 2. The result is in Kilobytes. If this number is something that you can live comfortably with in RAM, leave it set there. Otherwise, set it to a hard drive partition with adequate room.

EDITOR TEMP FILES: As text is loaded into the editor, edited, and then saved, CNet must store the text somewhere temporarily. The average size of an editor buffer is about 5-10K. If you have spare this amount of memory (per port) in RAM, you are well advised to keep it set there to keep the system running quickly. If necessary, you may set this to a hard drive partition with adequate room.

OPTIONAL VDE: The files located in the SYSTEXT:VDE directory contain the screen information for the visual data editor screens such as seen when using the EL, AL, EA, EG commands. If you perform these commands often enough to warrant it, you may wish to keep these files in RAM so that VDE screens can be created a little faster.

DEF. TERM U/D: This allows you to specify where CNet will first attempt to upload or download files when you use the upload or download files feature of CNet's built-in term program.

CD ROM U/D TEMP: When you create a subboard to access files located on a CD ROM drive, and set the subboard flag "Use CD-ROM temp dir" to YES, this path specifies WHERE files are copied to prior to being downloaded. Copying files to a temporary download directory is almost mandatory for 6-pack and other multi-disk CD ROM units to prevent erratic access to these devices. CNet will allow only one BBS process to access the CD ROM at a time.

SPELL DICTIONARY: If you have the RAM to spare, you can place the CNet files "dict" and "dict.index" in RAM to greatly increase the performance of the built-in spell checker. If you do not have the RAM to spare, specify the path to these files. Note that you might have to modify your AmigaDOS startup script to copy these files to the proper directory whenever you reboot your Amiga so CNet can find them.

FIDO INBOUND: If you are running Fido-Net, you need an inbound directory. Most people find MAIL:INBOUND/ to be most convenient.

FIDO OUTBOUND: If you are running Fido-Net, this is the corresponding OUTBOUND directory path. Most people keep it set to MAIL:OUTBOUND/.

FIDO NODELIST: If you are running fidonet, you must specify this path. To keep things simple and consistent, it is recommended that you use MAIL:NODELIST/.

BBS Macros

The text that you specify here will be typed all at once whenever you press the corresponding function key, F1 through F10, during BBS operation. The only special character is ‘ (backwards apostrophe) which represents a press of the ENTER key.

Term Macros

These macros are analogous to the BBS macros, but are used in CNet's built in terminal mode only, in place of the normal BBS macros.

Accounting...

CNet has the ability to maintain an actual monetary "account balance" for each user. The user account balance field has the units of CENTS (in other countries, substitute your lowest currency denomination). Each new user is given the initial balance as set from the CONFIG "defaults..." screen. While a user is online, his balance is displayed in the status window next to the "$$." The balance displayed does not reflect charges as they accumulate for the current call in progress. You can manually SET a user's account balance by using the "EA" command or by using the mouse to click on the balance in the status window while the user is online.

There are MANY ways to automatically charge for activity on the BBS. You can charge for time, for downloading, for voting, etc. You can also CREDIT users for activities, perhaps uploading or posting. The convention in use is that CHARGES appear as and are entered as POSITIVE numbers, and CREDITS appear as and are entered as NEGATIVE numbers.

The accounting system is very configurable (and therefore somewhat complex). There is much more to it than simply setting values for each of the BBS activities. These values can be made to change depending on the access group, the time of day, and the specific subboard in use.

The one term to become familiar with is "schedule." An accounting system schedule is the list of charges in use at a

particular time. Unless changed with a BBSEVENT (described later), CNet will always use SCHEDULE 0. Within a schedule is a complete list of charges for each bbs activity for EACH ACCESS GROUP.

When you first select "accounting..." from the CONFIG main screen, you will see two windows. The first will be a list of the schedules that exist on disk. CNet comes pre-configured with a schedule 0, so you should see a "0" in that window. The second window is a list of charges and other accounting variables. The "access:" slider below the charges window can be used to change the list of charges to show the values for each of the 32 access groups (0 to 31). Each charge has a description, units, and a current value. Units of "c" are cents, and units of ".01c" are Hundredths of a cent.

To edit a particular schedule, use the mouse to click on its number in the list of schedules window. The schedule number should appear in the box below the list of schedules window. To change any value, use the mouse to click on the description of the charge that you wish to change. The current value and the cursor should appear in the "value" box below the list of charges. Type the new value and press ENTER. Use the "access" slider to edit the charges of the different access groups. Your changes are saved if you select "save" when exiting the CONFIG program.

To create a NEW schedule (remember you must use BBSEVENTS to make use of schedules other than 0), click on the "NEW" button. The cursor will appear in the box below the list of schedules. Enter a number (not already on the list of schedules!) and press ENTER. Make changes to the charges as necessary. Click on "ADD" when you have completed. Do NOT forget to click on "ADD!" Exiting this screen without adding the new schedule to the list of schedules will cause your new schedule to be LOST.

The "COPY" button is used like "NEW" except you must first select an existing schedule (by clicking on its number). Then click on "COPY." The cursor will appear in the box below the list of schedules. Enter a unique number for your new schedule. The difference is that the charges from the first schedule you selected are COPIED into this new

schedule. Make any changes as appropriate. Do not forget to click on "ADD."

To remove a schedule from the list, click on the schedule number and then the "REMOVE" button. Schedules will actually be deleted only if you select "SAVE" when exiting the CONFIG program.

Following is a list of the charges available. Many of the them are mentioned elsewhere in the manual when their functions are discussed. Most of them are self explanatory.

Minimum balance allowed (c): the lowest actual value a user can have in the "balance" field before the BBS will stop the user from performing charged-for activities. In general, this will be a negative number. It tells the user how far in debt he can go before being "cut-off." Of course the user will always be able to perform "credit" activities.

New AG if balance prevents logon: this is an access group number, 0 to 31. If a user's balance is so low that he is unable to even logon (because of per-minute, per-call, per-day, per-month charges), CNet will automatically change the user's access group to this number and attempt the logon procedure again. Set this number to -1 if you do not wish to use this feature.

Each successful logon (c)

First call in any day (c)

First call in any week (Sun-Sun) (c)

First call in any month (c)

Each use of Re-logon command (.01c)

Per minute of connect time (.01c)

Per OLM sent (.01c): see the inter-user communication chapter.

Per successful FINGER command (.01c)

Per minute in the conference (.01c): this is the Join

tele-conference. See the inter-user communication chapter.

Per minute in InterUserChat (.01c): the CC command. See the inter-user communication chapter.

Per minute in gfiles/news (1 to 3) (.01c): used with the "area use rate" field found on the "EL" screen from the News or Gfiles areas. The "area use rate" can be used to select one of these three values, so that different values can be used depending on the subdirectory that the user is in. If "area use rate" is set to 0, the user will not be charged for being in that area.

Per gfile read/downloaded (1 to 3) (.01c): used with the "item use rate" field found on the "AT" screen when using the "AT" command to edit a text file. The "item use rate" can be used to select one of these three values to charge the user when the user reads or downloads the item. If "item use rate" is 0, the user will not be charge for reading or downloading the item.

Per minute in PFILES (1 to 3) (.01c): just like the "per minute in gfiles/news," but these values are used when in the Pfiles area.

Per pfile execution (1 to 3) (.01c): just like the "per gfile read/downloaded," but these values are used with the "item use rate" when a pfile is executed.

Per item sent as feedback (.01c): the "F" command.

Per item sent as e-mail (.01c): normal "local" e-mail.

Per item read as e-mail (.01c): all e-mail received, urgent, local, network.

Per e-mail item re-edited (MV) (.01c): when mail is changed using the "MV" command.

Per e-mail item removed (MV) (.01c): when mail is killed using the "MV" command.

Per FIDO NetMail sent (.01c)

Per UUCP NetMail sent (.01c)

Per minute using the Vote booth (.01c)

Per vote cast in Vote booth (.01c)

Per minute using subboard (1 to 3) (.01c): used with the "subboard use rate" field in the "EL" screen of any subboard. The "subboard use rate" determines which of these three values to use in the subboard. If "subboard use rate" is set to 0, the user is not charged for being in the subboard.

Per item read in subboard (.01c): can be nullified if the subboard flag "no read charges" is set to Yes.

Per post in subboard (.01c): can be nullified if the subboard flag "no post/rep charges" is set to Yes.

Per response in subboard (.01c): can be nullified if the subboard flag "no post/rep charges" is set to Yes.

Per subboard item re-edited (ED) (.01c): any post, response, or long file description edited.

Per subboard item removed (K) (.01c): any post, file, or response killed.

Per YANK task launched (.01c): subboard command.

Per local text search (Z) (.01c): subboard command.

Per global text search (ZG) (.01c): subboard command.

Per KByte downloaded (1 to 3) (.01c): used with the "dnload byte charge#" field in the "EL" screen of a subboard. The value of "dnload byte charge#" determines which of these three values is used. If "dnload byte charge#" is set to 0, the user is not charged for the amount that he downloads in that subboard. Versions of the "dnload byte charge#" and the three other charge#'s mentioned in the next three paragraphs also appear in the "EL" screen from the Gfiles/Pfiles/News prompts for use with the downloading of text files.

Per file downloaded (1 to 3) (.01c): used with the "dnload file charge#" field in the "EL" screen of a subboard. The value of "dnload file charge#" determines which of these three values is used. If "dnload file charge#" is set to 0, the user is not charged for each file that he downloads in that subboard.

Per KByte uploaded (1 to 3) (.01c): used with the "upload byte charge#" field in the "EL" screen of a subboard. The value of "upload byte charge#" determines which of these three values is used. If "upload byte charge#" is set to 0, the user is not charged (or credited) for the amount that he uploads. Often, these values, as well as "per file uploaded" are set to negative numbers (credits).

Per file uploaded (1 to 3) (.01c): used with the "upload file charge#" field in the "EL" screen of a subboard. The value of "upload file charge#" determines which of these three values is used. If "upload file charge#" is set to 0, the user is not charged (or credited) for the number of files that he uploads.

Per minute using the UserList (.01c)

Per minute using the BBSList (.01c)

Per addition to the BBSList (.01c)

Per use of TermLink (.01c): each time the "TERM" command is used (with "full" access), or used with a successful connection (with "limited" access).

Per minute using TermLink (1 to 3) (.01c): these values are used with the "rate" field in the "termlink" file as described in the inter-user communication chapter. The value of "rate" determines which of these three values to use. If "rate" is set to 0, the user is not charged for the termlink connection.

While online, a user can receive a summary of his account balance and current call charges by using the "AC" command. Selecting "detail" will show a breakdown of each type of charge accumulated.

Archivers...

The CONFIG program's list of archivers (like ARC, DMS, LHA, ZIP, ZOO) is used in conjunction with at least six BBS functions.

First, the list of archivers provides the information necessary to use the "Examine" subboard command. Each archive type can have associated with it a "view format." The view format is used to create the DOS command necessary to display the contents (list of files) within an archived file. A view format looks something like this:

zoo › %s v "%s"

"Zoo" is the DOS command. "› %s" causes the output of the Zoo to be redirected to a file. This "%s" will be replaced with an appropriate temporary filename. The "v" is an argument for the "zoo" program. The second "%s" will be replaced with the archived file's path and filename. all view formats must be of this general format.

Second, the list of archivers provides the information necessary to perform the "TEst" subboard command (also performed during auto-maintenance). The "test format" should be similar to the "view format" except that the arguments necessary to "test" the file are substituted in place of the "view" arguments. "Test keyword," "keyword line," and "keyword column" are also all used with the "TEst" command. See the subboard chapter for a complete description of the "TEst" command and these fields.

The third function of the archivers list is to provide DOS command formats for "packing" files. Files are packed by the "Yank" subboard command. See the subboard chapter for a complete description of the Yank command. For example, the "pack format" may look like:

arc a %s %s

The "arc a" is the DOS command and its argument(s). The "pack format" should always end with two %s's. The first one will be replaced by the temporary name of the new archive. The second one will be replaced by the filename or filename(s) of the file(s) being packed. The ZOO

program currently in use does not support AmigaDOS wildcards, so is "hard-coded" to pack "*," which is an MS-DOS wildcard representing "all files." ".TXT" contains a "pack format" which is really a place-keeper. TXT's pack format line should not be altered.

The fourth use for the archivers list is to EXTRACT archives. The "extract format" field is used when users upload QWK packets. It is also used by TOSS to extract archived packets. The "extract format" is similar to the "pack format" except for the arguments sent to the archiver program. For the "arc" example, the extract format is:

arc a %s %s

If a view, test, pack, or extract command or ability does not exist for a particular archive type, make sure the field is BLANK. CNet knows which archiver types to prompt the user with based on whether or not these fields contain data.

Not all extensions listed in the list of archivers must actually be archivers. Any three character extension may be listed here. Uses are as follows:

The fifth use of the list of archivers is to prevent specific types of files (those with specific extensions) from being uploaded. Each subboard has an "arcs uploadable" field. The range of numbers in this field correspond to the order of the extensions in the list of archivers. A user may not upload a file with an extension listed in the list of archivers unless that extension's number is included in the "arcs uploadable" field. Files with extensions not found in the list of archivers may always be uploaded. To see an extension's number, use the mouse to click on the extension in the list. The number will be displayed to the right of the extension. NOTE that if you change the order of the list of extensions, "arcs uploadable" fields may become invalid.

The sixth use of the list of archivers is to cause only files of certain types (certain extensions) to be Transformed. A file type will NOT be transformed if its extension appears in the list of archivers, but that extension's number is NOT included in the subboard's "arcs transformable" field. See

the subboard chapter's "transformation" section for a more complete discussion.

To edit an archiver's information, use the mouse to click on the extension in the window containing the list of extensions. The extension will appear in the box below, and it's number will appear beside that box. You can use the mouse to click into any of the input boxes to make changes to any specific field.

To add a new archiver to the list, click the "new" button. The cursor will appear in the box below the list of extensions. Enter the extension and press ENTER. All extensions must begin with a period. Click on "add" to actually add your new archiver to the list.

To remove an archiver from the list, first click on the archiver's extension. Then click on the "remove" button.

Editors...

CNet has the ability to incorporate external or "third-party" text editors. These add-on editors may either be designed to be used from a DOS shell, or may be specifically designed to work only with CNet. Because this list of editors is the one that is given to users when choosing a default editor (the EP command), the two "internal" editors are also listed.

The "Line editor" must always appear first in this list. The "visual editor" must always appear second in this list.

Each "external" editor must have a "path" and an "interface" type. The path is the complete path and filename to the editor program itself. The "interface" must be chosen as either DOS or CNet. External DOS editors will be given the filename of the temporary editor file as an argument.

To change an editor, click on the editor's name in the list of editors window. To add a new editor, click on the "new" button and enter all appropriate information. Click on "add" to add your new editor to the list of editors. To remove an editor, first click on the name of the editor, then click on the "remove" button.

The "local mode editor path" may contain an optional path and filename to an AmigaDOS editor to be used from the local console INSTEAD of the chosen "default editor." The name of a temporary file will be passed to the editor as an argument. Many people prefer "CygnusED" from local mode.

Protocols...

CNet uses an Amiga standard in file transfer protocols--the "XPR" protocol interface. XPR protocols are EXTERNAL ".library" files. This allows you to add, remove, or update file transfer protocols at any time. Most XPR's are public domain, and can be found on many larger BBS's. CNet come pre-loaded with the most popular and most reliable XPR's.

Each protocol has a title, a unique ID, a library name, and an "environment" (described below). Each protocol may also be chosen to be a "batch" protocol, and/or a "resumable" protocol.

The title should be something descriptive of the protocol. Usually, protocols have names, like "Zmodem" or "Xmodem," so this field is not too hard to fill in.

The unique ID should be a single CAPITAL letter, number, or symbol. Each protocol's unique ID must be different from the others. The unique ID is the key which the user must press when choosing the protocol from the list of protocols.

The library name is the actual filename of the ".library" file, including the ".library" extension. All XPR protocols begin with "xpr". This filename must match the filename as found in the LIBS: directory.

The environment is a "configuration string". It is passed to the protocol when the protocol is initiated. The environment depends on the protocol in use. If you are adding a new protocol, or wish to reconfigure an existing protocol, you should consult that protocol's documentation.

A "batch" protocol is one that can transfer more than one

file at a time. Zmodem and Ymodem are batch protocols, while Xmodem is not. Batch protocols send the filenames automatically when sending the files. CNet uses this information to allow the user to "skip" the prompt for filename when uploading a file.

A "resumable" protocol is one that can continue an upload that was interrupted, or in some other way unfinished. Zmodem is a resumable protocol. To resume an upload, the "U" command is used with the item's number.

To edit an existing protocol, click on it's title in the list or protocols window. Use the mouse to click into any field to change it. To add a new protocol, click on "new" and then enter all information. Click on "add" to add your new protocol to the list of protocols. To remove a protocol, first click on the protocol's title, and then click on "remove."

Events...

CNet's "event scheduler" is used to dynamically change BBS access requirements, run pfiles and DOS commands, and even to take the board offline and back online. The event scheduler is highly configurable, and can be made to execute events at specific times during the day, the week, the month, and even the year.

There are many event "commands" each of which may take various arguments. These commands are as follows:

RunCNetC: the argument must be the path and filename of a CNet C pfile.

RunARexx: the argument must be the path and filename of an ARexx script file.

RunDOS: the argument must be the path and filename of a DOS shell program. "RunDOS" executes the program interactively, like a pfile. It differs from "DOS-CMD" which executes the argument from the current CLI. Input and output will take place in the Shell from which CNet was loaded.

ReadFile: display a text file on the screen.

DOS-CMD: execute a DOS command using the current CLI. The user will not be shown the output from the command. This is the ONLY bbsevent currently capable of being executed directly from the CONTROL process (do this by leaving the "ports" field blank).

ClosePrt: close the port (when the port is "waiting for a call".) No argument. If used with type "Immediate--force system idle", ClosePrt will "dump" the user from the system and then close the port. If used with type "Immediate--system idle or not", ClosePrt will wait until the user logs off before closing the port.

