

The MLI drivers will not load

There may be memory conflicts with other network adaptors, expanded memory cards, graphics cards, interrupt conflicts, or DMA.

Opening the DA

The DA doesn't open

- PhoneNET Talk software was not correctly installed. Reinstall the software.
- The physical network connection for your computer has been broken. If you are using a PhoneNET Card PC for LocalTalk, check to see that the PhoneNET connector is securely attached to the back of the network adaptor.
- The zone you are attached to is not available. Check with the network administrator.
- Your PC does not have enough available memory. See Appendix B, "Memory Considerations."
- You have not allocated enough memory. See Appendix B, "Memory Considerations."
- An incompatible memory-resident program was previously loaded. Change your AUTOEXEC.BAT file so it loads the PhoneNET Talk stack software and the DA before it calls any memory-resident programs.

The DA does not open when I press the hot key

- The hot key has not been activated. At a DOS prompt, type `DA \R` to make the DA memory-resident.
- The hot key keyboard sequence has been changed. Use the Change Hot Key option in the Options menu to specify a new keyboard sequence.

Accessing files and directories on AFP file server volumes

The AFP file server I want to access does not appear in the Chooser window

The file server is not available, the file server's zone is not available, or the file server is located in a different zone. Check with your network administrator.

I can't open a directory to find files on a file server

You may not have the correct access privileges for the directory containing the desired file. Check with the network administrator.

I can't delete, rename, or create a new directory

You may not have the correct access privileges for the directory. Check with your network administrator.

The access privileges for a directory no longer appear

You have specified another user or group as the owner of the file. Ask the new owner or the network administrator to make you the owner or add you to a group that is the owner.

I can't delete or rename a file

- You may not have the correct access privileges for the directory containing the files. Check with the network administrator.
- The file is marked Read-Only in the AFP information window. If you are the owner of the file, you can change this option, otherwise, you won't be able to delete the file.
- Another user may be accessing the file. Many applications do not allow two users to access the same file simultaneously.

A file that I converted between Macintosh and DOS contains garbage characters

- You copied the file without using any conversion utility. See Appendix A, "Transferring Files Between Macintosh Computers and PCs."
- You have selected the wrong conversion option during the copy procedure. Try to copy the file again.
- You did not save the file in the correct format before converting it. Many applications have options to save a file in a format compatible with both Macintosh and PC computers. Check the documentation that came with your application for details.

Printing to an AppleTalk PostScript printer

The printer does not appear in the Chooser window

- The printer is located in a different zone, or the printer's zone is not available. Select a printer in a different zone.
- The printer is switched off.

An application will not print

- You haven't attached the printer port yet. Use the DA to attach the printer. Make sure you select PostScript and make a note of the printer port you select.
- You may not have installed the correct PostScript printer drivers when installing your application. Most applications require you to specifically install PostScript drivers.
- You specified the wrong printer port in the application's printer setup window.
- You didn't specify PostScript output in the application's printer setup window, or you have specified the wrong PostScript output option. Select the PostScript output option that best matches your particular printer. See the user's guide that came with your application for details.

Memory

There is not enough memory to load the PhoneNET Talk stack into memory

- On a 386 or 486 computer, use a memory manager.
- Consider loading and unloading portions of the stack as you need it. Reinstall and select the option to load PhoneNET Talk files manually. Use the batch files AMLID, APRNT, AFILES, ABOTH to load portions of the software you need. Use the AOFF command to unload the software.
- You can save 2 to 3K by reducing the number of buffers in the NET.CFG file. See Appendix C for details.

Windows

Windows runs very slowly

Check your configuration to determine if you are running Windows in 386 enhanced mode over Ethernet with the DMA enabled. If this is the case, reinstall the Ethernet card without using DMA, or run Windows in standard mode.

The DA or an ANET command crashes Windows

To avoid system crashes, exit Windows before running the DA or executing ANET commands.

