



# **3+Share<sup>TM</sup>**

*User  
Guide*

1694-01

# **3Plus<sup>TM</sup>**

**3Com<sup>®</sup>**

# **3+Share User's Guide**

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**A member of the 3+ family of products.  
For use with DOS 3.1.**

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## Recognition

Manual revision by Cindy Yates. Software program by the 3+ Engineering team with special mention to Tri Nguyen-Duy, Dave Perkins, Claudia Warner, and Lynn Welge. Production by Adrian Boyer and Tamra Heathershaw. Sanitary provided by Bob Buchanan, Liz Kroha, and Dave Perkins.

This manual was produced in house using EtherMac (3Com), MacWrite (Apple) and PageMaker (Aldus) software with the Apple LaserWriter on an EtherMac Network.

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## Chapter 1: Introduction

3+Share allows computer users on a 3+ network to share directories; application programs such as word processors, data bases and spreadsheets; output devices such as printers and plotters; and disk storage space. 3+Share provides the basis for 3+ advanced networking features such as electronic mail (3+Mail), communication with other 3+ networks (3+Route or 3+NetConnect), and access to networks from remote personal computers (3+Remote).

3+Share consists of the following services:

- ▶ The Name service that stores the names of all network users and servers
- ▶ The File service that manages the directories and files stored on the server's hard disk
- ▶ The Print service that manages shared network printers

## 3+Share Features

3+Share provides you with the following features:

- ▶ Lets you control access to your own files
- ▶ Gives you access to files and printers associated with any server on the network or any server available through internetwork links
- ▶ Runs with IBM Personal Computers and most IBM-compatible personal computers
- ▶ Runs most single user applications written for IBM PCs and compatibles
- ▶ Runs most multiuser applications designed for DOS 3.1 or 3.2 and the IBM PC Network quickly and efficiently
- ▶ Gives you access to EtherSeries servers and commands from a 3+Share workstation when you install EtherPath software
- ▶ Supports international characters for sharenames and file names

## Customer Support Information

Your network supplier provides extensive support for this product. Refer to the *3+ Administrator's Guide* for more information.

## About This Guide

This guide describes how to work with 3+Share user commands. For information on administering the 3+ network, refer to the *3+ Administrator's Guide*.

This guide has eleven chapters, including a glossary, and four appendices.

- |                   |  |
|-------------------|--|
| <b>Part I:</b>    | Chapters 1-5; provides information on using 3+Share.   |
| <b>Chapter 1:</b> | Provides an overview of 3+Share and the <i>3+Share User's Guide</i> .  |
| <b>Chapter 2:</b> | Describes concepts and terms that are basic to understanding how 3+Share works and how you will use it.                              |
| <b>Chapter 3:</b> | Gets you started using 3+Share through step-by-step instructions for basic procedures.   |
| <b>Chapter 4:</b> | Describes additional procedures for working with files in directories.   |
| <b>Chapter 5:</b> | Describes how to use the 3P program to print documents.  |
| <b>Part II:</b>   | Chapters 6-10; provides information on 3+Share user commands. Commands in Chapters 7-9 are listed alphabetically for easy reference. |
| <b>Chapter 6:</b> | Provides an overview of Part II, and describes the LOGIN and LOGOUT commands.  |
| <b>Chapter 7:</b> | Provides detailed information about each 3F user command.  |

- Chapter 8:** Provides detailed information about each 3N user command.
- Chapter 9:** Provides detailed information about each 3P user command.
- Chapter 10:** Provides a summary of 3+Share user commands.
- Chapter 11:** Provides a glossary of the terms used in this guide.
- Appendix A:** Provides a complete list of error messages and recovery procedures.
- Appendix B:** Describes how to use EtherPath to work with servers running EtherSeries 2.2 and 2.4 software. Describes the major differences between EtherSeries and 3+ software.
- Appendix C:** Describes the procedure for copying files using the 3Copy utility program.
- Appendix D:** Describes standard workstation configuration, contents of batch files, and guidelines for the use of concurrent servers as workstations.

## Conventions Used in This Guide

### Key Spellings

[→] for the Cursor right arrow key

[←] for the Cursor left arrow key

[↑] for the Cursor up arrow key

[↓] for the Cursor down arrow key

[⇧] or **[Shift]** for the Shift key

[⇐⇒] or **[Tab]** for the Tab key

↵ or **[Return]** for the Return or Enter key

All other keys are spelled in the guide as they are spelled on your keyboard; however, different computer keyboards vary in their key designations. The examples shown in this guide are for demonstration purposes.