Charges#: the argument must be the accounting system schedule number. By default, the accounting system uses schedule number 0 at all times. By using this event command, you can dynamically change the active accounting schedule. This is especially useful to charge for "peak" or "prime" times. See the "accounting..." section for more information.

LogonBPS: the argument is the LOWEST baud rate ABLE to logon. If you specify "9600," only callers with 9600 baud modems (or greater) will be able to log on. CNet will not disconnect a user until he has entered his ID and password just in case he has the "bypass bbsevents" privilege flag.

DloadBPS: the argument is the LOWEST baud rate able to download. The "bypass bbsevents" privilege flag overrides this restriction.

UloadBPS: the argument is the LOWEST baud rate able to upload. The "bypass bbsevents" privilege flag overrides this restriction.

LogonACC: the argument is the RANGE of access groups which may logon to the BBS. This is by default ALL groups. The "bypass bbsevents" privilege flag overrides this restriction.

XFersACC: the argument is the RANGE of access groups which may either upload or download. The "bypass bbsevents" privilege flag overrides this restriction.

PfileACC: the argument is the RANGE of access groups which may enter the pfiles, that is, use the "P" command from the Main prompt.

Modem#: similar to the ARexx interface's "modem" command. The argument is a number 0 to 2. Use 0 to completely close the serial device. Use 1 to re-activate and/or re-listen the serial device. Use 2 to "unlisten" the serial device. When in "unlisten" mode, all modem I/O is suspended, but the serial device is not closed. This command is useful when integrating various network mailers or other modem software which "share" a serial port.

CallBack: disable (argument of 0) or enable (argument of 1) the auto-callback at logon feature (user privilege flag). Normally, CNet will attempt to dial all long distance numbers. Use an argument of 2 to insure that CNet will only dial numbers found in the current "avalid" file.

Avalid#: argument is the current "avalid" file number. Normally, you configure just one "avalid" file (the file describing which phone numbers are "local" calls, described in the "logon" chapter). This command allows you to use DIFFERENT avalid files at different times. The search order is (# is the avalid#, and P is the current Port number):

systext:sys.avalid#.P
systext:sys.avalid#
systext:sys.avalid.P
systext:sys.avalid

SysopIn: 0 or 1 (No or Yes), may users page the sysop? This command as well as the next four affect the check-marks on the control panel's pull-down menu.

NewUsers: 0 or 1 (No or Yes), may new users logon?

U/Dbase: 0 or 1 (No or Yes), may users enter the Files area?

Pfiles: 0 or 1 (No or Yes), may users enter the Pfiles area?

Base: 0 or 1 (No or Yes), may users enter the Message area?

JoinLink: 0, 1, 2, or dialing instructions. Used in conjunction with the Join-link feature (see the inter-user communication chapter). Use 1 to allow incoming automatic joinlink connections. Use 2 to allow ONLY incoming automatic joinlink calls (no other users). Use 0 to not accept any joinlink calls. The argument may also contain "dial instructions" when auto-dialing to another joinlink site. The format is (# is a phone number, and "pass" is the remote system's joinlink password):

ATDT# pass

On-Line: take the system offline (argument of 0) or back online (argument of 1). The only effect this command has is that when "offline," the system will not answer the phone. The current caller will not be interrupted (unless the event type is "force idle.")

For each event, you must specify the PORTS on which the event will occur. This can be any valid RANGE of port numbers. When using the "DOS-CMD" event command, you can leave the PORTS field blank. In this case, the CONTROL panel will execute the DOS-CMD. This is especially useful to "run" bbs ports not currently open.

Each event has one of four TYPES: "Immediate--system idle or not" will execute the command whether or not there is a user online. This is usually preferable for "access restriction" commands--those that change baud rates, access groups, or configuration settings.

"Immediate--force system idle" will limit a user's time online in order to CLEAR the line at the event's PRECISE time. There is really is no way around this type of event--CNet will do everything possible to clear the line on time. It is usually preferable for system critical programs like auto-maintenance and network mailers.

The **"Only if system is idle"** type can be used for events which are not system critical. If a user is online at the scheduled event time, the event will not occur, but will

"wait" until the user logs off. If the event is still "valid," it will occur at that time. "Valid" times will be described shortly. This event type is usually used for third party maintenance programs and hourly network functions.

The **"Only if a user is online"** type can be used to run pfiles whose purpose is to, perhaps, display random user messages, such as a recurring system news item or an advertisment. This event type is used for events which are of little system value unless a user is online.

Events can be either weekly, monthly, or yearly. You can select an event to be weekly by placing check-marks in the boxes corresponding to the weekdays on which you would like the event to occur. If you want the event to occur daily, place check-marks in all seven boxes. To select an event to be monthly or yearly, no check-marks must appear in the daily boxes. For a monthly event, enter just the numeric date in the "[mm/]dd" box. The event will occur only on that date during each month. NOTE that if you specify "31" for example, the event will occur only in months with 31 days. For a yearly event, enter both the month and year in the "[mm/]dd" box.

Each event has a definite starting time. Enter the time in military format, like "2100" for 9pm, or "0" for midnight, or "10" for 10 minutes after midnight. Events will occur at the time specified here unless a user is online and the event type is "Only if system is idle."

The "valid" field is the amount of time (in military hours and minutes) for which the event is useful. It is NOT an estimated length of time of execution. If for some reason CNet is unable to execute the event at the scheduled time, CNet will use the "valid" field to determine how much time must pass before the event will be skipped altogether. For example, if an event is of type "Only if system is idle," and a user is online at the scheduled event time, the event will not occur. However, if the user later logs off, and the "valid" time has not yet passed, the event is considered "still valid" and WILL occur at the idle screen. Conversely, if an event is of type "Only if a user is online," and a user is NOT online at the scheduled time, the event will not occur. However, if a user later logs on, and the "valid" time has not yet passed, the event WILL occur when the user is

online. The one other time that the "valid" field is important is when you first load CNet. If you have amaint set to run at 400, and valid for 100, and you load CNet at 430 or even 459, amaint will run. "Valid" must be set to at LEAST 1 minute. If set "valid" to 0, the event will NEVER occur. It is fine and often necessary for "valid" times to cross day boundaries.

Many times, you may want to "repeat" events, perhaps every hour, two hours, or even every minute. Without manually entering each event, this is possible with the "iterate" and "interval" fields. Set iterate to the absolute number of times you want this event to occur. Set the interval to the amount of time (military hours and minutes) to wait between iterations of the event. This ability is especially useful for network mailers. It is also useful when you desire to display random or recurring messages to the user(s) by using pfiles, as often as once each minute.

CNet will extend events into new days if you select long enough intervals and enough iterations. If you specify 24 iterations with an interval of 200, this event will occur every two hours for TWO days. If the event is set to occur every Monday, the event will occur during Monday AND Tuesday. NOTE that if you also select the event to occur on Tuesday that the event will then appear to run TWICE on Tuesday.

To edit an existing event, click on the event in the "events" window. The events window shows the commands and arguments of all events. To add a new event, click on "new." Enter all information, in addition to selecting an event "command" from the "command" window. Click "add" to add the new event to the list of events. To remove an existing item, click on its entry in the events window, then click "remove."

Many events are straightforward. With access restriction or configuration commands, however, there is one thing you should be sure to do: To account for system re-boots at any time during the day, you should account for all 24 hours in the event "time" and "valid" fields.

For example, if you want only 9600 baud (and higher)

callers at all times, the following event is useful:

command: LogonBPS, args: 9600, type: System idle or not
time: 0
valid: 2400

However, if you want 9600 baud callers from 6pm until 2am, you will need two events:

command: LogonBPS, args: 9600, type: System idle or not
time: 1800
valid: 800

command: LogonBPS, args: 0, type: System idle or not
time: 200
valid: 1600

Notice how the "valid" fields add to 2400 hours, and all times are taken into consideration.

Modems...

Each BBS port that has a modem (or null modem) attached to it must have a corresponding entry here in the modem configuration screen. Fields on this screen control how a serial device is opened, which baud is used to communicate with it, and many other options and parameters.

First, CNet is designed to use Hayes compatible, or nearly Hayes compatible modems. Modems that use "AT" commands like "ATD" and "ATA" are generally "compatible enough" to work with CNet. Also, CNet is designed to use "7-wire" serial cables, containing pins for carrier detect, DTR, and RTS/CTS. CNet will be unable to properly function with a cable of lesser capability. In general, most modems and cables that you will find are suitable for the task, but occasionally you will find equipment that is not up-to-par for a BBS environment.

CNet needs the modem to supply a carrier detection (CD) signal. This signal is used to determine when a connection is established and when it is broken. Without this signal, CNet will be unable to "clear the line" or hang up properly when a user drops the connection. Some older modems have a DIP switch to enable or disable carrier detection.

Most newer modems use a software command "AT&C1" to enable CD. In the latter case, you can add "&C1" to the modem's second initialization string (described later).

CNet needs the modem to hang-up and go off-line when the DTR line is dropped. This will enable CNet to quickly hang-up and reset between callers. Some older modems have a dip switch to enable this function. Most newer modems use a software command "AT&D2" to enable DTR hang-up. In the latter case, you can add "&D2" to the modem's second initialization string (described later).

For high speed modems (9600 and higher), CNet needs the modem to operate using RTS/CTS handshaking. For USRobotics (and many other) modems, this is turned on using the "AT&B1" and "AT&H1" commands (or adding "&B1&H1" to your second initialization string). You should consult your modem's manual for exact commands specific to your modem.

CNet needs the modem to NOT be in auto-answer mode. Some older modems have a dipswitch for this. Most newer modems use the command "ATS0=0" to turn off auto-answer. In the latter case, you can add "S0=0" to the modem's second initialization string. If the "AA" light is OFF when the BBS is waiting for a call, you have correctly configured this mode.

CNet needs the modem to use VERBOSE result codes. The modem command to accomplish this is "ATV1." This is the default on all current modems, so you should really not have to consider this unless you are seeing numeric codes like "0" instead of "OK."

Optionally, instead of adding modem commands to the initialization strings, most newer modems have "nonvolatile memory" (or NRAM) which can be used to store configurations. Use a terminal program to type the configuration commands you desire, then use AT&W to write the configuration to memory. After that point, ATZ will restore your "saved" configuration instead of defaulting to factory settings.

Newer and more powerful modems have dozens more

configuration options. In general, the "factory" settings for these options will be satisfactory. However, if you would like more information, or if you are unconfident about configuring your modem(s), there are several example configuration files on the CNet distribution disks to help you along.

The fields you see on the "modems..." screen are as follows:

Device and unit: these correspond to the specific serial port type and driver that you are using. The Commodore 7 port A2232 card uses "serial.device" and unit numbers 2 through 8. The built-in serial port is "serial.device" unit 0. Consult your card's manufacturer or technical documentation for details.

Idle baud: the baud rate that will be used for communication with the modem when the port is "idle." Generally, this is the highest baud rate the modem can support. Because of Amiga hardware limitations, it is recommended that you not exceed 19200. Settings higher than 19200 may result in higher than normal "garbage" during file transfers, especially in the case of a multi-line BBS.

ESC code (escape code): if your modem will not properly support the DTR-drop capability mentioned above (that is, the BBS appears unable to hang-up on a user), you need to use the "ESC code" method of hanging-up. By default, a modem's escape code is 43 (the "+" sign). You probably already know that while your modem is connected to a BBS in terminal mode, you can press "+" three times, then ATH to hang up. By setting the "ESC code" to 43, CNet will do the same thing. Often, however, you will want to prevent users from hanging themselves up (and sometimes crashing the BBS at the same time depending on the modem type) by pressing "+" three times while at an input prompt. To get around this, set the ESC code to something "untypable" like a 30 or 31. When you do this, you need a corresponding "S2=30" or "S2=31" in your "init #2" string. CNet will use DTR-drop hang-ups when the "ESC code" is set to 0.

Shared: set this flag if another program must share this port's serial device at the same time. If you use TrapDoor

for this port, but are NOT using "trapwake" (described elsewhere) you will need to place a checkmark in this box.

Locked: place a checkmark in this box if you wish to use RTS/CTS flow control on this port. For high speed modems, you usually DO want to use RTS/CTS flow control. When "locking" the baud rate, you will want to set the "idle baud" at the HIGHEST rate your modem will support. Most 9600 and 14400 baud modems use a locked baud rate of 19200.

8none1 / 7even1: the serial port's parity checking and word size. The "de facto" standard in BBS communications is 8none1. The 7even1 option is provided for those areas of the world which continue to use the older protocol.

Init #1: CNet will send two initialization strings to your modem when the port is first opened, and again after each caller logs off. The first initialization string generally contains "ATZ" which is the command to "reset" the modem to the saved defaults.

Init #2: this string is sent immediately after #1, and generally contains commands which change the modem's configuration. You should be especially sure to include commands which "undo" what is done by "off hook," "terminal," and "termlink."

Hang-up: this string is sent to the modem after the "ESC codes" if you are not using DTR hang-ups. All Hayes compatible modems should use "ATH."

Dial-out: "ATD" is the modem command to dial out. Change this to "ATDP" if your line is pulse. This string is used for auto-call back validation.

Null modem: by directly connecting the serial port to another computer's serial port running a terminal program, you can create additional "local ports" for your BBS. Place terminals all over your house for family and friends to enjoy! (or create a serious office Local Area Network). With this box checkmarked, you can press ENTER twice to logon to the BBS from the terminal.

Answer string: "ATA" for Hayes compatible modems. This is the string CNet sends to the modem after detecting a "RING." REMINDER: the modem should NOT be in "auto-answer" mode!

Off hook: this string is sent to the modem when you are logging in to the port on your local console. This gives callers the illusion that the phone line is "busy." Normally, for local console logons, you will use a local port (one without a modem), generally port 0.

Terminal: the string to be sent to the modem as you enter terminal mode. This can be used to turn the modem speaker on, reset the ESC code, etc.

Term link: the string to be sent to the modem just before the port is used for dialing out by the "TERM" command (see the inter user communications chapter). Usually similar to "terminal" except you would not want to enable to modem's speaker.

Ans. timeout: the number of seconds that the BBS should wait after issuing the "ATA." Modems either default to 30 or 60. For high speed modems, connections can take a little bit longer as both sides "negotiate" a protocol, so 60 is recommended. In either case, this setting must match the modem's "S7" register. You can either use the ATS7=60 command before setting the NRAM (described above), or you can add "S7=60" to your "init #2" string.

Ans. pause: the amount of time (in TENTHS of a second) that the BBS should wait after receiving "RING" and before sending "ATA." One or two seconds (10-20) is an acceptable number, but you should set this value HIGHER if you are using caller-ID on the line. In this case, you should allow enough time for the phone to ring TWICE so that the caller-ID information has enough time to be transmitted. An acceptable value for caller-ID lines is probably 50-80.

RING key: the keyword that CNet will be watching for to determine that the phone is ringing.

CONNECT key: the keyword that CNet will be watching

for to determine that a connection has been made (after the modem has sent "RING", and CNet has replied "ATA").

CALLER ID key: the keyword what CNet will be watching for to determine the caller ID information. Supra modems use "NMBR =" (followed by the phone number that is calling). Check your modem's documentation for information.

Port password: you have the option of giving EACH PORT a unique password. In order to connect to this port, the user must enter its password. Leave the field BLANK to not use a port password.

To edit a port's modem's configuration, click on the port number in the list of ports window. To add a new port, click on "new." After entering all information, click on "add." To remove a modem, first click on the port number, and then click on "remove."

Fido-net...

CNet supports up to 12 Fido-net-type "domains" (otherwise known as networks). The original Fido-Net domain is called, oddly enough, "Fido-Net." Others now include CLink and Family Net, with the list constantly growing. To edit a Fido-Net domain, click on its name in the "Fido-Net" window. Here are descriptions of the fields you see on this screen:

A Fido-Net address has the format of ZONE:NET/NODE.POINT. Each domain uses a RANGE of ZONE numbers (a "First zone" and a "last zone.") CNet uses this range to accurately determine the domain and destination of netmail, when, for instance, a user enters something like "Mail Ken@1:2410/215." That destination is within the Fido-Net domain because the Fido-Net domain has a "First zone" of 1 and a "Last zone" of 6. When you get ready to connect your BBS to a network, you will be informed of the valid Zone range.

Fake/point-net: If you are a point you should get this from your boss. If you are a node, and wish to have points, you should select a number between 1 and 65534 which somehow corresponds to your net and node number (for

example, if your address is 1:24/267, an obvious fake/point-net number would be 24267). Because the original Fido-Net specification did not account for pointer, this number is required to help Fido-Net software to deal with points. For example, if you are point "2" and your boss's point-net is 24267, your "fake" address is "1:24267/1" and your boss's fake address is "1:24267/0." This keeps older Fido-Net mailer software happy. Your actual four-dimensional addresses are still 1:24/267.1 and 1:24/267.0, however.

Address (0): this is your actual assigned Fido-Net node number. If you are a point, use your boss's address here with your point number at the end. If you are a node, your point number is always 0. You must enter the full four-dimensional address here and in the next two fields. This is the address that will be used to export and toss messages.

First/second AKA (1): if you are a network, area, or hub coordinator, you may have other addresses associated with your BBS. These fields exist so that you make these known to CNet. Netmail addressed to your address or either of your AKA's will be correctly imported.

Echo origin: the default public message tag line. CNet will add this line (preceeded by " * Origin:") to every message that originates from your BBS. CNet will automatically add your BBS's Fido-Net address to the end of the line. From the subboard's EL screen, you can override this setting.

Netmail origin: normally, netmail messages do NOT contain origin lines. This field, however, allows you to disobey this convention on networks which allow it.

When editing an existing Fido-Net domain, the "areas...," "export-to...," and "mail routing..." buttons are active.

The "areas..." screen is used to specify the echomail subboards which you send and receive over the currently selected domain. Following are the fields you see here:

Areas: the name of the echomail area. This is the NETWORK name of the subboard. It is usually quite short,

and does not contain spaces. You obtain these names directly from the network or from your "feed" BBS. These names should match the "unique dirname" on the EL screens for those subboards used to contain these echomail areas. Click on the name of an area in this window to edit its fields.