Miscellaneous problems

The PC makes a repeated trilling sound

If the DA is not memory resident, the sound indicates that a connection to an attached file server has been lost or that an attached file server is shutting down. Open the DA to display a detailed message.

A message indicating that AppleTalk is not installed appears when I try to open a network application such as electronic mail

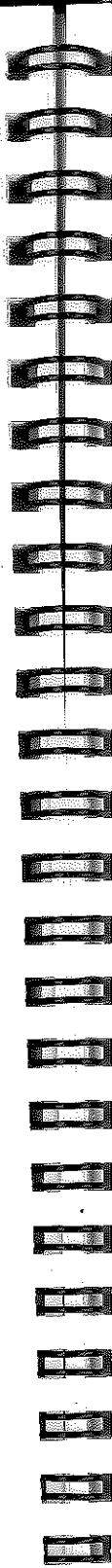
The application may not be compatible with previous versions of PhoneNET Talk software. You need to run the COMPAT.COM file included in the package. Consider adding this command to your network startup batch file.

The PC has delays of 3 to 4 seconds

The buffer size is too small. Increase the buffer size in the NET.CFG file. See Appendix C for details.

I can't see the DA function key menus on a laptop PC

Deselect the Color Monitor feature in the Options menu.



Chapter 5

The ANET Command Interpreter

PhoneNET Talk software includes ANET, a command interpreter designed to perform functions similar to the DA through batch files. This chapter covers the ANET command interpreter and describes how to write batch files. It is not necessary for you to learn to use ANET commands unless you desire to do so.

You must load the PhoneNET Talk stack before you can execute ANET commands.

You can write batch files that automate logging on to and accessing devices on the network, and to enter network commands at your keyboard. You can use ANET commands to get information about the network and about files on the current file server. In addition, ANET and the DA commands are compatible, so you can use them interchangeably.

ANET command summary

ANET consists of the following commands:

Command	Function
ACCESS	Changes access privileges for a directory
ATTACH	Attaches a file server volume; lists attached server volumes
AUTO	Automatically logs you on to one or more file servers and printers, and automatically attaches server volumes
CONFIGURATION	Displays hardware configurations
CONNECT	Connects a printer port to a network printer; lists currently connected printers
DEFAULT	Sets a new default MLI driver; shows current default MLI driver
DETACH	Detaches one or more file server volumes
DISCONNECT	Removes a network printer
EXIT	Leaves ANET; same as QUIT
HELP	Displays a synopsis of ANET commands and command syntax

Command	Function
LIST	Lists MLI drivers, MLI stacks, and PhoneNET Talk memory-resident programs
LOGOFF	Ends a session with a server; automatically detaches all server volumes and ends the session with all servers
LOGON	Logs you on to a server; lists all active sessions
MAP	Allows you to view or change current extension mappings
NAME	Registers your user name on the network; displays the current user name
QUIT	Leaves ANET; same as EXIT
REMOVE	Allows you to remove most MLI drivers, MLI stacks, and PhoneNET Talk memory-resident programs
STATISTICS	Displays internal statistics
TYPE	Allows you to see or change a file's icon type
USE	Selects a new MLI driver; shows the current MLID in use.

Entering ANET commands

You can invoke ANET directly from DOS or from a batch file. You can use ANET either for single commands or for a series of commands.

To use ANET for a single command, use the form

```
ANET commandname [parameters]
```

ANET executes *commandname* using any applicable *parameters* and exits to DOS.

To use ANET for a series of commands, type ANET and press Enter. Then enter each new command on its own line. When you finish, type the command QUIT or EXIT.

This example logs a user on and attaches two file server volumes.

```
LOGON S (MAINSERV) N (AK SMITH) P (BROADWAY)
ATTACH D: \\MYSERV\REPORTS
ATTACH E: \\MYSERV\REPORTS\MARCH
```

Descriptions for each command and its syntax are included in "ANET Commands," later in this chapter.