### Key Combinations

If two or more keys are to be pressed simultaneously, the keys are linked by a "+" sign. For example,

Press **[Ctrl]+[Alt]+[Del]**



## Conventions in Procedures

The following conventions are used in the procedural steps in this guide.

The input you must enter is shown in bold type. For example,

Type:

**HELP** ↵

means type the command **HELP** then press the **[Return]** or **[Enter]** key.

Terms shown in italics must be replaced with your specific information. For example,

Type:

**3F MOD** *sharename* ↵

means type **3F MOD** and the appropriate directory *sharename*, then press the **[Return]** key.

## **Chapter 2: Understanding 3+Share**

This chapter introduces you to 3Com's 3+ network and to the 3+Share network services.

### **Why Use a Network?**

Very likely, personal computers have boosted productivity in your organization. When you work with a stand-alone personal computer, your storage space, software, and files are only as far away as your computer system and your diskettes. Paperwork that took hours can be finished in minutes, spruced up with graphics, and printed.

Generally, though, people do not effectively solve business problems alone; they solve them through good communications with others.

When your computer is connected to those of your colleagues, new opportunities open up for sharing information, applications, files, and peripherals. You can exchange messages typed on your computers and automatically send them out to each person concerned. Connecting personal computers to a network makes these added resources available to you.

## What Is a Network?

A computer network is two or more computers that are connected together to allow communications and sharing of resources. It has both hardware and software components. The hardware includes the personal computers, computer servers, cables, and boards that provide the physical connection. The software includes the programs for users and servers that allow actual communication.

## Network Hardware

A network has two types of computers attached to it:

- ▶ **Servers:** personal computers or 3Servers that provide a central storage area for network and application programs as well as user files and other shared network services, such as electronic mail. A 3+Share server must have at least one hard disk.
- ▶ **Workstations:** personal computers on the network that run user software. Workstations on a 3+ network can be either IBM Personal Computers or personal computers that are IBM-compatible.

Servers can also act as workstations. If a computer has both server and user software installed, it can function as a server and a user workstation concurrently, and is known as a **concurrent server** or **concurrent workstation**.

Personal computer servers can have up to three printers attached. 3Servers can have up to seven printers attached.

Workstations can also have devices such as a modem, mouse, printer or plotter attached. Devices attached to a workstation are not shared on the network.

## Network Software

Network software has two functions:

- ▶ It provides services, with each service consisting of two parts --

**User software** that resides on each of the workstations on the network. This software consists of application programs, utility programs that configure the network environment, and programs that convert DOS commands to network requests.

**Server software**, a centralized software component that accepts requests through the user software and performs the requested action. For example, when a user gives a command to open a file, the File service accepts the request and displays the file on the computer screen.

- ▶ It moves requests through the network. Several software components move requests from user to server, from server to disk, and through network lines to other users and servers.

## The 3+ Network

The 3+ network is a computer network in which the hardware is connected with cable (like Ethernet or Token Ring) and the installed software is 3+Share.

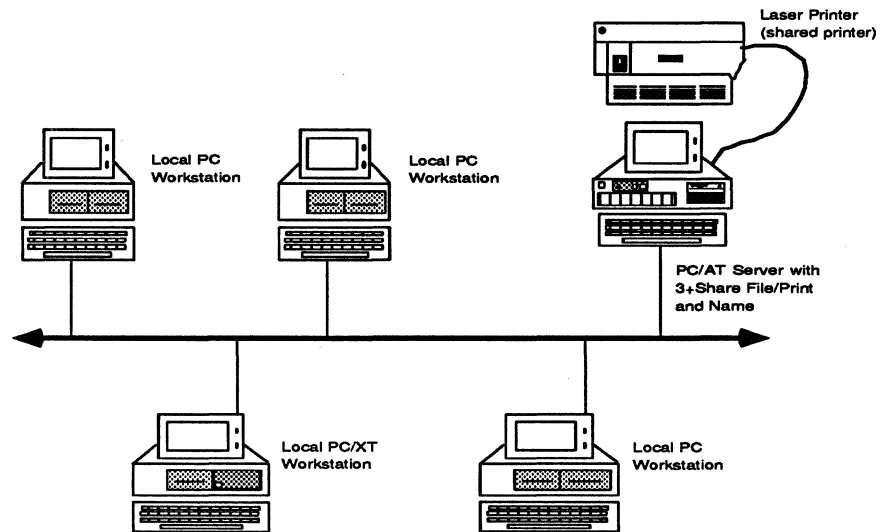


Figure 2-1. A 3+ Network

## 3+Share Software

3+Share software is the heart of the 3+ computer networking system. 3+Share allows network users access to each other's files, to applications on the network, and to peripherals, such as hard disks and printers. It also provides the basis for other 3+ services, such as 3+Mail.