Access level: each subboard has an access level. In order to "subscribe" to a subboard through the AreaFix utility, a node must have an access level equal to or higher than this value. Access levels for nodes are set from the "export-to..." screen.

Access flags: In order to "subscribe" to a subboard through the AreaFix utility, a node must have all of the access flags that are set for the subboard. Access flags for nodes are set from the "export-to..." screen. There are 8 access flags, numbered from 0 to 7. To "set" a flag, enter any letter or number in its place. To "reset" a flag, enter a "-" in its place.

Dupe table: the number of messages that CNet will "remember" when checking for duplicate incoming echomail messages for this subboard. To set the default value seen here, and for more information, see the "tosser..." section below.

Description: with the AreaFix utility, it is possible to request a list of the currently available echomail areas. Along with the short area name, CNet will provide the text that appears in this field to better describe what the area might contain.

Export-to: a list of the BBS's which have been entered via the "export-to..." screen. BBS's which will send and receive this echo with your BBS are marked with a "+." To toggle the "+" on and off, click on the BBS's address in the "export-to" window.

The "export-to..." screen allows you to enter the addresses of the systems with which you will participate in the exchange of echomail in the currently selected Fido-Net domain. Following are descriptions of the fields you will see here:

Export-to: the list of systems with which you will transfer echomail. Each address is a four-dimensional address. To edit the information for a system on the list, click on its address in the export-to window.

Archiver: the method that will be used to pack message packets destined for the export-to system. CONFIG will compose a list consisting of the archivers listed in the "archivers..." CONFIG screen for which a "pack" format was specified. "ARC" is perhaps the most widely used Fido-Net packer.

Mail type: this determines the "flavor" of echomail packets that Toss will create. "Normal" should be used for most purposes. Use "crash" to create packets that your mailer will mail immediately, instead of waiting for the network mail hour. NOTE that your mailer will only see "crash" packets if you run the mailer periodically throughout the day, perhaps on a BBS event. Use "hold" to create packets that will only be sent if the "export-to" system calls YOU.

Dimension: set this to 4D if you know that the export-to BBS uses four dimensional capable tosser software, incorporating the version 2+ Fido packet header structures (like CNet's Toss does). Set this to 2D if you are at all unsure.

Access level: in order to "attach" itself to an echomail area, the export-to's access level must be equal to or higher than the echomail area's access level.

Access flags: in order to "attach" itself to an echomail area, the export-to must have at least the access flags (and possibly others) that the echomail area does. There are eight flags, numbered from 0 to 7. To "set" any flag, enter any number or letter at its position. To "reset" any flag, enter a "-" at its position.

AF password: the password which the export-to must use when using the AreaFix utility. See a description of the AreaFix utility and the placement of the password in the "Tosser" chapter.

Areas: the list of echomail areas configured from the "areas..." screen for the current domain. Subboards which will exported to and imported from the current export-to will be marked with a "+." To toggle the "+" on or off, click on the subboard name in the "areas" window.

Often, netmail is not sent to its final destination right away. It is often "routed" to save phone charges. The "mail routing..." screen allows you to specify "rules" for the routing of mail. If you are a point, you will want to route ALL netmail to your boss. Here's what you will see on this screen:

Route mail: a list of addresses to which mail can be sent using the BBS "mail" command. There is one wildcard "*" allowed here, which can be used in place of any one or any combination of the zone, net, node, or point components of an address. The "route mail" patterns should be listed in order of increasing generality, from most specific to most general. The LAST entry should ALWAYS be "*:*/*.*" so that ALL netmail will matched by this list. When sending mail, CNet begins at the top of the list comparing the send-to address to each entry on the list until a match is found.

Route-to: the address to which the mail will be routed. The "*" wildcard is also allowed here, and will be replaced by the corresponding number the user specified when sending the mail. For example, routing mail addressed as "1:*/*.*" to "1:*/0.0" means to send all mail in zone "1" directly to the net coordinator of the net given by the original address.

Mail type: the "flavor" of the mail packets created. In most cases, "normal" is used. If you want your mail packets to be sent immediately (as soon as your mailer runs, instead of at the netmail hour), set this to "crash." If you want your mailer to wait until the system calls YOU to PICK-UP the mail packets, set this field to "hold."

To add a new route pattern to the END of the list, click on "new." Enter the "mail route" and "route-to" and then click on "add." To add a new route pattern anywhere else in the list, first click on the route pattern whose position you

would like to assume. Next, click on "insert." After entering the "mail route" and "route-to," click on "add." The new route pattern will be inserted immediately before the route you first clicked on.

To remove a route, first click on the route, and then click on "remove."

Logs...

CNet is able to add occurrences of specific events to the caller log. In addition to being listed in the caller log, it is also possible to give a specific event its own separate log. It is possible to log specific events only for specific users. Following are descriptions of the fields you see on this screen:

Log ID: a unique number. There is a set of logs pre-configured into CNet. Each log has its unique number. CNet uses the Log ID number to locate specific logs. You should not change, remove, or re-use the Log ID number of an existing CNet log.

Optional log name: If this field is used, CNet will create a file by the same name in "sysdata:log" containing only entries for this log. You must handle the reading and deletion of these logs yourself. The only exception are "dloads" and "uploads" which are read and reset by the "LU" command.

User log flag: the value of this field determines for which users this log is active. It may be set to a number from 0 to 31, representing one of the 32 possible "log verbosity flags" that each user has in his account. The event will be logged if the user has this flag number in his "log verbosity flags" field. For example, if the user log flag for feedback is 1, the event will be logged for a user with a log verbosity flags of "0-5,10" but will not be logged for a user with a log verbosity flags of "0,9-17."

Log only when remote: you may wish to log maintenance-type events like KillPost, ForwdMail, etc., but only if performed from REMOTE. Select this option to skip the logging of the event when it occurs from local mode.

The majority of the log types are self explanatory from their 8 or 9 letter description. Here are some additional descriptions:

Editmess:	the subboard ED command.
EditMail:	the MV command from Main.
ForwdMail:	the FOR command from the mail-read prompt.
KillMail:	the MV command from Main.
NewBBS:	an addition to the BBSList.
NewChoice:	a choice added to an existing Vote topic.
NewVote:	a new vote topic.
Vote:	a vote cast.
KillBBS:	a removal from the BBSList.
EditVote:	a vote topic altered.
KillVote:	a vote topic removed.
NetMail:	Fido-Net mail.
AddSubb:	the AL subboard command.
Adopt:	the AO subboard command.
CallLog:	the LC command.
Dump:	the DUMP command.
EditAcct:	The EA command.
EditAttr:	the subboard AT command.
EditFile:	the WF command.
Edit Group:	the EG command.
EditSubb:	the subboard EL command.
EntryFile:	the subboard EN command.
ExitFile:	the subboard X command.
FbackRead:	the VF command.
KillItem:	the subboard K command.
KillResp:	from the subboard ED or end-of-post K command.
KillSubb:	the subboard KL command.
KillUser:	from the EA command.
MaintLog:	the LA command.
MoveItem:	the subboard ML command.
NuserRead:	the VN command.
ReadFile:	the RF command.
TestFile:	the subboard TEST command.
Transform:	the subboard TRANSFORM command.
Validate:	The subboard V command.
XferLog:	the LU command.
ChatReq:	the C command.

EditFing:	The EF command.
EditPref:	the EP command.
EditTerm:	the ET command.
EditUser:	the EU command.
Finger:	the FI command.
Identify:	the ID command.
OLM:	the OLM command.
Password:	the PW command.
YankStart:	the Yank command.
ArexxSays:	the Arexx LOG command.
MCI_Says:	the MCI & command.
NewName:	the EU command when used to change Handle.
FullMaint:	when ID is used to gain full maintenance.
BBSLIST:	the L command from Main.
CC:	the CC command.
Join:	the J command from Main.
Monitor:	The MON command from Main.
TermLink:	The TERM command from Main.
RunPFile:	when a pfile is run.
ReadNews:	when a news area gfile is read.
Shell:	the S command from Main.
ReadGFile:	when a gfile is read.

To edit a log procedure, click on the log name in the list of logs window. Use the mouse to click into the fields you wish to edit. To add a new log for use from a CNet C pfile, click on "new." After entering all appropriate information, click on "add." Remember not to use the name or Log ID of an existing CNet log. To remove a log, first click on the name of the log in the list of logs windows. Then, click on "remove." Remember not to remove any of the default CNet system logs.

Tosser...

CNet's "tosser" is responsible for packing Fido-Net messages into bundles ready to be transported over the network. It is also responsible for unpacking incoming bundles and distributing the messages to the appropriate subboards and mailboxes. See the tosser chapter for more information. The options and fields on this screen are used to control the tosser's operation. These options and fields are as follows:

Input buffer: This determines the amount of memory (in BYTES) to use for reading from the ".PKT" files. The higher this value, the less often Toss will have to read from the disk, making its operation more efficient. 100,000 is a reasonable setting. Try something higher if you have memory to spare.

Output buffer: This determines the amount of memory (in BYTES) to allocate for EACH of your export-to nodes during a toss. 50,000 is a reasonable value. Try something higher if you have the extra memory.

Default dupe table size (in number of messages): Toss is able to remember messages that it has seen. It does this by making a table of the origin addresses and MSGID serial numbers as it tosses them. You can make this table as large as you want, but remember that memory will be allocated for EACH area that you export-to during a toss. Set this to 0 to disable the feature. To have this feature work, you must insure that there is a directory "mail:dupetables/" on your hard drive. This is where the actual "dupe-data" will be stored. This is a DEFAULT setting. From the "subboards..." screen, you can change the dupe-table size on a per-subboard basis.

Send echomail from "unknown" systems to "bad": If Toss detects incoming echo-mail from a BBS which is not configured to receive the area (as configured in the "export-to..." screen), this option will cause those messages to be sent to the BAD MESSAGES area. This option provides some security against messages arriving into a subboard from a BBS with which that subboard is not configured to communicate with. If unselected, echomail from "unknown" systems is imported.

Trapdoor front-end version 1.74 or higher: If you select this option, Toss will use full "four-dimensional" filenames (like 1.255.2410.0.OUT). Without this option, Toss will generate the MS-DOS type HEX filenames (like 0000001F.OUT). The four-dimensional filenames are more efficient and less ambiguous, but the option for hex filenames is provided for compatibility.

Send "dupe" echomail to "bad": This option tells Toss

what to do with "dupe" echomail, as determined by the dupe-table (described above). If selected, all "dupe" echomail will be routed to the BAD MESSAGES area. If unselected, all "dupe" messages will simply be "skipped" (that is, LOST).

Show kludges in imported messages: Normally, the control sequence lines that Toss and other networking software use to route messages are stripped from messages as they are imported. If you really WANT to see these lines in your message bases, select this option. Changing this option will not affect messages that have already been imported.

Without point-net, use 3D address in paths: If you are a point, and your boss does not have a pointnet established, this option tells Toss to add your point number to PATH statements on messages that you export. You should ask your boss whether or not he wants to see this happen.

Xfido/Ifido start messages with 2.msg: This option is included really for sysops NOT using the CNet Tosser, but instead some other third party software. If this option is selected, the "1.msg" files will not be used by Xfido and Ifido. If this option is unselected, the "1.msg" files will be used as normal messages. You should select this option if you are using TrapToss, but leave it unselected if you are using Foozle.

CHAPTER 5 - Logon procedures

There are three ways to enter the BBS--local mode, remote dial in, and null modem.

Local mode is use of the BBS "locally" (as opposed to remotely), from the system "console." Although sysops usually reserve one modemless port for local mode use, you can enter local mode on any running port, regardless of whether or not there is a modem attached. If there is a modem attached, CNet will send it the "off-hook" command sequence (definable from the CONFIG "modems..." screen) to make it appear "busy" to your callers. To enter local mode, open the port's screen, and press the SPACE BAR. To enter local mode and immediately logon as account number one, press the TAB key instead. You may only use this "AutoLogon" feature if the control panel is not "locked." If you prefer, Logon and AutoLogon are commands from the first pull-down menu.

When your modem sends a "result code" to your computer, CNet will display this result code verbatim in the control panel, and at the bottom of the port's status window (if the port's screen is open). This lets you know what your modem is "saying" at all times. CNet makes use of several fields on the CONFIG "modems..." screens to interpret these codes. Most important are the "ring" and "connect" keywords--CNet uses this information to determine when to respond with "ATA" (to tell the modem to answer) and when a connection has been established. Once a connection has been established, CNet uses the carrier detect signal from the modem to determine when the connection has been lost.

Modem Answer Problems

If CNet appears to answer the phone, and then hang-up before the user fully connects, this could be the result of one of several problems: Your modem should NOT be in auto-answer mode to work with CNet. Check by looking at the "AA" light on your modem if it has one--it should NOT be on when the modem is waiting for a call. Some primitive modems do not support carrier detect (CD) indication. Your modem must have that basic feature to work with CNet. Also make certain that your modem cable

uses at least a full "7-wire" setup. If you have a "CD" light on your modem, it should be OFF when CNet is waiting for a call, and come ON once there is a connection. You may need to increase the amount of time your modem allows to complete a connection. High speed modems often require a full 60 seconds connect properly. Changing the connection time is covered in the "modems.." section in the chapter about the configuration editor. Finally, it could just be line noise. Some high speed modems are so particular that they will simply "hang-up" if they detect even the slightest noise problem.

Null Modem Setup

One final way to connect to the BBS is through a "null modem" connection. A null modem connection consists of a null modem CABLE (a specially cross wired serial cable), connected directly from a serial port on the BBS computer to the serial port of another stand-alone PC or terminal. The null modem port is configured from the CONFIG "modems..." screen just like other ports, except that you should check mark the "null modem" option. Null modem connections can operate at the maximum serial speed possible between the two computers. From the null modem terminal, press the ENTER key TWICE consecutively (and quickly) to enter the BBS.

The logon prompts

After connecting, CNet displays a version number and copyright message. Under NO circumstances are you allowed to change this information.

The first prompt to appear is one asking the terminal type. Knowing this right away allows CNet to display the opening screen (sys.start) according to the user's choice of terminal type (if you have created separate screens). The choice that the user makes here will be used for the call. The user can use the ET command to change the terminal type once he's logged on.

If the user presses ENTER at this prompt, CNet will assume an ASCII (dumb) terminal type. If the user selected an actual terminal type on his last call, CNet will prompt the user with "use previous term settings?" before settling for ASCII.

The next prompt is "Enter NEW if you have no account. Enter your handle." You may actually enter your handle, your real name, or your account number at this prompt. Your real name can only be used for logon if you have chosen it not be private. If you enter an incorrect name, CNet will allow you to "search" the user list if the CONFIG flag "allow who/user search at logon" is selected. If CNet is UNABLE to find your name or handle from this prompt, changes are that your "sysdata:pointers" file has become corrupt. Logon using your account number and then run the maintenance program "pointers" to correct the problem.

Enter "NEW" at this prompt to run the new user logon procedure (see the next section). You will have to do this in order to install yourself as "user #1" on your BBS before you open it up to remote callers.

Enter "WHO" at this prompt to list the system's current users. This command is only available if the CONFIG flag "allow who/user search at logon" is selected.

The new user procedures

The new user procedure begins with terminal configuration questions (computer type, line feeds, screen size, etc.). Next, personal data questions will be asked--country, address, handle, real name, etc. If a user enters a banned phone number (one appearing in the "badnumbers" list) he is immediately disconnected at this time. Next, a couple of select user preferences will be queried, such as "more?" mode and time zone offset. Finally, the new user and sysop questionnaire questions will be asked. All of the configuration and preference settings are described in the "preferences" chapter. Modification of the new user questionnaire files is discussed in the "modifications" chapter.

CNet checks for duplicate handles, real names, and handles and real names that match the "badnames" file at the END of the new user procedure. If "avalid files" exist, CNet then offers auto-call-back validation (see the next section).

Auto-call-back at logon and Auto-call-back validation

Auto-call-back validation allows you to have CNet automatically validate new users (give them an access group of 1). If CNet is able to call the user back at his data phone number, make a connection, and then authenticate the user's identity, he can be considered "validated." This saves you the time of having to manually "voice validate" users by calling them back yourself. Auto-call-back validation is activated simply by creating "avalid files" (lists of local phone number prefixes) as described shortly.

Auto-call-back validation is offered to a new user after he completes the new user procedure. If for some reason the auto-call-back was unsuccessful or skipped, the user has the option to try again by using the "X" command from the Main prompt. Both successful and unsuccessful auto-call-back's are noted in the call log.

Auto-call-back at logon can be either a security feature, or a user convenience. When auto-call-back at logon is enabled, CNet will attempt to hang-up and RETURN the phone call as soon as the user completes the logon. Auto-call-back at logon is enabled with a privilege flag in the user account called "AutoCallBack @Logon." If you set this flag to "Opt," CNet will ASK the user if he would like the call returned. If you set this flag to "Yes," CNet will FORCE the call to be returned.

By default, auto-call-back at logon will only return phone calls that are "local" as determined by your "avalid files." By using a BBS event, you can change the operation of auto-call-back at logon. The event command is "callback." An argument of "0" will disable auto-call-back at logon. An argument of "1" will enable it to dial ALL numbers, EVEN LONG DISTANCE NUMBERS. An argument of "2" will enable only "avalid" numbers (this is the default).

Creating "avalid" Files

An auto-call-back configuration file ("avalid file") is used to tell CNet which numbers it may dial, and how to dial them. Typically, you configure this file to tell CNet which numbers are local (AKA, FREE) for you to call. In some

areas near area code borders, it is necessary to dial the area code, even though the number is a local phone call. This is taken into account in an avalid file. Each line of an avalid file has the following format:

AREACODE DIALCODES EXCHANGES

The AREACODE is the "long distance" part of a phone number (in CNet, the digits to the left of the hyphen). The DIALCODES are the extra digits necessary to actually dial the number (like a "1" or a "1" and the area code). The EXCHANGES is a RANGE of valid local phone number exchanges (usually the first three digits of the "local" part of the phone number). For example, if my phone number were 313-4531000, and all 313-453, 313-454, and 313-455 numbers were local calls by simply dialing the last 7 digits, I would add the following line to my avalid file:

313 - 453-455

NOTE when there are no DIALCODES, as in this example, it is necessary to place a hyphen ("-") in that field. If I lived in an area where it was local to call another area code, and the phone company required that I dial 1 and the area code, I could have entered a line like this:

616 1616 255-256

The auto-call-back routines will work with numbers of any length. This means that the auto-call-back routines should work in any country. The following might be a legal entry in a small European country with phone numbers like "4245-662331."