Command syntax

Syntax statements in this section use the following format:

- Commands appear in all capital letters:

```
HELP
```

- Italics indicate a symbolic name. Substitute real arguments for these:

```
TYPE filename
```

- Square brackets surround optional command arguments:

```
TYPE filename [type]
```

- A vertical bar indicates that you must use only one of the options that the bar separates:

```
LOGOFF sessionname | /ALL
```

- An ellipsis means you can repeat an item:

```
DETACH driveletter...
```

Note: Type `\\` literally: The double backslash is a special DOS notation telling DOS to treat the name that follows as a network device, the first element of which is the session name:

```
ATTACH E: \\BIG_GUY\ODDJOB\SALES
```

The two backslashes are not symbolic names, and you must include them in a pathname that includes a network device.

ANET commands

This section lists the format of each ANET command, examples of the command, and its short form. The short form can be used wherever the long form is used.

ACCESS

ACCESS changes access privileges for a directory.

Form: ACCESS *pathname* [O(*priv*["newowner"])]
 [G(*priv* ["new group"])] [E(*priv*)]

Examples: ACCESS E:MYDIR G(DF)
 ACCESS E:MYDIR G(=DF)
 ACCESS E:MYDIR O(CDF="John Smith")
 G(DF="Accting") E(DF-C)

Short form: AC

The privilege indicators (*priv*) are

- C—Make changes to a directory's contents
- D—See directories in directory
- F—See files in directory.

The user categories, designating to whom the privileges apply, are

- O—the directory's Owner
- G—the Group associated with a particular task
- E—Everybody, including anyone logged on as a guest.

The order in which you give the categories is not significant.

The access privileges that are assigned to a directory when it is first created allow the owner See Files, See Directories, and Make Changes privileges. No other privileges—to the Group or to Everybody—are assigned.

To use this command, you must already be logged on to a server, and at least one server volume must already be attached.

Using operators with ACCESS

ACCESS has three optional operators—plus (+), minus (-), and equal (=). You usually use operators to change a previous state:

- (+) Add the specified privileges to any that exist
- (-) Take away the specified privileges from any that exist
- (=) Use the specified privileges instead of any that might already have been assigned.

An operator applies to all privilege indicators to its right until another operator is used. When you use a privilege indicator without an operator preceding it—as in G(C)—+ is assumed. When a privilege indicator or an operator tries to add a privilege that already exists, or take away one that doesn't exist, it's ignored.

For example, if you wanted to add the Make Changes privilege to the group's privileges after these privileges had been set, you could write

```
ACCESS E:MYDIR G(+C)
```

No matter what privileges the group had previously with the contents of MYDIR, it now can also change what is in the directory.

The equal sign denies (or cancels) any privilege not explicitly stated as one of its arguments. When you want to state absolutely what the privileges are, precede the privilege indicator letters with an equal sign:

```
ACCESS E:MYDIR G(=DF)
```

No matter what privileges it already had with the contents of MYDIR, the group now has only See Directories and See Files privileges.

If you put only an equal sign in parentheses, you remove all privileges:

```
ACCESS E:MYDIR E(=)
```

No matter what privileges anybody except the owner and group members previously had with the directory MYDIR, they now have none.

Changing owners or groups

You can also assign new owner or group names to a directory that you own by placing the argument

```
=name
```

within one of the privileges. In the following example the new owner of MYDIR (Primo Acme) gets full access privileges; group members and the guests can see directories and files in MYDIR, but they are not allowed to change its contents:

```
ACCESS E:MYDIR O(CDF = "Primo Acme") G(=DF)
E(=DF)
```

To assign a new name and to take away all privileges, use a double equal sign:

```
ACCESS E:MYDIR G(=="New kids")
```

To take away a group name, use an empty string:

```
ACCESS E:MYDIR G(=="")
```

ATTACH

ATTACH associates a DOS drive with a file server pathname. The order in which elements of the command appear is significant. You must have already logged on to a server to attach a server volume.

If you type ATTACH without arguments, it returns a list of server volumes and the server pathnames to which they are attached.