## Understanding 3+Share Services

3+Share consists of the following network services :

- ▶ The Name service: This service is a database of users and servers, which is used by all the 3+ network services. When a name is created, certain properties that define it are assigned to the name.
- ▶ The File and Print services: These services allow users to share directories (user files and application software) and printers.

While you can purchase and run other 3+ services, such as 3+Mail, this guide discusses only the Name, File, and Print Services. For information on other 3+ products, contact your local network supplier or refer to the user's guide supplied with that product.

### The Name Service

The Name service is a database that stores the name of and information about network users and servers. Users and servers have three-part names, with a colon (:) separating each part, as follows:

`name:domain:organization`

**Name** is the user's name. **Domain** is usually a geographical location or a department within a small office or organization. **Organization** is usually the company name. For example:

`Linda Young:HQ:3Com`

`Sam Franklin:Dallas:3Com`

Generally, you will share files and applications with users and servers in your work group or department (domain). In this case, you need type only the name of the user or server. You must specify a three-part name only in order to access a different domain.

## Aliases

Each user may have one or more aliases. An alias is generally a short form of the user's name. The users in the examples above might have the aliases LindaY and SamF. To assign an alias, consult your network administrator.

## Passwords

Users and servers can have passwords. Passwords help prevent unauthorized use of the network and its resources. If you add a password to your name, you must provide this password along with your three-part name or alias when you log in to the network. For example, if LindaY in the above example has added the password "Mypass " to her name, she must specify that password when she logs in to the network.

```
login linday /pass=mypass
```

## The 3N Program

3N is the user software that interfaces with the Name service. It allows a user to log in for verification as a registered user, list registered users, assign or modify a password, etc.

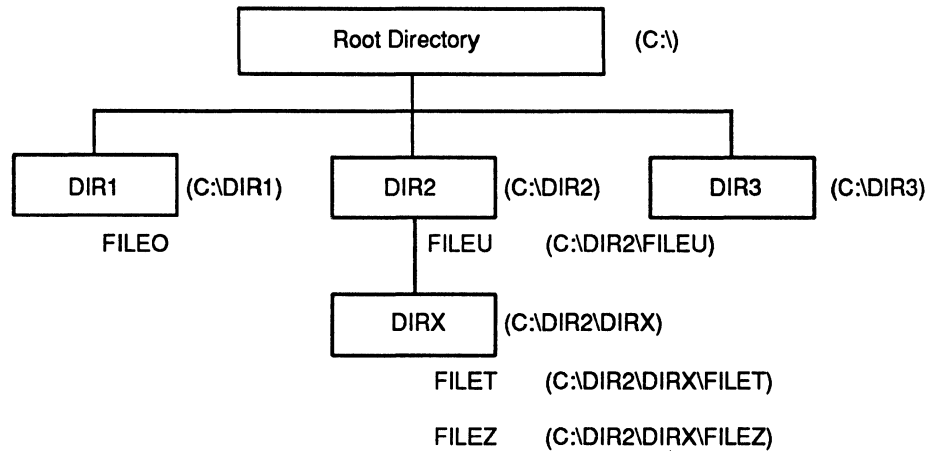
## The File Service

The 3+Share File service provides controlled access to network directories and to the files and application programs in those directories. The software that lets you work with the File service from your workstation is the 3F program.

## Directory Structure

A directory is a logical grouping that contains entries for other directories and files on a disk.

3+Share uses the DOS 3.1 directory structure. This structure is a hierarchical or tree structure. A root directory always exists on DOS formatted disks. You begin with this root directory and other directories are added under that root as they are created. This structure makes it easy to organize your files.



**Figure 2-2. Hierarchical Structure of Directories**

A directory that is below another directory on the tree is a **subdirectory** to the one above it. In the above example, directory DIRX is a subdirectory to DIR2.