4245 04245 66-67

The auto-call-back routines will work with very SPECIFIC numbers. If, for example, my number is 313-4531000, and I would like to auto-call-back just ONE PERSON in Florida, the following line would work:

813 1813 5551212

Your phone service may change the definition of a "local" call depending on the time of day. You might also have different exchanges on your phone lines, allowing different local calling areas. To take advantage of these

circumstances, CNet allows different auto-call-back ("avalid") configuration files at different times of the day and on different ports. When CNet searches for an avalid file, it searches in the following order (and stops when it finds one):

systext:avalidX.Y
systext:avalidX
systext:avalid.Y
systext:avalid

X is the "avalid number." The avalid number is by default "0." You can use a BBS event to set the avalid number depending on the time of day. Set the event command to "avalid" and the arguments to the avalid number. Y is the current port number.

Caller ID

CallerID gives you a way to digitally determine the phone number of the person calling you. In order for it be useful on a BBS, you must have a modem which can read it from the phone line. You must also order the service from your local phone company.

The CallerID information is transmitted over the phone line between the 1st and 2nd ring. In order to allow your modem enough time to "see" this information, you must lengthen the time between "ring" and "answer"--the default setting of 12 (2.4 seconds) is too short. From the CONFIG "modems..." screen, select a port, and then set the "answer pause" field to 30-35 (6-7 seconds).

On the same CONFIG screen, the "caller-id key" should be set according to what your modem transmits just before sending the phone number. The default setting of "NMBR =" will work with Supra FaxModems with CallerID chips.

With this level of configuration, CNet will report the CallerID phone number in the call log, and will list account numbers which have a matching data phone number. If there are more than 7 matches, the list will end with "...."

Each access group and user account has a variable which describes HOW the CallerID information will be used. Its

possible values are:

No action
Just log it--user never knows it's there.

Copy to data#
The CallerID phone number will be copied to the user's account each time he calls. This allows you simply to keep track of where the user is calling from.

Must exist
If a user calls without CNet receiving a CallerID phone# from the modem, he will be disconnected. No "private" calls will be allowed.

Must exist/copy
A combination of the two functions above.

#'s must match
If the user's Data phone number in the BBS records does not match the callerID#, he will be disconnected.

If the CallerID variable for access group 0 is set to anything other than "No action", new users will not be able to type in their own data numbers--they will be copied from the CallerID information automatically.

Each user account has a flag called "Phone Verification", accessible from the EA screen. It allows you to keep track of whether or not a user's phone number has been validated. Its possible values are:

UNV Unvalidated

ACB1 Auto-call back was once successful at data#, but caller-id has since reported another number.
ACB Auto-call back was successful at data#

CID1 Caller-ID # once matched the data#, but the user has since called from another number.
CID Caller-ID # MATCHES the user's data#

SYS Sysop validated (by voice or however). This will be overridden by caller-id or auto-call back operations.

System-wide CallerID Setup Options

Several CallerID options exist from the CONFIG "options..." screen:

If "validate new users with CallerID" is selected, new users will automatically be given access group 1 if CallerID information was available to supply their data phone numbers.

If "skip handle prompt with CallerID" is selected, CNet will skip directly to the "enter your password" prompt when the user calls. If more than one user shares the same data phone number, CNet will search for an account in that group with a matching password. If you press ENTER at the password prompt, you will still be able to logon by handle.

If "don't answer without CallerID match" is selected, CNet will not even pick up the phone unless there is a user with a data phone number that matches the one that is calling. Use this option for a VERY private BBS.

CHAPTER 6 - The BBS User Interface

CNet command and subsystem structure --an overview

CNet uses a parsed-input free-form command prompt structure. Unlike some other BBSs which use only simple one-key ("hot-key") commands, CNet allows very expressive (and powerful!) commands. For example "read global new tome since 1-7-93 until 7-7-93" is a valid subboard command. To make things easier to remember and type, CNet does support command aliasing. In the previous example, "RA" could have been used in place of "read global new." For more information about the formulation of commands and command aliases, see the "BBS modifications" chapter.

Because CNet parses input, there may be occasion to add quotation marks around arguments with spaces (such as handles and names). For most commands that operate on names and handles, that handle or name is the ONLY argument they take, however, so CNet will automatically "add" the words together. For example:

read mess by "tom sawyer"

requires quotations around tom sawyer, but

mail ken pletzer
or mail "ken pletzer"

will both work.

Most commands have "verbose" and "abbreviated" versions. You may use "Edit Preferences," "E P," (E space P) or "EP" to accomplish the same thing. View the contents of the "cnet:bbsmenu" text file to see CNet's full command structure. Adding or changing items in that file modifies the commands available to users on the BBS.

CNet consists of a "Main" level, and a series of other "command prompts." The Main level is the central point in the BBS from which the other areas are reached. Upon "Quitting" from a command prompt, you are eventually returned to the Main level. "Quitting" from the Main level is equivalent to logging off.

Commands available at all command prompts

There exists a set of commands which is available from every command prompt. Unlike some other BBS's, CNet offers these commands "everywhere" to provide a consistent and predictable user interface. These commands are as follows (many of them are more fully described elsewhere):

? : This is by far THE most important command on a CNet BBS. The question mark provides a summary of commands each with one line descriptions. All menus are found in the directory systext:menu.

ACcount: Account balance information. Provides a summary for the accounting system activity for the current call. Also displays balance and "minimum allowed balance." See the "accounting..." section of the CONFIG chapter for more information.

AG: Activity Graph. Display the graph of system activity (percent) versus time of day. This is the same graph displayed and reset from the control panel.

CC: Chat call. Ask a user on another port to chat. See the "inter-user communication" chapter for more information.

Chat: Ask the sysop to chat. If the user privilege flag "sysop chat" is set to "Def," you may "ring" the sysop if the control panel's pull down menu option "sysop is in" is check-marked. This privilege flag may also be set to "No" or "Yes" to disable or enable ringing of the sysop at all times regardless of the pull down menu's setting.

CRedits: Display your file transfer credit information. This includes daily totals, overall totals, and credit balances. If you are in a subboard, the default file and byte ratios for the subboard are displayed.

DS: Download selected. Displays a list like "SS." An option is given to TEMPORARILY remove files from the list. Files that you remove from the select list at this prompt will be REPLACED once the download is

complete. This gives you the option of PARTIALLY downloading your list of selected files.

EA: Each account(s) (sysop). See the "user and access group" chapter for more information.

EF: Edit finger files. Use this command to change your responses to the new user questions. Other users can view your finger files using the "FINGER" command.

EG: Edit access group(s) (sysop). See the "User and access group" chapter for more information.

EP: Edit preferences. Macros, signatures, More?, user dictionary, network aliases, help level, etc.

ET: Edit terminal preferences. Screen size, ANSI emulation, graphics set, etc.

EU: Edit user information. Handle, name, address, street, birthday, gender, etc.

Feedback: Send a message to the sysop's feedback mailbox. Sysops use "VF" to read from the feedback mailbox. An option on the CONFIG "options..." screen may be used to re-direct feedback to the sysop's mailbox (account #1).

FIND: Find a file anywhere on the BBS. This command searches your subboards for files matching the pattern you specify. You may specify wildcards like #, ?, *, etc. If you do not specify wildcards, "*" is added to beginning and end of your search-text. FIND will only find files if the search-text is found in the first 9 characters of the filename. The "Browse" function is used to display, read, download, etc., found files. See the subboard chapter for more information.

FReq: File request. With the appropriate privilege flag, you may use this command create or add to the ".REQ" files that mailers like TrapDoor use to request files from remote systems. The command takes a Fido-Net address as its argument.

Help: CNet's HELP utility. Provided so that you may receive more detailed online information about specific commands and features. Reads files from the systext:help directory.

HIde: Remove yourself from the "WHO" display so that other users can not see you. See the "inter-user communication" chapter for more information.

ID: Remote system operators must use this command before they will be given system operator privileges. The password for the ID commands is set using the Shell "Setpass" program.

INFO: Displays the file "systext:sys.info." You may edit this file to describe your systems hardware and software configuration. Other pertinent BBS information may also be kept here.

LA: Log of automaintenance. When users or files are deleted by automaintenance, a note is made in this log. Option is given to restart this log.

LC: Log of calls. Records log ons, log offs, and lots of other information about user activities while online. See the "logs..." screen in the CONFIG chapter for more information.

LU: Log of uploads and downloads. Actually two logs read one after the other.

Mail: Send mail to another user. Also "MS" for mail send. See the "mail" chapter for more information.

MM: Multi-mail. Send "bulk" and "party" mail. See the "mail" chapter for more information.

MR: Read your mailbox. See the "mail" chapter for more information.

MUffle: Prevent users on other ports from sending OLM's to you. See the "inter-user communication" chapter for more information.

NF: New files scan. Search the subboards for new file

uploads since your last call. See the subboard chapter for more information.

NM: New messages scan. Search the subboards for new messages posted since your last call. See the subboard chapter for more information.

NSAL: New scan at logon. A combination of the NF and NM commands. See the subboard chapter for more information.

NU: Read the new user message "systext:sys.nuser." This file often contains the "rules of the BBS". It is displayed to new users before they first log on. You should edit this file to express the rules, content, and special character of your BBS.

OLM: Send a message to a user on another port. See the "inter-user communication" chapter for more information.

PW: Change your password. You should change your password at least once every six months. Users with high access should change passwords more often. Users must be cautioned to NEVER use the same password on any other BBS.

QWK: Upload a QWK reply packet. A QWK reply subboard must exist somewhere on the BBS. See the subboard chapter for more information.

RM: Read marked messages. Messages are "marked" using the text search subboard commands (Z and ZG) when you opt to "use a background task."

SS: Scan selected. Display a list of the files that you have selected for downloading. A summary of credit information and estimated time is provided. An option is given to remove items from the list.

STatus: A quick display of the most important account information. Displays your access, your address, important system dates, and other information.

Time: A simple display of how long you have been online and how long you have left.

WHO: Display a list of ports and who is online. See the "inter-user communication" chapter for more information.

UM: User monitor. Receive OLM's when other users log on and log off. See the "inter-user communication" chapter for more information.

WHY: Display the "reason" that your last file transfer was unsuccessful.

***C:** Clear your selection buffer. All files that you selecting using the "*" command will be removed. Your private "yank" files will be deleted.

The "Main" command level

The "Main" prompt is the command prompt at which the user is placed after successfully logging in to the BBS. The Main command level can be thought of as a "central" point--a "hub" connecting the various parts of the BBS. Following are the commands available to you to transport yourself to these other locations:

Base: CNet's message base. The actual "Bulletin Board" part of the system, where text messages are posted and replied to. See the subboard chapter for more information.

Gfiles: General text files base. See the gfiles/pfiles chapter for more information.

Join: Enter the join tele-conference. See the inter-user communications chapter for more information.

List: The BBSList feature. With easy to use prompts and menus, CNet is able to store tens of thousands of BBS listings in a quickly accessed B-tree structure (thats programmer's lingo for "fast"). Full support is in place for international numbers. Listings are automatically removed after a number of days specified by your setting on the CONFIG "limits..." screen.

MOnitor: Monitor the activity of users on other ports. See the inter-user communcations chapter for more information.

MV: Mail verify. Edit or kill mail once you've already sent it.

News: The news files base. Similar to a gfiles base, but new items are automatically displayed to users at logon. See the gfiles/pfiles chapter for more information.

Off: Leave the system. Some other BBSs like to call this very important command "Bye" or "Logout." The "Off" command is also available from MOST other command prompts.

Pfiles: The program files base. This is where external games, utilities, and "door" files can be made available to your users. See the gfiles/pfiles chapter for more information.

Relogon: Logoff and be immediately taken to the logon prompt. This allows users running low on time to start another call without risking losing the modem to another caller. Only users with the "relogon" privilege flag set in their accounts may do this.

Shell: The online shell for system operators. An actual AmigaDOS command shell is opened for online use! Requires a password as set using the "Setpass" program. Access to the online shell should be reserved only for yourself, or for highly trusted co-sysops who FULLY understand the shell commands. CNet uses Matt Dillon's "FIFO" programs to accomplish the magic of the online shell. CNet will read from a "shell-startup" file in the S: directory to set up the shell environment. You may set up a special startup file by editing your BBSTEXT file to change the name of the file CNet will look for. This file should contain the "NOREQ" command to prevent AmigaDOS from throwing up "requestors" which require a local mouse click to handle. You may wish to add other commands to this file (like alias and path). One example would be to use ALIAS to set "Q" equal to "ENDCLI." See your AmigaDOS manual for more info about fun with those commands.

TErm: Terminal mode. Authorized users can "dial out" on free ports. See the inter-user communications chapter for more information.

UL: User list. A program to list or search the user base. You can search for specific handles, names, access groups, phone numbers, or countries. You can order the output by ID number, handle, or phone number.

Uploads: CNet's file transfer base. See the subboard chapter for more information.

Vote: CNet's voting booth. With easy to use prompts and menus, CNet is able to hold "topics" to be voted upon. Users with the appropriate privilege flags can add topics, add additional choices to existing topics, or kill/edit topics.

X: Auto-call back validation. If for some reason the auto-call back failed during the new user procedure, this command is in place to re-enact that event.

The input prompt

The only "control" key you ever really need to use to enter a command is the ENTER key, and maybe the BACKSPACE key to correct your mistakes. Many other control key commands are available, however, for the advanced "power" user. They are (^ just means to hold down the control key):

^B: Beginning. Return cursor to the start of the line.

^E: User defined macro #1 (use EP command to edit).

^F: User defined macro #2 (use EP to edit).

^K: Kill. Delete everything under and to the right of the cursor.

^N: End. Bring cursor to the end of the line.

^R: Move to the next word. Equivalent to using ^U until you reach a space.

^T: Move to the previous character. ANSI terminal users may use the left-arrow key.

^U: Restore the next character. ANSI terminal users may use the right-arrow key.

^V: Verify. Re-display the prompt and input line.

^W: Move to the previous word. Equivalent to using ^T until you reach a space.

^X: Cancel the input line and begin again.

When using an ANSI terminal, the cursor can be moved anywhere in the input line to do inserting and deleting. When ENTER is pressed, however, everything under and to the right of the cursor is lost.

When using an ANSI terminal, the up and down arrow keys may be used to access a command history of the last 10 commands entered.

Whenever you are given an input prompt already containing text, that text will be "highlighted" (dark on light). To replace that text with any other text, just begin typing. To add to (or modify) the text you see, press the space bar, left arrow key, or backspace key. To complete remove the text, press the DEL key.

Ranges of numbers

Many commands operate on a RANGE of items. Many data fields take a RANGE of numbers. How do you specify this range of numbers to CNet? CNet's range parser is extremely flexible and powerful, and quite simple once you understand its rules. In computer fashion, a range looks like x[-y][,z[-w]]... (did everyone understand that?) But let's take the example of reading items from a subboard prompt:

R1	Read item 1
R1-5	Read items 1 through 5
R1,5	Read items 1 and 5
R1-5,10	Read items 1 through 5 and 10
R1-5,10-15	Read items 1 through 5 and 10 through 15
R1,3,5,7,9	Read items 1,3,5,7 and 9
R7,1-3	Read items 7 and then 1 through 3
R1,1	Read item 1 twice

A maximum of 10 commas may be used. Individual "-" ranges must go from a smaller number to a larger number.

Pausing and breaking

CNet will recognize the ASCII standard control-S to pause text display. Any other key (except control-S!) will resume text display. This pausing method is implemented through software, however, so may appear "delayed" due to modem output buffering. When using high speed modems (9600 baud or better), it is advised that you instead use CNet's "more?" and paging features whenever possible.

Whenever you want to CANCEL something, control-C is your best choice of key sequences. Control-C will abort menus, messages, and many features which ask the user to wait (such as text searches and user lists). The slash ("/") may be used as an alternative to control-C.

A less potent "cancel key" is the SPACE BAR. The SPACE BAR is used to "skip" to the next response when reading an item with multiple responses. With high speed modems and CNet's "more?" and paging features, it is rarely used for this purpose any longer. The space bar will also abort menus. The space bar is not an effective way to abort searches.

Skipping prompts for faster action

Many commands have one or more "Yes/No" prompts associated with them, each of which has a "default" response of either Yes or No. To skip these prompts, automatically selecting the default responses, add an exclamation point ("!") to the end of the command.

"O!" will log you off without asking "are you sure?" and "want to leave feedback?". "F!" will immediately enter the editor to write feedback. "M John!" will ask for a subject and then enter the editor to write mail to John. "P!" (at a subboard prompt) will ask for a subject and then enter the editor to write a post, skipping the regular post option prompts. "R!" at the "Respond or pass" prompt will immediately enter the editor, skipping the prompts for addressee, etc. The exclamation point will work with ALL Yes/No prompts.

The exclamation point has been programmed to work in many other situations as well. To read an item or file

"continuously," without "more?" or "respond or pass" prompts, add an exclamation point. This is especially useful when buffer capturing text. Control-C will still work to break text display.

Busy sysops will appreciate the ability to use the '!' for certain maintenance commands. One example would be when cleaning out unwanted files from an Upload base. The command: "K1,5,7-9,12!" would kill files 1, 5, 7, 8, 9, and 12 without the need to answer any further prompts. Obviously, such power must be exercised with care.

Notes:

CHAPTER 7
Users, access groups, privileges, and limits

CNet supports 32 "access groups," numbered from 0 to 31. Each user of your BBS is assigned to just ONE of these 32 groups at all times. Two "special" group numbers are 0 and 1. Access group 0 is the group to which NEW USERS are automatically assigned. Access group 1 is the group to which AUTO-VALIDATED (call-back or caller-ID) users are assigned. All other access groups may be configured in any way you choose. Although most people prefer to make group 31 the "sysop group," you can select any number you choose (2-31). The number 31 has no special meaning over the number 2, for example. For simplification, some people prefer to use only a small number of the access groups, maybe only numbers 0 to 4.