Form: ATTACH
 [*drive letter*:*sessionname**volumename**pathname*]

Example: ATTACH E:\\BIG_GUY\ODDJOB\SALES

Short form: AT

sessionname is the name assigned to the session when you log on

volumename is the name of the server volume

To determine the session name, use the ANET LOGON command with no parameters. To determine the server volume name, see your network administrator. Be sure to use the DOS short name for any names created on a Macintosh computer.

AUTO

AUTO performs automatic log-on procedures and attachments that were saved by the DA program. The first time it is invoked, it also registers your user name on the network. To log on automatically and attach server volumes, AUTO uses the connections and user names listed under Review Auto-Connections in the DA Special menu.

If you issue the AUTO command with no options, all servers and printers are connected. If you enter the command with the PRINTERS or SERVERS option, only those services will be automatically connected.

If a password wasn't saved as part of the automatic procedure, ANET prompts you for one.

Form: AUTO [PRINTERS] [SERVERS]

Examples: AUTO

 AUTO PRINTERS

Short form: AU

CONFIGURATION

CONFIGURATION allows you to view configuration information about MPI stacks and MLI drivers.

Form: CONFIGURATION [[ALL [STACKS|MLIDS]]
 |MPIstackname|MLIDname]

Example: CONFIGURATION ALL

Short form: CONF

CONNECT

CONNECT attaches a printer port to a network printer.

Form: CONNECT [LPTn[:] [N(*printername*)]
 [P(*printertype*)] [Z(*zone*)]
 [X(*translation*)] [L(*leftmargin*)]
 [T(*topmargin*)] [B(*bottommargin*)]
 [C(*cpi*)] [S(*papersize*)]
 [#(*tabsetting*)]
 [Q(*printquality*)] [I(*lpi*)]
 [D(*time-out*)]]

Examples: CONNECT LPT1: N(Myprinter)Q(N)
 CONNECT

Short form: CONN

CONNECT with no parameters lists the currently connected printers. Use margin options only with the Epson translation mode.

n is the printer number

printername is the name of the printer to connect

printertype must be Laserwriter, Imagewriter, or LQ

zone is the printer zone

leftmargin is in 1/10 inch; default is 5

topmargin is in 1/10 inch; default is 5

bottommargin is in 1/10 inch; default is 0

cpi is characters-per-inch and must be 10, 12, or 15; default is 10

papersize must be 11, 14, or A4 and defaults to 11

tabsetting defaults to 8

translation must be Epson, PostScript, ImageWriter, or none

printquality must be N or D; N = near letter quality and D = draft

lpi is lines-per-inch and must be 6 or 8; default is 6

time-out indicates the number of seconds the printer will wait for a new character before deciding that the print session is complete.

DEFAULT

The DEFAULT command sets a new MLID as the default. This is the MLID that will be used when PhoneNET Talk is started. When you issue the DEFAULT command, the named MLID becomes the default MLID the next time you start your computer.

DEFAULT with no parameters shows the current default MLID. If you want to use a different MLID without changing the default setting, use the ANET USE command.

Form: DEFAULT [MLIDname]

Short form: DEF

DETACH

DETACH disassociates the listed DOS drives from file server volumes. The DETACH command does not log you off a server, nor does it close an open session. Use LOGOFF to perform these functions.

Form: DETACH *driveletter* [*driveletter*]...

Example: DETACH D: E:

Short form: DET

If you use DETACH with a drive that isn't attached, you see the message:

```
This device is not redirected
```

DISCONNECT

DISCONNECT allows you to remove a network printer by disassociating the printer port from the printer. DISCONNECT /ALL disconnects all printer ports from all printers.

Form: DISCONNECT LPTn: [LPTn:] | /ALL...

Example: DISCONNECT LPT1: LPT2: LPT3:

Short form: DIS

EXIT

EXIT exits you from ANET and returns you to DOS. It has the same effect as the QUIT command.

Form: EXIT

Short form: E

HELP

HELP presents a list of all ANET commands and their syntax. If necessary, use Ctrl-S to pause scrolling, and press any key to continue scrolling.