A **path** gets you from one directory or file on the tree to another directory or file on the tree. You access a directory on the tree by specifying the path to the directory you want. In the example in Figure 2-2, the path from the root directory (C:\) to FILEZ is C:\DIR2\DIRX\FILEZ.

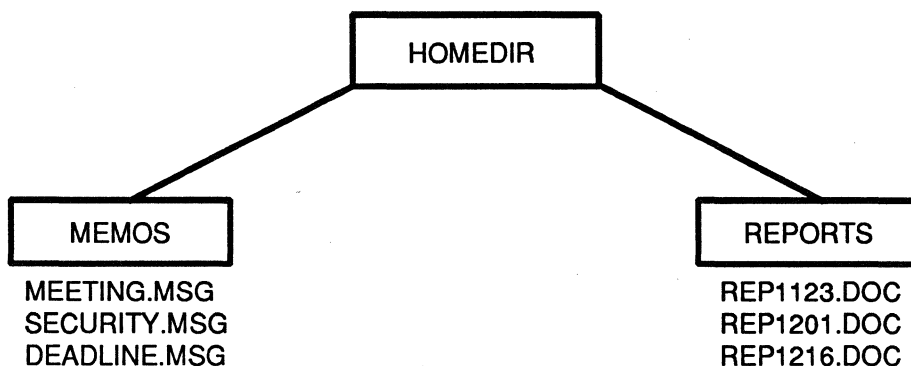
### Your Home Directory

When your network administrator added you as a user to the Name service and assigned you a File server, 3+Share created a directory for you called a home directory -- your personal directory on the network. Any subdirectories you create are added under your home directory. You have automatic access to your home directory and to subdirectories you create within this home directory.



### Organization of 3+ Directories

A 3+ directory organizes files in a standard DOS 3.1 hierarchical order, using directory and subdirectory names. In the following example of hierarchical structure, HOMEDIR is the user's assigned home directory. Below it are the subdirectories MEMOS and REPORTS. These are subdirectories created by the user. MEMOS contains the files MEETING.MSG, SECURITY.MSG, and DEADLINE.MSG. REPORTS contains the files REP1123.DOC, REP1201.DOC, and REP1216.DOC.



**Figure 2-3. Hierarchical Structure of a Home Directory**

To specify a path, begin with the first directory below your home directory. For example, using the files in Figure 2-3 above, you would specify the path to the file DEADLINE.MSG as \MEMOS\DEADLINE.MSG.

### Creating Directories

You create directories by using the DOS MKDIR command. For step-by-step instructions, refer to "Creating a Directory" in Chapter 4.

## Network Directories

Although you have automatic access to your home directory and its subdirectories, no other network user can use any of your directories unless you explicitly make them accessible by giving them a **sharename**. You can access other users' network directories only if sharenames have been assigned to them. This guide refers to directories that are given sharenames as **shared directories**.

You do not have to declare your home directory shareable for your own use; 3+Share automatically shares your home directory for you with Private access rights and no password. Only you, the owner, can access your home directory unless you make it accessible to other users with the 3F SHARE command.

You can assign more than one sharename to a directory, and each sharename can have different access rights. For example, you can assign Read access rights to one sharename and Read/Write access rights to another. For added security, you can also assign a password to a sharename.

## Drive Identifiers

When you have files or applications on diskette, you can access them (that is, make them available for use) by inserting the diskette into a physical drive A: or B: on your personal computer. If you have a hard disk, you can access them via drive C:. When your files or applications are on a network server, you can access them by using the 3F LINK command. The 3F LINK command links a shared directory to a drive identifier to provide a logical connection to the network.

You can use the letters A: - Z: for drive identifiers and have up to 26 links at one time by setting the number of available drive identifiers using the DOS LASTDRIVE option in the CONFIG.SYS file. (Refer to Appendix D of this guide for information on the LASTDRIVE command.) You can link each drive identifier to a different directory. When you want to use a directory, link the sharename for that directory to a drive identifier. When you want to use your home directory, link it to a drive identifier; no sharename is necessary because 3+Share automatically makes your home directory available for your use. The 3+ Local Workstation Startup diskette or 3+Start user volume created by your network administrator is initially set for drive identifiers A: - G:.

When you have finished using a directory, you can unlink it from the drive identifier. That drive identifier can then be used to link to another directory.

For instructions on accessing a directory, refer to "Linking Your Home Directory" and "Linking to the Applications Directory" in Chapter 3.