Access groups really have TWO functions. First, each access group has its own "number" from 0 to 31. Many areas of the system (individual subboards and "list" areas) are protected with an "access groups" field. Such a field is set to a RANGE of access group numbers. Only users from those specified access groups may enter the area.

Each individual user account contains the privilege flags, ratios and limits that are used to determine which BBS functions that particular user has access to, how many calls he may make during a day, how many minutes he receives for each call, etc. The second function of an access group is to carry a "default" set of these user privilege flags, ratios, and limits. Whenever a user is "assigned" to group 0 or 1, or you manually change a user's access group number, the "new" access group's defaults are COPIED into the user's account information.

Note that the access group settings themselves are never actually used to determine access to BBS functions--each user's account settings are used instead. This means that once a user has been assigned to an access group and has received the default settings from that access group, that user's account may then be "customized" by using the "EA" command and manually changing any of the privilege flags, limits, or ratios. In the extreme, with customization, a user can be a member of group 31, but have all of the settings and privileges of a default member of group 0.

Note that if you again change that user's access group, the defaults from that new access group will be copied into the user's account, and any customization will be LOST.

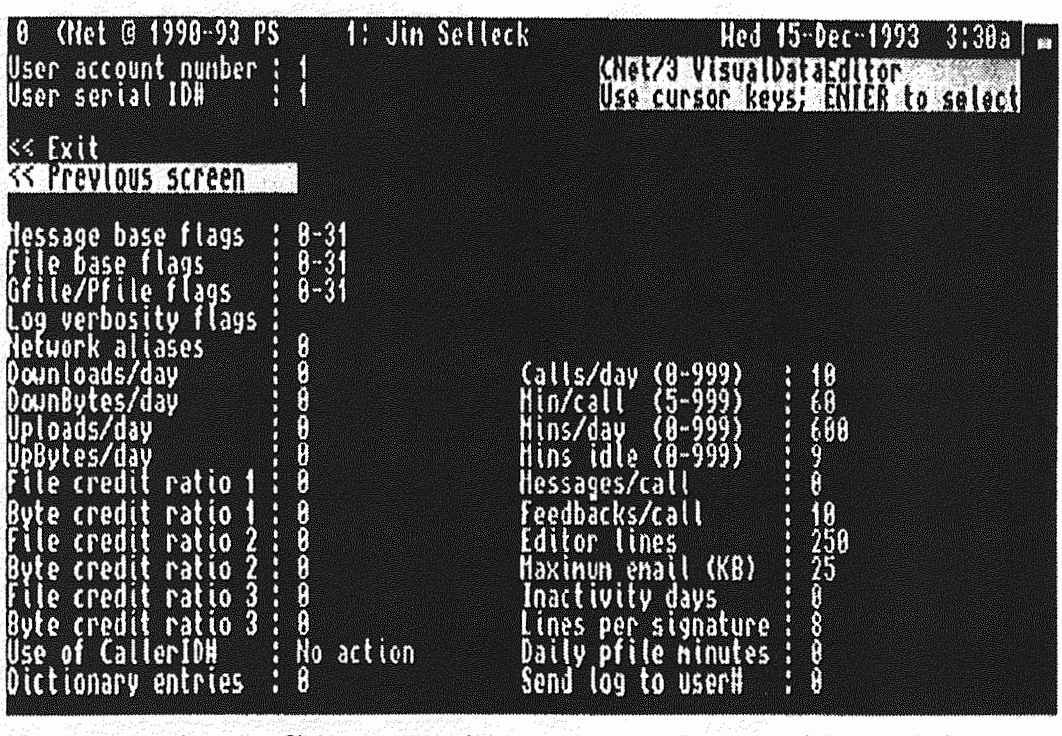
On the same token, because access groups are merely "default" access variable sets, when you change an access group's fields, this has no immediate affect on users who are already members of that access group. CNet provides a way to "apply" changes that you make to an access group to all of that access group's current members. This is called "transposing" access group defaults. The maintenance pfile "transpose" found in the maintenance directory of the pfiles area does just this. Transpose will ask you for an access group to transpose "from" and one to transpose "to." If you want to adopt the defaults of a particular access group into users' accounts who are members of that group, select that access group as BOTH the "transpose from" and "transpose to" groups. If you specify a different "transpose to" group, not only will users of the "transform from" group have their fields replaced with the fields from the "transform to" group, their access group numbers will be changed to that of the "transform to" group. This effectively allows you to change all members of one group to members of another all at once.

The EG and EA commands

To edit an access group default set, use the "EG" command followed by the group number (0 to 31). To edit a specific user's account, use the "EA" command. By specifying a RANGE of numbers, the EG command can be used to edit more than one access group at a time, and the EA command can be used to edit more than one user account at a time. When editing multiple groups or users, all fields in the visual data editor will initially appear "ghosted" (black on blue). Then, each field that you edit will "light up" to signify that its value will be applied to ALL groups or users that you specified.

The EG and EA commands share two identical screens--"privilege flags" and "limits/ratios/flags." Following are descriptions of the options found here. If used as part of a larger "system," individual flags and fields may be described again throughout this manual.

Editing Limits/Ratios/Flags



Message base flags: Each message area subboard has a "flags required" field. In order to enter the subboard, each flag (a number 0 to 31) specified in the "flags required" must also be present here in the message base flags. For example, if a subboard has flags required of 1-5,10, and a user has message base flags of 0-31 or even 1-5,10, he may enter the subboard. If the user has message base flags of 0-9,11-31, or even 2-5,10, he may not enter the subboard. In the first case, he was missing the "10" flag. In the second case he was missing the "1" flag.

File base flags: This field operates identically to "message base flags" but is used for subboards in the uploads area as opposed to the messages area.

Gfile/pfile flags: This field operates identically to "message base flags" but is used in conjunction with the "flags required" fields of the gfiles, pfiles and news subdirectories.

Log verbosity flags: From the CONFIG program's "logs..." screen, each system log is assigned a "flag" number from 0 to 31. In order for an event to be logged for a user, his "log verbosity flags" must include that log's flag. This allows you to "watch" the activity of certain users more closely. You may develop a scheme such as "logs

with a flag of 0 should be logged for all users" and "logs with a flag of 1 should be logged for less trusted users" and "logs with a flag of 2 should only be logged for users whose every move we are concerned about." In this example, you will want to give users log verbosity flags of "0" or "0-1" or "0-2" depending on your needs to monitor their activity.

Network aliases: When using netmail or UUCP mail frequently, it becomes a chore to remember and type large numbers of network addresses; one miss-keyed letter could send the letter to another user or to another location entirely. A network "alias" is an abbreviation for a complete network address. CNet will allow each user to use the EP command to enter as many network aliases as is specified by his "network aliases" field. When sending mail, the mail command will first check the recipient's name against the user's personal list of abbreviations. The editor is used to enter and edit network aliases. Each line consists of one alias and its abbreviation. For example, sending mail to Ken Pletzer at fido address 1:2410/215 is now as easy as using the "mail ken" command, and including the following when editing network aliases:

```
ken     Ken Pletzer@1:2410/215.0
```

Downloads/day: The actual number of files which the user may download from the system in one day (midnight to midnight). This number DOES include "free" files. Set this field to 0 to give the user unlimited download files.

Downbytes/day: The actual number of bytes which the user may download from the system in one day (midnight to midnight). This number DOES include "free" files. Set this field to 0 to give the user unlimited download bytes.

Uploads/day: The actual number of files that the user may upload in one day (midnight to midnight). This is included primarily for security reasons, to prevent users from overwhelming your storage capacity. Set this field to 0 to give the user unlimited file uploading.

Upbytes/day: The actual number of bytes that the user may upload in one day (midnight to midnight). This is included primarily for security reasons, to prevent users from overwhelming your storage capacity. Set this field to 0 to give the user unlimited byte uploading.

File credit ratios (1-3): A file "credit ratio" determines how many "file credits" the user receives each time he uploads a file. Each file credit the user has is good for downloading one file. There are THREE file credit ratio fields here. The credit ratio that is used during a given upload is determined by the subboard's "upload file ratio#." When a subboard's "upload file ratio#" is set to a number between 1 and 3, it corresponds to one of the three of the user's file credit ratios. When a subboard's "upload file ratio#" is set to 0, the user receives NO file credits for uploading into that subboard. For more information, please read the "credit ratios" section in the subboard chapter.

Byte credit ratios (1-3): This field works analogously to the "file credit ratio" fields for bytes instead of files. Please consult the discussion of file credit ratios above, substituting "byte" where you read "file."

Use of caller ID (no action; copy to data#; must exist; must exist/copy; must match data#): This field's setting determines how a caller ID signal is handled. How you actually set this value will depend on the actual security needs of your systems. Note that caller ID is only available in certain areas, and requires a phone company service fee, and a modem capable of receiving caller ID signals. If "no action" is specified, the user is always allowed to logon normally. Note that caller ID matches (the caller ID signal and a list of account #'s whose data phone numbers match the caller ID signal) are always noted in the caller log. If "copy to data#" is specified, each time that user logs on, the phone number from which he is calling (the caller ID signal), if present, is copied into his "data phone#" field. If "must exist" is specified, a caller ID signal must be present in order for the user to log on. The actual value of that caller ID signal does not matter (but is still noted in the log). If "must exist/copy" is specified, a caller ID signal must be present to log on, and that caller ID signal is copied to the user's "data phone#" field. If "must match data#" is specified, the caller ID signal must be an exact match of what is already in the user's "data phone#" field in order for him to be able to log on. Caller ID is explained further in the "logon" chapter.

Dictionary entries: The spelling checker built into the

visual editor has the ability to "learn" custom words for each user. This field determines the actual number of words which may be kept in the user's custom dictionary file. A user may edit and delete words from his custom dictionary by using the EP command. Each line of a user's custom dictionary file corresponds to one "learned" word.

Calls/day (0-999): The number of times that the user may log on to the system in one day (midnight to midnight). The special value of 0 is recognized to allow an unlimited number of logons.

Min/call (5-999): The number of minutes that the user may spend online each time that he calls. The special value of 999 is recognized to allow an unlimited amount of time each call. "Time remaining" will show as 999 in the status window for as long as this user is online.

Mins/day (0-999): The number of minutes that the user may spend on the BBS each day (midnight to midnight). This field is used together with "mins/call" to determine the actual number of minutes that the user may spend online during a given call. The special value of 0 is recognized to allow unlimited number of minutes per day; time will be limited only be calls/day and min/call.

Mins idle (0-999): A user is "idle" if the BBS is waiting for him to type at a command prompt. While text is being sent to the user, or the user is entering a command or text, he is not idle. This field determines the number of minutes for which the user may be idle before he is automatically disconnected from the BBS. During the last 30 seconds of "idle time," the BBS will "beep" (and the Amiga's screen will flash) once each 6 seconds, and the "time remaining" in the status window is replaced with the "idle timer." A value of 0 is recognized to allow unlimited idle time. For security, it is NOT recommended that you allow unlimited idle time to ANY user.

Messages/call: This field determines the actual total number of posts, responses, and mail messages that the user may enter during one call to the system. A value of 0 is recognized here to allow an unlimited number of messages to be entered. This field is included primarily for security reasons to prevent your system from being overwhelmed

maliciously.

Feedbacks/call: This field determines the actual number of feedbacks (private messages to the sysop) that the user may enter (the F command). There is no provision or need for unlimited feedbacks. A value of 0 actually prohibits the user from sending ANY feedbacks.

Editor lines: The default number of lines which the user may enter when writing posts, responses, feedback, and mail. While a user is in the editor, each line may occupy approximately 80 bytes of memory. Do NOT set this field to 0.

Maximum email (KB): Many users like to "keep" old mail long after they have read it. This field was designed to discourage that by limiting the size of a user's mailbox. Once a user's mailbox reaches the specified size (in kilobytes), mail senders are informed that the user's mailbox is "full." Your choice of values here depends on your system's space limitations. A value of 0 is recognized to allow an unlimited mailbox size.

Inactivity days: If you never deleted users from your BBS, you would find that some users call once or twice, and then never call back. Other users would go years without calling back. This field is used by auto-maintenance as a "cut-off" point. If the user goes the number of days as specified by "inactivity days" without calling the BBS, he is automatically deleted during auto-maintenance. This process is sometimes called "weeding" the user base, or "purging" inactive users. A value of 0 is recognized as making the user immortal on your BBS.

Lines per signature: Each user may use the EP command to specify "signature files"--files that are automatically appended to the end of each message that he writes. Signature files are a convenience feature, preventing the user from having to enter a perhaps very lengthy footer for each message that he writes. Signature files can be abused, however, and can often be very annoying if TOO long and used TOO often. This field allows you to keep your users in check by specifying the actual number of editor lines

which may be used when editing a signature file. A value of 0 is recognized as allowing the default number of editor lines (as specified by the "editor lines" field above).

Daily pfile minutes: The number of minutes that the user may spend using pfiles each day (midnight to midnight). This field was included because users sometimes abuse their use of games and other pfiles, and spend little or no time elsewhere on the BBS. Time using a pfile only counts against this limit if the "debit daily time" flag is set to "yes" in the pfile's attributes screen (the AT command from a pfiles area prompt). A value of 0 is recognized to allow an unlimited number of minutes using pfiles each day.

Send log to user#: For security reasons, the actions of specific users may be of some interest. If you set this field to a valid account number, a log of the user's activity will be sent to the mailbox as specified by the valid account number. The log in mail will appear identically is it does in the normal call log.

Privilege flags

All privilege flags are either "yes" or "no" unless otherwise indicated.

System operator: This is the big one. Having this flag allows a user to do just about anything he wants to. He can always enter all subboards and pfiles, gfiles, and news

areas. He always has access equivalent to a subboard operator in those subboards. He has access to ALL MCI commands. Many privileges are not "automatic" however, and are assigned separately as described by other flags. When calling from REMOTE, the special command ID must be used to gain remote system operator access to the system. This is an added security precaution. Passwords may or may not be set for the ID command. Consult the "maintenance" chapter for more information.

Send EMail: Whether or not the user may use the Mail command.

Receive EMail: Whether or not other users may send mail to this user.

Set mail expiration: Whether or not the prompt "# of days before auto-expiration" will appear when writing mail. Mail can be set to "expire" after a set number of days. Expired mail is automatically skipped and deleted when a user reads his mail.

Send bulk mail: Whether or not the user may use the MM (multi-mail) command. Multi-mail allows someone to send one message to a group of users all at once. See the "mail" chapter for more information.

Send party mail: Whether or not the "is this party mail" prompt will appear when a user enters bulk mail. Bulk mail that is designated as party mail causes all replies to the mail to be automatically distributed to all of the recipients of the original bulk mail. In order for party mail to be used, a "route file" must have been specified during the MM command.

Send urgent mail: Whether or not the "urgent mail (shown at logon)" prompt will appear when a user enters mail or bulk mail. Mail that is marked as urgent mail is displayed immediately after a user successfully logs on.

Forward mail: Whether or not the user may use the "FORward" command when reading mail. When you receive mail that is better read by some other user, or you wish to organize your mail between multiple sysop

accounts, the FORward command is invaluable.

Use the pfiles: Whether or not the user may use the "Pfiles" command to enter the pfiles area from the Main prompt.

Use the gfiles: Whether or not the user may use the "Gfiles" command to enter the gfiles area from the Main prompt.

Use the userlist: Whether or not the user may use the "UL" command from the main prompt. The userlist feature is very handy when you need to locate users. The program uses a large amount of processor and hard drive time, however, and can drastically slow other ports.

Conference: Whether or not the user may use the "Join" and "OLM" (On Line Message) commands. See the chapter "inter user communication" for more information. Without this flag, the user is also unable to RECEIVE OLM's.

MCI level 1: Whether or not the user has access to use any of the most basic of MCI commands. Which commands are considered "level 1" are actually definable through a line in BBSTEXT. See the "editors and MCI" chapter for more information.

MCI level 2: Whether or not the user has access to use any of the more advanced MCI commands. Which commands are considered "level 2" are actually definable through a line in BBSTEXT. See the "editors and MCI" chapter for more information.

Relogon: Whether or not the user may use the "Relogon" command from the main prompt. It is sometimes convenient to logoff and then immediately "call back" without actually being disconnected. This is handy when more than one person is calling from one location. However, this feature may easily be abused, making the "calls/day" and "minutes/call" fields powerless.

Bypass bbsevents: The CONFIG program's "event scheduler" contains several commands for limiting a user's access to the BBS based on baud rate and access group. Setting this flag to Yes specifically bypasses the

effectiveness of those events which may prevent logon, uploading, or downloading. See the "config" chapter for more information. This privilege flag will under no circumstances prevent an event from actually occurring (that is, auto-maintenance will always occur on schedule).

Alias message authors (Yes, no, sub): Whether or not the "use/change alias" prompt will appear when posting or responding. Setting this flag to Yes or No will cause this flag to always or never appear, respectively. Setting this flag to "sub" will cause CNet to honor the "allow alias" flag from each subboard's configuration. Only sysops and subboard operators may use another actual user's name or handle as an alias.

Adopt orphans: "Orphan" files are those found on the subboard storage device which are not currently listed for user access. This flag determines whether or not the user may use the "AO" command in a subboard to add "orphan" files to the list of files. This is primarily a sysop-only privilege.

Read private messages: When set to Yes, all messages in all subboards marked as "private" will be readable.

Kill/edit any file: When set to Yes, the user may use the Kill and EDit commands on all items in all subboards.

Kill/edit own files: When set to Yes, the user may kill items that he posted and uploaded (regardless of their age and number of responses). When a user kills his own file, he loses the file and byte credits that he gained by uploading it. The user may also use the EDit command to change the text of his messages.

Skip file validation: Newly uploaded files will require validation by a sysop or subboard operator only if the subboard flag "new file validation" is set to Yes, and this flag is set to "No." Unvalidated files may not be viewed or accessed by the users.