Form: HELP

Short form: ?

To view help information about a particular ANET command, type **HELP** followed by the command.

LIST

LIST allows you to list all Terminate and Stay Resident (TSR) programs as well as all MPI stacks and MLI drivers. LIST with no options is the same as LIST ALL.

Form: LIST [TSRS | STACKS | MLIDS | ALL]

Example: LIST STACKS

Short form: LI

LOGOFF

LOGOFF disconnects a workstation from a session.

If the server session from which you want to log off still has one or more server volumes attached, a prompt asks permission to detach them. If you say No, LOGOFF is canceled. When you use the /ALL option, this prompt doesn't appear.

Form: LOGOFF *sessionname* | /ALL

Examples: LOGOFF GOULASH

LOGOFF /ALL

Short form: LOGOF

LOGON

LOGON logs a workstation on to a server called *servername*.

LOGON with no parameters returns a list of all active sessions.

Form: LOGON [S(*servername*) [Z(*zonename*)]
[U(*username*)]
[P(*password*)] [D(*sessionname*)]

Examples: LOGON S(Fitsgerald) U(Duke) P(spring)

LOGON S(Diane's server)

LOGON

Short form: LOGON

Important: If you use any argument, then one of those arguments must be S(*servername*).

The order of the arguments is not significant.

In the following example, Duke with the password "spring" logs on to the server named Fitzgerald:

```
LOGON S(Fitzgerald) U(Duke) P(spring)
```

If you give only the server name argument, LOGON creates a session and registers you as a guest.

When you log on without the D option, the session name becomes the server name with spaces changed to underscores, characters unacceptable to DOS stripped away, and the length of the name truncated to 15 characters.

You can force the session name to be any legal DOS name by specifying it in the argument *D(sessionname)*. This capability is useful in batch files to ensure a unique known session name for attaching server volumes.

Quotation marks and parentheses: Arguments in parentheses must be enclosed in quotation marks if the argument contains one or more of the following characters: < > \) ". In addition, all embedded double quotation characters must themselves be doubled. For example, A<" becomes "A<"".

Multiple session names

You can create more than one session with the same server. This happens when you log on to the same server from your PC with two or more user names. Assuming that you use only the *S(servername)* parameter, the name of the first session that you create is the same as your server name (except for the character changes and deletions mentioned earlier to shorten the name to 15 legal DOS characters). Each subsequent name appends a number to the end of the name, starting with the number 1 (as in MARGIE1). Each additional session increments this number (MARGIE2, MARGIE3, and so on) up to the limit set by REDIR.

MAP

MAP associates a particular DOS filename extension with a Macintosh file type. The appropriate Macintosh file type information is added to a DOS file when it is copied to the server. MAP has no effect on files already on the server.

You use MAP for two purposes: to set the Macintosh icon type and creator for a PC-created file so that Macintosh users can see an appropriate icon for that file, and to specify those extensions that identify DOS text files or Macintosh text files. (These files can be converted from one type to the other during copying.)

Form: MAP [extension [filetype]]

Examples: MAP

 MAP DOC

 MAP DOC BINARY

Short form: M

If you issue the MAP command with no arguments, it reports all current extensions already defined and their icon types. If you use MAP with just extension, you see the icon type for the extension:

```
ANET MAP TXT
```

```
Type for extension 'txt' is DOS-Text
```

The default icon type for all files created on the server is Binary.

NAME

NAME registers your user name on the network under the name you give.

If the user name includes spaces, you must enclose the whole name within double quotation marks.

Unlike other parameters for ANET, *username* can contain any characters; it can be up to 31 characters long.

If the name you enter is already being used by another user running the same DOS version on the network, ANET appends a digit to the name that you enter; for example, if WAYNE is the name, it becomes WAYNE1, another WAYNE becomes WAYNE2, and so on.

If you issue NAME with no arguments, ANET shows the current user name.