Write anonymously (yes, no, sub): Whether or not the user may remain anonymous when posting, responding, or uploading. Setting this flag to Yes or No either gives or

denies this privilege at all times on all subboards. Setting this flag to "sub" causes CNet to honor the subboard's "anonymous messages" flag. A subboard setting of "force," however, overrides a user setting of "no."

Trace anonymous: When set to Yes, the handles of all anonymous authors on all subboards will be shown in parentheses following the "By: Anonymous" when messages are read.

Private messages (yes, no, sub): Whether or not the "private message" prompt will appear when posting, responding, or uploading. Setting this flag to Yes or No either gives or denies this privilege at all times on all subboards. Setting this flag to "sub" causes CNet to honor the subboard's "private messages" flag. A subboard setting of "force," however, overrides a user setting of "no." Private messages are only effective if they are "addressed" to someone.

Conference control: This flag gives a user power over all inter-user communications. If set to Yes, he may see all "hidden" users, he may OLM any port, he may force an inter-user chat by adding "!" to the end of the CC ‹ port#› command, and he automatically has "control" of any join tele-conference room which he enters. See the "inter-user communications" chapter for more information.

Infinite file credits: When set to Yes, CNet will not restrict a download based on the number of file credits that the user has. However, the user's file credits variable continues to be updated as normal, and may reach severly negative proportions if the user is a "leech."

Infinite byte credits: When set to Yes, CNet will not restrict a download based on the number of byte credits that the user has. However, the user's byte credits variable continues to be updated as normal, and may become negative if the user does not upload.

AutoCallBack @Logon (no, yes, opt): Primarily designed to be a security feature, if set to Yes, this flag will cause CNet to call the user back EACH TIME that he logs on. (If set to "opt" he is first asked if he'd like to be called back). Be VERY CAREFUL about how and for whom you set this

flag. CNet will call LONG DISTANCE if necessary. The normal auto-call-back routines and "avalid" files are used to determine which phone numbers are considered local. See the "logon" chapter for more information. A bbs "event" is necessary to actually enable auto-call-back at logon. The event command "callback" should be given an argument of "1" during times you wish auto-call-back at logon to occur, and should be given an argument of "0" during times you do not wish auto-call-back at logon to occur.

Timelock exempt: All subboards and pfiles/gfiles subdirectories have "minutes timelock" fields which determine the number of minutes that a user must be online before entering those areas. If this privilege flag is set to "yes," the timelocks will have no affect on the user, and he may enter any subboard as soon as he wishes.

Add new vote topics: Whether or not the user may use the "Add" command from the vote command prompt.

Add new vote choices: Whether or not the user may enter the choice of "0" when voting on a topic to add an entirely new choice.

Kill/Edit vote topic: Whether or not the user may use the Kill and Edit commands from the vote command prompt.

Edit handle: Whether or not the user may use the EU command to change his handle. This privilege should be withheld from most users for security reasons, but for your more trusted users, it makes the sysop's job easier.

Edit name, bday, sex: Whether or not the user may use the EU command to change his real name, his date of birth, or his gender. Most users will find that these items rarely change.

Edit address, st/zip: Whether or not the user may use the EU command to change his address, city, state, and zip code.

Edit voice phone#: Whether or not the user may use the EU command to change his voice phone number. If you

voice validate callers, it may be unwise to allow users to change their own voice phone numbers.

Edit data phone#: Whether or not the user may use the EU command to change his data phone number. If you validate users with caller-ID, it may unwise to allow users to change their own data phone numbers.

Allow WHO banner: Whether or not the user may use the EP command to set a line of text (called his "who banner") to be seen below his name on the WHO command display.

Use Termlink (no; ltd; ful): Termlink allows users on one port to dial out on another port. In "full" setting, users actually enter an unrestricted terminal mode on the call-out port. In "ltd" setting, users may choose from a list of BBSs to dial. Consult the "inter-user communication" chapter for more information.

Monitor another port: Port-monitoring allows a user on one port to view what a user on another port is doing. Optionally, the monitoring user can actually type into the monitored port. This is a very powerful feature and should only be reserved for system operators. Consult the "inter-user communication" chapter for more information.

Alarm sysop @logon: If set to Yes, an audible warning will sound when the user logs on to the BBS. A BBSTEXT line is output, which by default contains an MCI DOS command similar to chat mode paging. This feature is designed audibly notify you when specific users of interest log on.

Open screen @logon: If set to Yes, the port's screen will automatically be opened (as if you had double clicked in the control panel) when this user logs on. The port screen will also automatically close once the user leaves the BBS. If the port screen was already open, this flag will have no effect.

Open capture @logon: If set to Yes, the port's capture buffer will automatically be opened (as if you had used the port's pull-down menu) when this user logs on. The capture buffer will also automatically close once the user leaves the BBS. If the capture buffer was already open, this

flag will have no effect. NOTE that the capture buffer is stored in RAM until the pull-down menu is used to save or clear the buffer. If the capture buffer is open for too long, you may run out of RAM.

Send FIDO netmail: Whether or not the user may use the Mail command to send fido-net netmail. See the "mail" chapter for more information.

Send UUCP netmail: Whether or not the user may use the Mail command to send UUCP mail.

FIDO FReq and attach: Files may be requested and sent over the fido-net. This flag controls whether or not the user may use the FReq command to post file-requests to fido-net BBSs. To process file requests, CNet creates or appends "REQ" files in the fido-net outbound directory. This flag also controls whether or not the "request, attach" prompt will appear when entering fido-net netmail.

Hold and Crash mail: Whether or not the "crash, hold, normal" prompt will be given when entering fido-net netmail. The selected type is sometimes called the "flavor" of the netmail message, and determines the timing of its distribution across the network.

NetMail cost exempt: The fido-net nodelists contain a cost variable for each BBS in the nodelist. This number may reflect the actual "cost" of sending netmail to that address in your country's lowest currency (pennies in the USA and Canada). Unless you set them when you compile the nodelists, these cost values usually default to 0. After sending netmail, CNet will subtract this amount from the user's accounting balance, unless the "cost exempt" flag is set. Note that nodelist compilation is NOT performed internally by CNet. You will need to use a separate program such as "TrapList" for that purpose.

Costs are net credits: Instead of using the nodelist costs as "money" and subtracting them from the user's accounting balance, you may choose to use a system of "credits." Every user has a "network credits" field in his account. If you set the "costs are net credits" privilege flag to "yes," CNet will check and deduct from the user's "network

credits" field. The only way network credits are ADDED to this field from the BBS is by sysop use of the EA (edit account) command.

Receive DL rewards: A subboard may be configured such that "rewards" are given to the uploaders of files each time someone downloads their files. These rewards are based on percentages and other configuration variables. Consult the subboard chapter for more information. If a reward is due, setting the "receive DL rewards" flag to No will prevent the user from receiving that reward.

May page the sysop (no, yes, def): When a user pages you using the "Chat" command, he is either told that you are unavailable, or he is told that you are being paged. In the latter case, a BBSTEXT line is read that by default contains a DOS command to produce a sound on the Amiga. Some users you might WANT to know are paging you, and some you might NOT want to know are paging you. By setting this privilege flag to either "yes" or "no," you can select that the user is ALWAYS able to page you, or NEVER able to page you. Setting this privilege flag to "def" will allow the user to page you if the control panel's pull down menu option "sysop is in" is checkmarked. Note that the control panel may have different "sysop is in" settings for different ports.

Special Sysop EA functions

As was mentioned earlier, the EA command may be used to edit a specific user's account (or a range of user accounts). The fields found in two screens (privilege flags and limits/ratios/flags) are identical to those found in two screens of the EG command, which were described above. Much of the other information editable from the EA command screens is nothing more than what the user may edit himself using the EU, EP, and ET commands, so will not be considered in depth here. However, the EA command allows you to edit several other user variables which do not appear anywhere else. They will be described here:

Sysop comment: A line of text for your eyes only. This comment will be displayed at the bottom of the port status window when the status window is open. Also, while

looking at the control panel, a "+" will be displayed alongside a user's handle if there is a sysop comment. The "UserInfo" button can be used to quickly view the comment.

Expiration date: A date on which the user's access will automatically be changed to the "expiration access" group. When disabled, the date will read 00-Jan-00.

Expiration access: The access group to which the user will be assigned once the expiration date has been reached. Useful in cases where the user is on "probation" for a period of time, or if the user has paid for special access for a specific time period.

Phone verification (unv, acb1, acb, cid, cid1, sys): This field allows you to keep track of how a user was validated, or VERIFIED as leaving correct phone numbers. CNet will automatically update this field unless it is manually set to "sys," which should be used to indicate that a sysop has manually verified the user. "Unv" indicates that the user has not yet been validated in any of the following ways. "Acb" indicates that the BBS successfully performed auto-call-back validation on the data phone number during the user's last call. "Acb1" indicates that the BBS successfully performed auto-call-back validate on the data phone number at one time, but not on the last call. "Cid" indicates that the user's data phone number matched the caller-ID signal on his last call. "Cid1" indicates that the user's data phone number matched the caller-ID signal at one time, but not on his last call.

Time today (1/10s): The actual amount of time that the user spent on the system during the last day (midnight to midnight), not including the current call if the user is currently online. This value is given in TENTHS of a minute. On a new day, this number is not reset to 0 until the user actually calls. That is, it reflects the amount of time spent on the system during the "last call date."

Calls today: The number of calls the user has made to the system during the last day (midnight to midnight), not including the current call if the user is currently online.

Total calls: The number of calls that the user has made to the system in total.

Time credits (1/10s): This field provides a way to "temporarily" give the user more time for his next call(s). A user's maximum time per call will be computed as his "mins/call" setting PLUS the time credits setting. Note that time credits are given in TENTHS of minutes. Time credits are "used up" as the user spends time online. For example, if the user has a normal 40 min/call, and 100 time credits (10 minutes), he will have 50 minutes maximum the next call. If he only spends 4 minutes on line, his time credits will be reduced to 60 (6 minutes), and he will have a maximum of 46 minutes the next call. Time credits are only given from the EA command.

Network credits: This field contains the number of netmail "credits" the user has. This field is only considered when the user has the privilege flag "costs are net credits" set to Yes. See the discussion of that privilege flag. Network credits can only be given from the EA command.

Public messages/private messages: The actual number of posts and responses (public) and mail and feedback (private) messages that the user has entered.

Balance: This field is used in conjunction with the accounting system. The units are CENTS. See the section concerning the accounting system in the CONFIGURATION chapter for more information.

Pfile points: This field is here for sysop editing, but is not directly used by CNet. The AREXX command "addpoints" can be used within AREXX games to add and subtract from this value. This field is here primarily to give AREXX game programmers a user variable to use to track game advancement, etc.

CHAPTER 8 - User preferences

User configurable variables and preferences are split into three categories: user profile, terminal settings, and BBS preferences. There is a user command corresponding to each one--"EU" (edit user profile), "ET" (edit terminal settings), and "EP" (edit preferences). These commands are available at all command prompts.

The user profile

The "EU" command is used to edit the basic user profile data--name, handle, address, city, state, zip, voice#, data#, birthday, gender, and organization. All but the "organization" is self explanatory.

The "organization" is text that will appear below the user's name on posts and responses that he writes--it "identifies" him with a group. Once written, a message's organization line does not change--that is, changing the organization field in your user records does not affect existing messages.

There are five different privilege flags to control which of these data that a user may edit himself (without sysop intervention). They are "handle," "name, birthday, sex," "address st/zip," "voice phone #," and "data phone #."

If the system's user data file pointers (used internally by CNet to locate specific user files quickly) become corrupt or invalid, CNet will not allow use of the "EU" command. In this case, the sysop must use the maintenance pfile "pointers" to re-create the pointers.

The terminal preferences

The "ET" command is used to edit the user data fields which affect how CNet "talks" to the user's terminal program. CNet needs to know the size of the terminal's display, and which type of control-codes it understands. The fields here are:

Computer type: Chosen from the list in the "CNET:BBSMENU" file, menu number 30. Once users have chosen computer types, you should not alter the order of the computer types as given in menu number 30. It is OK to add new computer types at any time to the END of

the list (for a total of up to 32 choices).

Graphics set: ASCII, Commodore C/G, IBM, Amiga Int'l, or Amiga SkyPix. This information tells CNet how to "talk" to the user's terminal--which codes to send to produce certain characters. For example: Code number 225 could be any of several different characters depending on the graphics set. ASCII is the simplest of the graphics sets, containing only the letters, digits, and basic symbols, using only character codes 0-127. IBM and Amiga International use the same ASCII codes 0-127, but offer support of the graphic or multi-lingual "extended" character codes 128-255 as well. Commodore C/G also uses all character codes 0-255, but does not use the same ASCII codes for letters, numbers, or basic symbols. "SkyPix" is usually an IBM character set, with the added ability to display simple raster graphics like circles, lines, patterns, etc. SkyPix has limited usefulness and compatibility because it is an exclusive Amiga protocol.

ANSI support: None, Simple, or Full. ANSI stands for "American National Standards Institute." ANSI as an organization is responsible for the determination of standards for a wide variety of industries and scientific processes. The word "ANSI" in the computer BBS world has become synonymous with the ANSI documents concerning terminal emulation--which code sequences to send to change colors, move the cursor, etc. It is appropriate to speak of "ANSI terminal emulation." The ANSI terminal specification actually consists of an extended "VT100" command set. If your terminal program is "dumb" and does not support ANSI at all, select "none." If your terminal program supports VT100 or limited ANSI (colors and cursor movement), select "simple." Only select "full" if your terminal is capable of understanding the ANSI command sequences to insert and delete characters from a line, and to insert and delete lines from the screen. Many terminal programs for the PC compatibles only support "simple" ANSI. Use the visual editor to determine if your terminal program supports simple or full ANSI. If characters insert and delete correctly in "full ANSI" mode, your terminal supports full ANSI. New users should be able to determine their correct ANSI support level by answering several questions posed in the New User questionaire.

Line feeds: Yes or No. All terminals use the carriage return character to move the cursor to the beginning of the line. Most terminals require an extra character (a line feed character) to advance the cursor to the NEXT line. If your terminal requires line feeds, and you set this field to "no," text will appear to display "all on one line."

Screen width: the number of characters that fit across your screen from left to right. Most terminals are designed for 80 characters. This field is provided for compatibility with other possible screen sizes, such as 120, 40 or even 22 (any VIC-20 users still out there??). CNet uses this field when determining when to wrap text. When a user follows directions in the editor, that is to press ENTER only when beginning new paragraphs, CNet is able to reformat (re-flow) text to match a screen of any width.

Screen height: the number of characters that fit across your screen from top to bottom. Most terminals are designed for 24 characters. Some terminals, however, offer more. CNet uses this field in conjunction with the "more?" mode, to determine when to pause screen output. It is also used by the visual editor to determine the number of rows to offer.

ANSI tabs: Yes or No. The ANSI standard for terminal tabbing is default tab stop at each 8th column. When an ANSI terminal receives a TAB, it advances to the next tab stop (1st, 9th, 17th, etc.) column. If your terminal supports this, CNet will send the actual tab character, assuming your terminal will move the cursor as expected. Without this ability, CNet must send individual "space" characters to achieve the proper alignment. This option is provided simply as a means of achieving better efficiency, although with the advent of high speed modems, it is not as needed as in the past.

ANSI color: Yes or No. Although a terminal may be capable of supporting most ANSI, it may simply be incapable of interpreting color change commands. If this is the case, or if you are using a monochrome monitor, or if you simply prefer a black and white display, set this option to "no."

The BBS preferences

The "EP" command is used to edit your BBS preferences. CNet offers the user a great deal of power and configurable features. Many of them are controlled from the options found here. They are as follows:

Help level: Novice, Intermediate, Expert, Super-user. This field should be set to reflect your familiarity with the BBS and CNet BBSs in general. Novices receive "help-lines" at command prompts, listing the most commonly used commands. Intermediate (and more advanced) users do not receive these help lines. The "entry" and "exit" files for subboards are not displayed to super-users. There is currently no distinction made between intermediate and expert users.

More? mode: Yes/No. Set this option to Yes to receive a prompt "more (y/n/c)?" each time your screen fills up. This feature makes use of the "screen height" field as set from the ET command. From the "more?" prompt, press N to attempt to abort the text. Press C for "continuous" printing (no additional "more?" prompts will appear until the next command prompt). Press any other key to receive the next page of text.

Message reading: Continuous, Prompts, ANSI paging, ANSI scrolling. This option controls the way in which subboard posts and mail messages will be read. "Continuous" means to read the item's responses immediately after the original post without command prompts in between. CNet will still honor the "more?" mode, however. A "respond or pass" prompt will appear only after the last response has been read. Setting this option to "Prompts" will cause CNet to give the "respond or pass" prompt after EACH response. When set to "continuous," it is still possible to get the "respond or pass" prompt to appear before the last response. Use control-C, or hit "N" at the "more?" prompt. The "ANSI paging" option must be used in conjunction with the "more?" mode. When enabled, CNet will retain the "header" of each message on the screen, as pages of the messages are displayed underneath, separated by "more?" prompts. "ANSI scrolling" may or may not be used in conjunction with the "more?" mode. "ANSI scrolling" will again retain

the "header" of each message on the screen, but this time, text appears to "scroll" underneath the header, while the header remains stationary. Enabling the "more?" mode here is a good idea for high speed modems or when using local console mode.

File xfer protocol: This option provides a way to set the default file transfer protocol without actually transferring anything. Normally, CNet prompts to change the default protocol each time a file transfer is about to begin.

Time zone: -23 to 23. CNet maintains a "system" time, but displays all dates and times to users relative to their home time zones. For example, if a message was posted at 5:15pm on a BBS in Michigan, all local users (and users in the Eastern Time Zone) will see the message as being posted at 5:15pm. By setting the "time zone" to -5, users in Hawaii, however, will see the message as being posted at 12:15pm. The -23 to 23 range of values insures that even BBSs and users in the middle of the Pacific Ocean, separated only by the International Date Line, will still be able to use this feature. One POSSIBLE option is to keep your system on UCT (Universal Coordinated Time) or GMT (Greenwich Mean Time), and have ALL users (even local users) set their time zones.

Time format: 12 or 24 hours. When set to 12 hours, CNet uses "a" and "p" to distinguish times in the AM from those in the PM hours. This is the most "user friendly" and intuitive choice for most North Americans. When set to 24 hours, CNet uses "military" or 24 hour time, with "0" meaning 12 midnight, "12" meaning 12 noon, and "23" meaning 11 PM.

Mail box/forward: You may use this option to "close" your mailbox. Only system operators may send mail to closed mailboxes. You may also use this option to set a "forwarding address" for your mail. Instead of receiving mail to your mailbox, you may instead choose to automatically forward all incoming mail to another location. Currently, mail may only be forward to another "local" user's mailbox (that is, not to a network address).

Text translation: If you are using multiple languages or

text sets (see the modifications chapter), this option may be used to change the default text set. This option allows you to, for example, switch from the English to French languages, or from "CNet style" to "IBM style" user interfaces.

Auto hide & muffle: (Off; Your own port; Other ports; All ports). This feature allows you to automatically invoke the effects of the "HIDE" command after you logon (see the inter-user communication chapter for details). By hiding from your own port, you prevent yourself from seeing "echoes" of everything you type into the join teleconference. By hiding from other ports, you prevent other users from knowing that you are on-line, or have even logged on. By hiding from all ports, you get the effects of both.

Default editor: CNet comes with two "internal" default editor choices, the line editor and the visual editor. Additional "external" editors may be added (see the CONFIG chapter). This option allows users to select which editor will be used for writing messages. In the case of CNet's two internal editors, commands exist in each to allow the user to switch between them.

Message bundling: The user fields set here are used to control the operation of the subboard "Yank" command (see the subboard chapter for details). You must select a packer or archiver (like ARC, ZOO, or LHA). This will be the program used to pack the Yank or QWK files. You may select the packer to be "TXT," which is not an archiver or packer at all. Using "TXT" tells CNet NOT to do any packing. The file will be readable and editable as soon as it is downloaded--no unpacking will be necessary. NOTE that because QWK packets actually consist of multiple files, QWK message bundling REQUIRES a packer--QWK can not function with a setting of "TXT" here. The other field set here is an "end of line" sequence. This setting affects only Yank files--it has no effect on QWK packets, which follow a predetermined structure. The "end of line" sequence may be chosen as Carriage Return (CR), Line Feeds (LF) or both (CR/LF). Amiga users will want to set this to LF. Commodore 64/128 users will want to set this to CR. Most other users will want to set this to CR/LF.

Your UUCP ID: This is the (up to) eight character name that you will use on the UUCP network(s). If the BBS is not connected to a UUCP network, this field is of little consequence. Most people use their initials, their first initial and last name, or their first name and last initial. Rarely do people use something unrelated to their real names. Before you are able to send mail or post in a UUCP network subboard, your UUCP ID must be set.

Edit signatures: (Default; Local mail/feedback; UUCP messages; FIDO messages/handles; FIDO messages/real names; Other messages/handles; Other messages/real names; Upload descriptions/handles; Upload descriptions/real names). Separate, different signature files may be created for these nine purposes. Signature files are automatically added to the end of messages as they are saved. Using a subboard flag, sysops may disable the use of signature files in specific subboards. If one of the eight specific signature files has not been written, CNet will attempt to use the "default" signature file. To remove a signature file, edit the signature file, delete all of the lines, and then Save the empty text.

Edit "who" banner: Your "who banner" appears underneath your name and other information in the WHO command display. This option allows you to change this message. New users' "who banners" are copied from a BBSTEXT line which by default reads "Be nice to me, I'm new. :)"

Edit MACROS: (Control-E; Control-F; Logon). A "macro" is an abbreviation or a symbol that is "expanded" to mean something more complex. Using CNet's MACRO feature, you can "program" your control-E and control-F keys to ouput any text you wish. They will then work similarly to the way the function keys do in local mode. You can set them to commonly used command sequences, or to commonly used phrases. The special character ` (backwards apostrophe) is recognized here to mean a carriage return (the ENTER key). The "logon" macro is text that will be added to your input buffer automatically when you first logon. If there is a command or series of commands that you execute each time you logon, the logon macro can be used to save you some time.

Edit user dictionary: This feature is used in conjunction with the visual editor's spelling checker (see the editors chapter). When the Learn command is used, CNet attempts to place the new word into this file. Occasionally you may wish to view or manually edit this dictionary file. NOTE that the spelling checker requires that you place only one word per line. The number of words (lines) that may be added to this file is limited by each user's account "dictionary entries" field.

Edit network aliases: This feature was added to make use of netmail faster and easier. Netmail addresses are long and sometimes difficult to keep straight. For example, the way to send mail to Ken Pletzer via FidoNet is "mail ken pletzer@1:2410/215.0." The network aliases feature allows you to give "aliases" or abbreviations for the mailboxes you send mail to the most often. The mailbox may be either a UUCP or FidoNet address. Use one editor line per abbreviation. The format is:

‹ alias› ‹ address›

for example:

ken	Ken Pletzer@1:255/2410.0
future	future@engin.umich.edu

Now, sending mail to ken is as easy as "mail ken." Each user is limited to the number of aliases specified by their user account variable "network aliases."

CHAPTER 9 - The Subboards

CNet uses the term "subboard" to refer to an area where users can post messages, read messages, upload files, and download files. Depending on its configuration, any CNet subboard can contain just messages, just files, or a combination of both. Other BBSs sometimes refer to subboards as "areas," "bases", "bins", or "sigs".

CNet organizes its subboards into two logical groups--the uploads base, and the message base. To enter the uploads base from the Main prompt, use the "Uploads" command. To enter the message base from the main prompt, use the "Base" command. Other than the logical distinction between these two divisions, CNet treats any subboard like any other subboard. The commands available to users in an uploads base subboard are identical to those available to him in a message base subboard. However, it is possible to restrict access to any of uploading, downloading, posting, or responding in any subboard on a per-subboard basis. The choice is yours as to whether or not you wish to allow your users to upload in any or all of your message base subboards, and whether or not you wish to allow your users to post messages in any or all of your upload base subboards.

Creating subboards

To create a subboard, use the "AL" command from the Uploads base or Message base prompt. You can also use this command from a subdirectory prompt. Subdirectories and subboard tree structure will be explained in another section.

The first question will be "use direct disk access?" Direct disk access subboards will be explained in another section. Press RETURN for now.

The next question will be "copy from physical subboard#." If you have already added and configured a subboard, and wish to copy its configuration to the subboard you are adding now, you may enter the existing subboard's physical subboard number at this prompt. Physical subboard numbers are displayed on the subboard edit (EL) screens. If this if your first subboard, or you do not wish to

copy the configuration from another subboard, just press RETURN.

The next question will be "Is this a subdirectory?" Subdirectories are pathways to additional lists of subboards. Subdirectories are explained further in another section. If you want a subboard which will contain actual posts and/or files, answer no or just press RETURN at this prompt.

The next question will be "Title to appear on list?" You can enter anything you wish here, or just press RETURN to abort the AL procedure. The title that you enter here will be the actual title that the user sees when he lists the available subboards. It does not affect actual filenames or directory names.

The next question will be "name used on disk (unique)." Each subboard must have associated with it a UNIQUE name, suitable to be used as an AmigaDOS filename, and DIFFERENT from all of your other subboards. CNet will use this name when creating storage directories on your hard drive for the subboard. Subdirectories and direct disk access subboards must also be given unique names to allow for the creation of a data directory to store various subboard information. In the case of a fidonet subboard, the "name used on disk" must match the echo's "tag" name as given by your fidonet coordinator.

The next question will be "path to subboard data structures." This path will default to BASE0: or UDBASE0: (depending on whether you are in the Message base or Uploads base, respectively), followed by the unique subboard name you previously selected. For most purposes, this is OK. By default, all subboard data (text and headers) are stored in BASE0: and UDBASE0:. Do not alter this scheme unless you are an advanced user and really know what you are doing.

The next question will be "enter the partition range" with a default of 0. If this subboard will not be used to store files, or will be used to access files from a specific path (as in the case of a CD Rom), or you only have one hard drive partition for the BBS, just press RETURN. Otherwise, you may select a range of hard drive partitions over which this subboard's files will be stored. You should have created

and decided upon these partitions during CNet's initial configuration. Although partition 0 defaults to BASE0: or UDBASE0:, partition 0 is actually COMPLETELY DEFINABLE for each subboard. You will be asked for the path to partition 0 later. For partitions 1 and greater, CNet assembles the path names to these partitions by using the prefixes "BASE" or "UDBASE" (depending on whether you are in the Message or Uploads base, respectively), followed by the partition number, and then the unique subboard name (for example, UDBASE1:SUBNAME/). See the section paths and partition if you have any doubts about what this prompt is for.

The final question will be "partition0/CDROM/netpath." If this subboard will not be used to store files and is not a UUCP subboard, press RETURN. Otherwise, what you enter here will become the primary path to this subboard's files (sometimes referred to by CNet as "partition 0"). By default, this is BASE0: or UDBASE0: followed by the subboard's unique name. However, if this subboard will be used to access a CD ROM, now is the time to specify the path to the CD ROM directory (for example, CD0:ibm/games/action/). If this subboard will be used to store UUCP messages, now is the time to specify the UUCP directory (for example, UUNEWS:alt/movies/sttng/ for a UUCP subboard entitled "alt.movies.sttng"). If this subboard is a direct disk access subboard, now is the time to enter that path (for example, RAM: or DF0:).

If CNet has no problem finding or creating the directories you have just specified, you will then find yourself in the visual data editor (VDE) looking at the subboard configuration (EL) screen. For most cases, a default configuration is acceptable. If you are familiar with browsing this screen, or have already read the section to come "viewing/editing subboard configuration," now is a convenient time to make final configuration changes to your new subboard. If everything looks OK, or you are not yet familiar with the BBS, just press RETURN here to exit the VDE.

Paths and partitions

In the simplest of CNet configurations, all Message bases are stored in BASE0: and all Upload bases are stored in

UDBASE0:. Within BASE0: and UDBASE0: can be found subdirectories, one matching each of the unique subboard names that you used when you created the subboards. Within each of those subdirectories appear all files uploaded to that subboard, and another subdirectory entitled "data." The data subdirectory contains the item header and other index information. This configuration is the default, and would be obtained by simply pressing RETURN when prompted for data path, partitions, and partition 0 path when creating subboards.

The first way to customize this setup is to change the default "partition 0/CDROM/netpath." You may have already done this if you have set up a CD ROM or direct disk access subboard. By default, this path is set the same as the "path to data files." However, by changing this field, you can cause the subboard to look at any path you choose to find files. Here's an example, involving three subboards, each storing uploaded files onto different partitions:

```
        Title:          Games and more
        Unique name:    games
        Data path:      UDBASE0:games/
        Partitions:     0
        Part0 path:     UDBASE0:games/
All default here

        Title:          Bad games
        Unique name:    bad
        Data path:      UDBASE0:bad/
        Partitions:     0
        Part0 path:     DH2:bad/
Customized to DH2:

        Title:          Adventure games
        Unique name:    adventure
        Data path:      UDBASE0:adventure/
        Partitions:     0
        Part0 path:     DH3:adventure/
Customized to DH3:
```

The above examples show some of the power of CNet's file subboard configuration--but there's more. The above examples demonstrated subboards which stored all of a subboard's files on one partition. This works well for most

configurations. However, for the advanced system operator, CNet has the ability to SPLIT a subboard's files between more than one partition. This is where the "partitions" setting can be used.

Valid partition numbers are 0 through 31. Any combination of these may be used. When CNet needs to know what "partition 0" is, it refers to the "part0/CDROM/net path" as configured in the subboard. This was shown in the examples above. When CNet needs to know what partition 1, partition 2, and up to partition 31 are, it uses the prefix "BASE" or "UDBASE" (depending on whether you are in the Message or Uploads base, respectively), followed by the partition number, and then the subboard's unique name. You must use ASSIGN commands in your startup-sequence files to make these assignments to your physical hard drive partitions. You can have these logical partitions assigned to your physical hard drive partitions in any way that you want. However, it is recommended that you follow a logical order to make it easy for you to remember:

UDBASE0:	is	DH0:udbase/
UDBASE1:	is	DH1:udbase/
UDBASE2:	is	DH2:udbase/
	etc.	

For example, if you have a subboard configured as follows:

Title:	Games and more
Unique name:	games
Data path:	UDBASE0:games/
Partitions:	0-2,4
Part0 path:	UDBASE0:games/

CNet would look in the directories UDBASE0:games/, UDBASE1:games/, UDBASE2:games, and UDBASE4:games/ for the subboard's files. As files are uploaded, CNet will place them into the hard drive partition(s) with the most amount of free space. Using the Adopt Orphans (AO) command, you can also directly add files from any one or a combination of these partitions. Users will see the files listed together. The fact that these files are spread across multiple hard drive partitions will not be known to them.

Memory and buffers

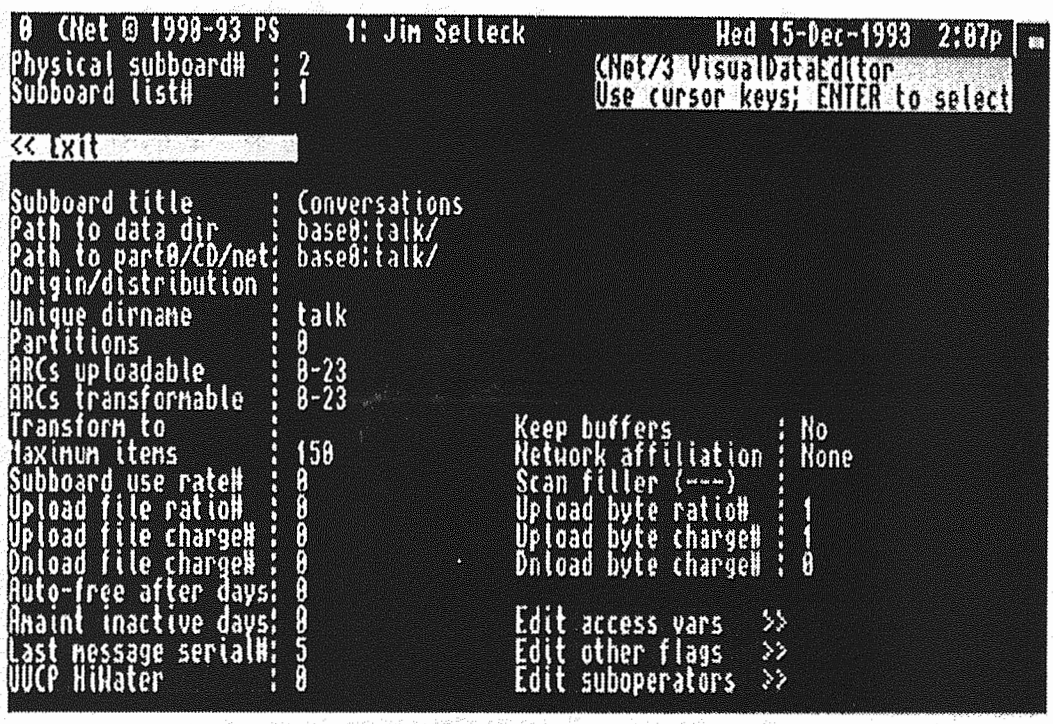
When a user enters a subboard, memory is allocated for that subboard to hold its item headers. The amount of memory allocated is dependent upon the maximum number of items that the subboard is configured to support. A moderately sized subboard will hold 150 items. If you increase this value (as described in the next section), you should be considering the memory you are asking for. A subboard configured to 1500 items will use ten times as much memory as one configured for 150 items. The number of responses that items have does not require additional memory--a subboard may have 20,000 responses and experience no memory problems. As other users enter the same subboard, additional memory is not allocated--they will all "share" the data structures already in memory. If there is not enough memory to enter a subboard, the user will be given the message that the subboard is "temporarily locked."

If memory permits, you may edit the subboard's configuration to specify that part or all of a subboard's data structures remain allocated and loaded in RAM. If you set the "keep buffers" to "headers", the short "_headers3" file will be retained in memory once all users have left the subboard. The _headers3 file is the one that is immediately loaded when a user enters a subboard. It contains information to determine which messages are new, and how to sort them. If this file is already in memory, efficiency of moving between subboards will be greatly enhanced. This file is also used by the global file duplicate checking routines. If at all possible, to prevent delays in global file duplicate checking, you should attempt to keep the headers in memory at least in your subboards which contain files.

You may also set the "keep buffers" to "headers+items" which will cause CNet to retain both the _headers3 file AND the much larger _items3 file in memory. There is little need to do this, as CNet loads the _items3 file in sections, and only as-needed. However, if you have the RAM to spare, you may try keeping these in memory if you have a couple of subboards which receive a large amount of traffic.

Viewing/editing a subboard's configuration

The final step of creating a subboard brought you to a screen where you could move around using the cursor keys and edit various subboard configuration information. You can return to this screen at any time by using the "EL" command while at the subboard's prompt. From this screen, you can edit several of the parameters and paths that you originally specified when creating the subboard. If you edit the paths, CNet will not be able to MOVE data between partitions. It would be wise to check the configuration from the Shell after making path changes to a subboard. Other options available from this screen include:



Origin/distribution: For Network subboards. In a fidonet subboard text entered here will override the default "* Origin" line as configured for the network. In a UUCP subboard text entered here will be used as the "Distribution:" line in outbound messages.

ARCs uploadable: The CONFIG program contains a list of archiver/packer programs. Each of these archive types has its own number, beginning with 0. CNet recognizes the archive type (if any) of an upload file by reading the 3 letter filename suffix, such as .LHA, .DMS, or .ZIP. The ARCs uploadable field determines which of the listed suffixes may be uploaded. The restriction is limited to the suffixes specifically listed, files uploaded with a suffix NOT in the

list of archiver/packer programs will NOT be rejected.

ARCs transformable: Again using the CONFIG's archiver/packer program numbering, this field determines which file types will be transformed using the transformation scripts. Transformation is completely described in another section.