Form: NAME [*namename*]

Examples: NAME MyStation

 NAME "Marianne on 4th Floor"

 NAME

Short form: N

QUIT

QUIT exits ANET and returns to DOS. It has the same effect as the EXIT command.

Form: QUIT

Short form: Q

REMOVE

REMOVE allows you to remove most MLI stacks, MLI drivers, and PhoneNET Talk TSRs.

Form: REMOVE ALL | modulename [modulename]...

Example: REMOVE APRINT

Short form: R

You can remove any of the modules displayed in the ANET LIST command. If you plan to remove more than one module, you must remove them in the order that they are displayed in the LIST command.

If you load other TSRs in memory after the PhoneNET Talk files, you will not be able to execute the REMOVE command.

The ANET REMOVE ALL command removes all PhoneNET Talk files from memory that are loaded after REDIR.EXE, MINSES.EXE, and SHARE.EXE.

REDIR.EXE, MINSES.EXE, and SHARE.EXE cannot be removed with the REMOVE command.

STATISTICS

STATISTICS allows you to view statistics from the LSL, MPI stacks, and MLI drivers.

Form: STATISTICS [LSL | MPIstackname | MLIDname] STATISTICS ALL [STACKS | MLIDS]

Examples: STATISTICS LSL
STATISTICS ALL MLIDS

Short form: S

STATISTICS LSL retrieves statistics from the Link Support Layer. STATISTICS ALL prints all statistics for all stacks. ALL STACKS or ALL MLIDS prints statistics for all stacks present or for all MLIDS present, respectively.

You can view legal stack and driver names by using the ANET LIST command.

TYPE

TYPE changes or displays the specified file's icon type.

You can't change the icon type of a file unless its present type is known to PhoneNET Talk.

To use this command, you must already be logged on with at least one server volume attached.

Form: TYPE [filename [filetype]]

Examples: TYPE Q:MYFILE.TXT BINARY

 TYPE D:MYFILE.DOC

 TYPE \\MYSESS\MYDIR\MYFILE.TXT

Short form: T

Using partial syntax

If you issue the TYPE command with only a filename, you get the file's type:

```
TYPE D:MYFILE.TXT
```

ANET reports

The file's type is DOS-TEXT

The following example changes the type of the MYFILE.TXT file on volume D to Binary:

```
TYPE D:MYFILE.TXT BINARY
```

If you were now to call for the file's type, ANET would report:

The file's type is BINARY

USE

USE allows you to temporarily use a loaded MLID other than the default driver. It does not change the designated default driver. If you want to change the default driver, use the ANET DEFAULT command.

Before you issue a USE command, disconnect all file servers and printers with ANET DISCONNECT and ANET LOGOFF.

Form: USE *MLIDname* [#*instancenumber*]
 [*Z(zonename)*] [*H(hint)*]

Short form: U

instancenumber specifies which card to use if you have more than one of the same type of communications card.

zonename is the name of your zone on an EtherTalk or TokenTalk network.

hint is a suggested identification number for your network node.

If you specify a parameter, your NET.CFG file is modified to reflect those changes.

You can change your workstation's network zone with the *zonename* parameter.

You can view all loaded MLI drivers by using the ANET LIST command.

Writing your own batch files

Writing your own batch files is a convenient way to access AppleTalk services. Virtually any operation that you can do with the DA can be done by creating your own batch files. A batch file can have any series of ANET commands.

You could create a batch file called LOGME.BAT to do the following: log Jarrett on to the Classics server with the password "Art", and then to attach drive D to the directory LANDE and drive E to subdirectory CRONKITE.

```
LOGON S (CLASSICS) U (JARRETT) P (ART)
```

```
ATTACH D:\\CLASSICS\\LANDE
```

```
ATTACH E:\\CLASSICS\\LANDE\\CRONKITE
```

Execute the file by typing ANET *filename* or ANET *@filename*. To use ANET most efficiently in a batch file, use this syntax:

```
ANET @filename
```

The special symbol @ (Shift-2 on most keyboards) tells ANET to read its commands from filename, a text file that contains a list of ANET commands.