Transform to: CNet has the ability to "tranform" archives of one type to another. Specify here the number of the archive type to which to attempt to transform uploads. CNet requires a "script" file for every possible transformation procedure, as well as the archiver programs themselves, for this feature to work properly. Transformation is completely described in another section.

Network affiliation: For local (non network) subboards, keep this field at its default of "none." Otherwise, set this field to reflect either UUCP, or one of the fidonet domains that you have configured using the CONFIG program.

Scan filler: This field can be set to contain up to 3 characters to be displayed alongside of the subboard title when users List the available subboards. Subdirectories are by default set to have a scan filler of "DIR."

Upload file ratio number: Set this number to a value of 1, 2, or 3 to correspond to the three upload file ratios that the user has in his account. Set this number to 0 to NOT award file credits for uploading.

Upload byte ratio number: Set this number to a value of 1, 2, or 3 to correspond to the three upload byte ratios that the user has in his account. Set this number to 0 to NOT award byte credits for uploading.

Upload file charge#: This value, together with the other three charge# values (upload byte charge#, download file charge#, and download byte charge#) refer to values in the current accounting system schedule. If set to a value of 1, 2, or 3, they correspond to one of the three charges for the respective function. If set to 0, the user is not charged for the transaction. The accounting system is covered in greater detail in another chapter.

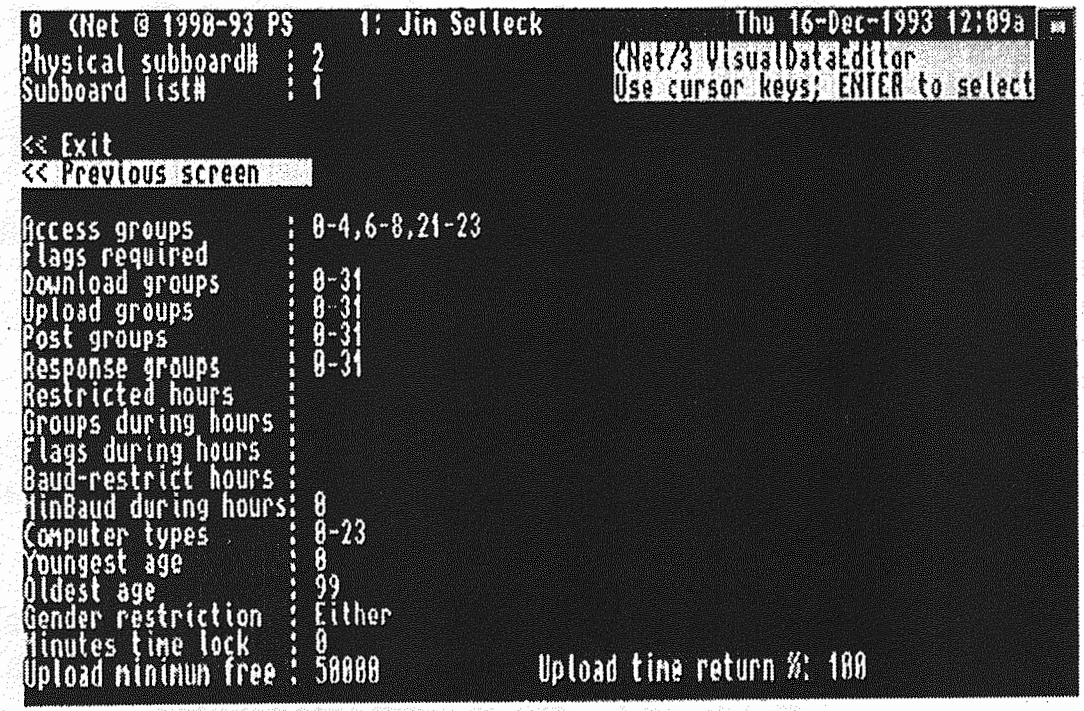
Auto-free after days: This field specifies the number of days that must pass after a file is uploaded before it will become completely free to download (no credit or accounting charges).

Amaint inactive days: This field specifies the number of days that an item must remain inactive before automaintenance kills it. A post is inactive if it has not received a response in the specified number of days. A file is inactive if it has not been downloaded in the specified number of days.

Last message serial number: This field holds the serial number of the last message that was posted in this subboard. This value must never be set lower. It is OK to set the value higher in the event that the subboard structures are lost, and the subboard is re-added using old data files.

UUCP HiWater: In a UUCP subboard, this field holds the number of the last message that was imported from the UUCP directory. This field is automatically updated. However, if you wish to re-import messages beginning at a lower message number, just set this value lower and re-run the UUCP to CNet import program IUUNEWS.

The "Edit Access Vars" screen



Access groups: The range of access groups which may view this subboard on a list of subboards. It is important

that you set this and other access variables for ALL subboards, regardless of whether the subboard is within a subdirectory that the user does not have access to. Certain CNet functions process subboards by physical number, with disregard for the actual subboard tree structure.

Flags required: Each user has in his account fields called BASE and UDBASE flags. In order to enter a subboard, a user must "have" each of the flag numbers as specified by this field. CNet checks the user's BASE or UDBASE flags fields depending on whether the user is in the Message or Uploads area, respectively. For example, if the "flags required" is 0-4,10, a user with flags of 0-31 may enter, but a user with 0-9,11-31 may not, because he is missing flag 10.

Download groups: Determines which access groups may download files from this subboard.

Upload groups: Determines which access groups may upload to this subboard.

Post groups: Determines which access groups may post to this subboard.

Response groups: Determines which access groups may respond to items in this subboard.

Restricted hours: Set a range of hours during which to use an ALTERNATE set of "access groups" and "flags required" fields. This allows you to split access to the subboard based on the time of day. Restricted hours can be, for example, 0-23 for all day, 9-17, for 9am to 5pm, or 0-9, 17-23 for all times OTHER than 9am-5pm.

Groups during hours: Used instead of "access groups" during times of the day (system time) that fall within "restricted hours" as configured above.

Flags during hours: Used instead of "flags required" during times of the day (system time) that fall within "restricted hours" as configured above.

Baud-restrict hours: Set a range of hours during which to restrict access to the subboard based on the user's baud rate.

For instance, you may not want users with 300-2400 baud using your games subboard during prime time.

MinBaud during hours: The minimum baud rate which as user must be using in order to enter a subboard during the times specified by "baud restrict hours." The user's connect baud rate is displayed near the center of the bottom line of the status window.

Computer types: This field is provided so that you may restrict access to a subboard based on the user's chosen computer type. CNet supports the configuration of 32 computer types, each with a number 0 to 31. Use the "computer types" field to select a range of computer types which may enter the subboard. A computer type "name" can be associated with each computer type number by referring to/modifying the file "CNET:BBSMENU," under the heading of menu number 30.

Youngest age/oldest age: To enter the subboard, the user must fall within the age range as specified by these two fields. CNet uses the user's birth date as he supplied in the new user program.

Gender restriction: Using this field, you can create subboards limited to just males or just females.

Minutes time lock: This field specifies the number of minutes which must pass after a user logs in before he will be able to enter the subboard.

Upload minimum free: This field specifies the minimum number of BYTES which must be free on the upload drive before CNet will allow an upload to occur. The default is 1,000,000 (1Meg).

Upload time return %: If, for example, a user spends 40 minutes of his 50 minutes-per-call limit uploading, he will have little time left to do anything else. This field allows you to "give back" any fraction of that time once the upload is completed. 100% means ALL of the time will be returned--using the numbers above, the user will get 40 ADDITIONAL minutes to use during that call or anytime that day. 50% means HALF of the time will be awarded. 200% means DOUBLE the time will be awarded.

The EL "Other Flags" screen

Subboard closed: A flag that you can quickly toggle to temporarily keep users out of a subboard. Only sysops and subboard operators will be allowed to enter.

Invitation only: If this flag is set to "yes," the only way that a user will be able to enter the subboard is if you specifically INVITE him using the "INvite" command from the subboard's prompt. To display a list of users invited to a subboard, use the "MEmbers" command. If the "invitation only" flag is set to "no," the invite command is still operational, but will in this case UN-INVITE specific users from a "public" subboard.

Default as dropped: By default, users are "joined" to all subboards. Users can use the subboard commands "Join" and "DRop" to change this condition. If you set this flag to "yes," users must specifically JOIN the subboard before they will be able to scan or yank new messages from it.

QWK reply upload sub: To allow your users to use the QWK system for reading and replying to messages offline, somewhere on your BBS you must create a direct disk access subboard which has this flag set to "yes." Assign it a subdirectory such as "UDBASE0:qwk/." This subboard will be used for temporary uploading of "QWK" reply packets when the user uses the "QWK" command from any

command prompt. Users may also choose to enter this subboard and upload QWK packets directly. Only QWK packets will be accepted into this subboard, and all uploaded files will be deleted at completion of the QWK import procedure. The QWK subboard can be visually "hidden" (so that it accessible ONLY through the QWK command) by placing it inside a subdirectory which only the sysop can enter. However, for the command to function for users, the QWK subboard itself must have its access parameters set so all qualified users can enter and upload.

Show names/handles: In terms of displaying user's real names, you may choose to have certain subboards more "private" than others, and some more "public" than others. Also, some network subboard require "names only". This field has 6 possible states from which to choose. They are:

Handle (name)	: Show (name) or (handle) if user
Name (handle)	: set his name as not-private info.
Handle + name	: Show both handle and name,
Name + handle	: you choose which one shows first.
Handles only	: Only show handles.
Names only	: Only show names.

Sysops and subboard operators will always see both names on all messages, regardless of this field's setting. In addition, they will see anonymous and "alias" messages with user's handle in the parentheses.

Disable ALL MCI: Setting this flag to "yes" will disable users from being able to enter MCI (control Q and Y) into their posts and responses. It will also prevent MCI in existing messages from being interpreted.

Address messages: Setting this flag to "yes" will allow users to address their messages. Message addressees will have their names displayed in message headers, and will be notified of new messages addressed to them as they enter the subboard. Setting this flag to "force" will prevent a user from entering a message unless he has addressed it to someone. This setting is especially useful in file-mail subboards, described in the Mail chapter. Even if set to

"no," sysops and subboard operators are always allowed to address messages.

Private messages: Setting this flag to "yes" will allow users to mark messages in this subboard as "private," readable only by the addressee and themselves (and sysops and subboard operators). Setting this flag to "force" will automatically cause addressed messages to be marked as private. This setting is primarily useful in "private mail" or "file mail" subboards. Even if set to "no," sysops and subboard operators, and users with the "private messages" flag in their accounts set to "yes" are always allowed to specify messages as private. Even if set to "yes," users may only leave private messages if the "private messages" flag in their accounts is not set to "sub" or "yes."

Anonymous messages: Setting this flag to "yes" will allow users to mark messages as being from "anonymous" instead of their real names or handles. Setting this flag to "force" will automatically cause all messages to be marked as anonymous. Even if set to "no," sysops and subboard operators, and users with the "write anonymously" flag in their accounts set to "yes" are always allowed to specify messages as anonymous. Regardless of the setting of this flag, users may only leave anonymous messages if the "write anonymously" flag in their accounts is set to "sub" or "yes."

Def. Notify ULer @DL: Each file item is assigned a flag called "Notify ULer at DL" which, if set to "yes," will cause CNet to send mail to the uploader each time the file is downloaded. This item flag is only editable by sysops and subboard operators using the "AT" command from the subboard prompt. The "Def. Notify ULer @DL" flag allows you to specify the default setting of this item flag for each new upload to this subboard.

New file validation: If you or the subboard operator(s) wish to personally view and "validate" new uploads before they are made public to other users, set this flag to "yes." If set to "no," new uploads will automatically be "validated" and will be available for immediate download. To validate new uploads, use the "Validate" command from the subboard prompt.

Show unv. files: This flag determines whether or not your users will be shown unvalidated uploads. If set to "yes," users will see the word "‹ unvalidated› " in place of the item's actual filename (unless they themselves uploaded the file). Sysops and subboard operators are always able to view the filenames of unvalidated items. When the filename of an unvalidated item is displayed, the letter "v" will appear alongside the item number during a Scan.

Global dup check: This flag, if set to "yes," will search ALL subboards accessible by the user to insure that the file is not already online before allowing that file to be uploaded. Many optimizations have been made in this searching algorithm, but it still may appear "slow" and even "timeout" some less-patient terminal programs when you have many thousands of files online to be searched. CNet has the ability to keep the subboard header files memory resident, avoiding ANY disk access during global duplicate checking. The header files are relatively small, so even a large BBS can usually do this without running out of RAM. Set the subboard flag "keep buffers" to "headers" to insure FAST duplicate checking if you choose to use this feature.

No signatures: Using the EP command, users can create custom "signature" files, which are automatically appending to the ends of messages. In some circumstances, these signature files may be unnecessary or unwelcome (in the case of many network subboards). Setting this flag to "yes" will prevent CNet from appending the user's signature files to messages written in this subboard.

No post/rep charges: The accounting system has settings for charges (or credits) to be applied when users post or respond. Setting this flag to "yes" will cause those charges NOT to be applied for posts and responses in this subboard.

No read charges: The accounting system has settings for charges to be applied when users reads messages in a subboard. Setting this flag to "yes" will cause those charges NOT to be applied for posts and responses read in this subboard.

File transformation: A "script" file is a list of AmigaDOS commands to be executed in order. Scripts are sometimes

also called batch or "BAT" files. Using scripts, CNet has the ability to "transform" files from one type to another. For example, in a subboard designed for IBM callers, you may wish to transform any files uploaded in .LHA form into .ZIP files. In most Amiga user subboards, you may wish to do just the opposite. This field controls WHEN the appropriate script will be executed. If set to "no", no transformation will take place. If set to "amaint," it will be performed during your auto-maintenance procedure. If set to "immediate," it will be performed while the user is still online, immediately after the file is uploaded. Please see the section concerning file transformation for more information about this powerful feature.

File testing: Using the archiver programs, CNet has the ability to test new uploads for file integrity. This flag determines WHEN that testing will occur. If set to "no," no testing will be performed on the files. If set to "amaint," files will be tested during your nightly auto-maintenance procedures. If set to "immediate," files will be tested immediately after they are uploaded, while the user is still online. Files which FAIL the file integrity test are automatically UNVALIDATED and marked with a "!" character beside their item numbers during a Scan. Please see the section concerning file testing for more information about this powerful feature.

Purge old responses: By default, auto-maintenance (amaint) will delete only ENTIRE ITEMS when they become inactive (a specified number of days passes without a response or download). However, setting this flag to "yes" will apply the "amaint inactive days" purge routines to INDIVIDUAL RESPONSES to items. As responses to items become "old" (the specified number of days passes since they were written), amaint will kill them without killing the original post or the "new" responses.

Amaint adopt orphans: If you set this flag to "yes," amaint will automatically search all of the partitions for which the subboard is configured for "orphan" files (not listed as items on the subboard). These orphan files will be added to the subboard (provided there is room in the subboard). User number 1 (the sysop) will be listed as the "uploader" of these files. This option is useful for file networking subboards.

Allow aliases: If you set this flag to "yes," users will be able to use any name (except the names of other users) when writing messages. When these messages are read, only the "alias" name will be shown. Sysops and subboard operators will see the user's handle inside of parentheses beside the alias. Sysops and subboard operators are allowed to use aliases at any time, and ARE allowed to use the names of BBS users when choosing aliases.

Kill/edit own items: If this flag is set to "yes," users will be able to use the "Kill" and "EDit" commands to kill and edit posts or files that they have posted or uploaded in this subboard. If the "kill/edit own items" flag in the user's account is set to "no," he will not be able to kill or edit his own items regardless of the subboard's flag. If the "kill/edit own items" flag in the user's account is set to "yes," he will ALWAYS be able to kill or edit his own items regardless of the subboard's flag. Of course, sysops and subboard operators can kill or edit anything that they damn well please.

Add new vote topics: Each subboard may have its own "voting booth," which users may enter by using the "VOte" command from the subboard prompt. This flag determines whether or not users will be able to add their own vote topics here. By default, only sysops and subboard operators may add vote topics to a subboard. NOTE: vote topics may be "linked" to items by using the "AT" command, and entering the vote topic's serial number. This will activate the VOTE command from the "respond or pass?" prompt.

Carbon copy to EMail: This feature automatically creates a "carbon copy" of each post and response that is entered into the subboard and sends it to the addressee's private mail box. While reading his private mail, the addressee will be able to respond to message privately, and directly into the base in which the original message appears. If set to "no," no carbon copying is done. If set to "yes/def. on," users will begin to receive carbon copy messages immediately. If set to "yes/def. off," users will have to use the special command "CArbon" from the subboard prompt in order to enable carbon copied messages from that

subboard. Users can use the "CArbon" command to disable carbon copied messages from subboards which send them by default.

Def. purge status: Each item in each subboard has a field called its "purge status." The purge status determines when and how an item will be removed from the subboard. You can edit each individual item's purge status field by using the "AT" command. The subboard's "default purge status" field allows you to pre-set each new upload's purge status field to a specific value. These values are as follows:

Auto: remove the item during amaint once the item has become inactive (no responses or downloads after a specified number of days). This is the default.

@DL: once the item has been downloaded, immediately change the item's purge status to "@amaint" (see below). This is a very useful setting for a private user-to-user file-mail subboard.

Query@DL: once the item has been downloaded, ask the downloader if he'd like for the item to be removed.

@amaint: the item will be removed during the next auto-maintenance procedure. Using this as a default would cause all new uploads to the subboard to be deleted nightly.

Protected: the item will not be deleted during auto-maintenance, regardless of its inactivity status.

Use CDROM temp dir: if this flag is set to "yes," all downloads from this subboard will first be copied to a temporary directory. This CDROM temporary directory is defined in the CONFIG "paths..." screen. By copying files from the CDROM all at once at the beginning of the download, contention is avoided when multiple users attempt to download from the CDROM simultaneously. This contention could be a serious bottleneck in the case of a multi-disk changer. Users are notified that copying from the CDROM may take a few seconds.

Item arrangement: users are able to select the order in which they would like items to be listed in the subboard's "scan" list. The command that users may use to change the order of items is "ORder." The subboard field "item arrangement" allows you to set an initial or default setting for the order of items in this subboard. Possible values are