## The Print Service

The Print service is the software that manages the shared printers on your network. To use a printer on the network, the following procedures must take place:

### What the Network Administrator Does

- ▶ Connects a printer to a printer port on the server; designates a **port identifier** to the printer when setting up the Print service on the server
- ▶ Makes the printer accessible to users by giving it a **printer sharename**. In this guide, printers with sharenames are referred to as "shared printers".

### What You (the User) Do

- ▶ Make a connection between your workstation and a shared printer by linking a **printer identifier** (PRN: or LPT1, LPT2, or LPT3) to the printer and specifying the printer's sharename. For instructions on linking to a shared printer, refer to "Linking to a Printer" in Chapter 5.

## Print Queues

When you send a file to a shared printer for printing, a copy of it is placed in a temporary file on the server, where it waits in line to be printed. This temporary file is called a **print spool file**. Information about all the print spool files is kept in an ordered list called the **print queue**.

Files are printed on a first come, first served basis. If four documents are already waiting to be printed, your file will be fifth in the queue and will be printed after the other four.

You can delete a file from the print queue if you change your mind and do not want it to be printed. You can also assign or change the priority of files in the print queue. (You can only change the priority of your *own* files in the queue.) Files with the highest priority will be printed first. Files at the same priority will be printed on a first come, first served basis. For additional information on print queues, refer to "Managing Your Print Files" in Chapter 5.

## Working with 3+Menus

With 3+Menus, you can access most 3+ network and DOS functions by way of an easy to use, point and pick windowing environment. 3Com recommends that you use 3+Menus as your primary interface to the network. For installation and operation information on 3+Menus, refer to the *3+Menus Reference Guide* and the *3+Menus "How To" Guide*. The following table summarizes which 3+ commands can be used with 3+Menus.

**Table 2-1. 3+Menus Functions**

Menu Item	3+ Functions Available	3+ Command
Directories and Files	Share Directories Unlink Directories List Linked Sharenames	3F SHARE 3F UNLINK 3F DIR /LINK
Printer Connections	Unlink Printers Modify Printer Link List Print Queue Modify Print Status Delete Print File	3P UNLINK 3P SET 3P QSTAT /SPOOL=ALL 3P SET /SPOOL= <i>n</i> 3P DEL[ETE] /SPOOL= <i>l/n</i>
Shared Resources	List Servers List Shared Directories List Shared Printers Unshare Directories Modify Sharename password or access Link Shared Directories Link Shared Printers	3N DIR SERVER 3F DIR \\ <i>servername</i> 3P DIR 3F UNSHARE 3F MOD[IFY]  3F LINK 3P LINK

Open Close Arrange Transfer Mark Share Window  
Let other users link to the selected directory

---

Main Menu

Directories and Files

A: E:\

B: BUDGET

C: IN Create Shared Directory

D: LE

F: KE

G: CO

SK

3F

Directory's sharename =

Can users look at or use files (\R)? Y

Can users alter files (\W)? N

Can users add new files (\C)? N

Can other users make shared directories  
in this shared directory (\SHAR)? N

Can multiple users access the  
directory at the same time? N

Directory's password = \*\*\*\*\*

---

**Figure 2-4. 3+ Menu's Screen Example**

## Summary

This chapter has provided an overview of how to use the network. Chapters 3 - 5 provide step-by-step instructions for getting started on the 3+ network and using the File and Print services. Chapters 6 - 9 provide detailed information about the 3+Share program commands.

## Chapter 3: Getting Started

This chapter shows you the basic procedures for working with 3+Share. To step through the procedures, you must have an IBM-compatible computer connected to the network and be a registered user on a 3+ network.

In your daily use of the network, you may only need to use the steps in the procedure "Starting 3+Share" and "Logging Out." This would be the case if your user diskette is set up to automatically bring up the directory or directories you normally work with. However, to log in (connect to the network as a user) from someone else's computer or work with a different directory, you will need to do one or more of the following procedures that are presented in this chapter:

- ▶ Starting 3+Share on your personal computer
- ▶ Logging in to 3+Share
- ▶ Linking to your files
- ▶ Working with an application
- ▶ Printing a file
- ▶ Logging out of 3+Share

### Starting 3+Share

There are two ways to start using 3+Share on your workstation -- from a diskette or through 3+Start.

## Starting from Diskette

From your network administrator, you may have received a 3+ Local Workstation Startup diskette. This diskette contains the files you need to start 3+Share. (If you need to create one, or if you want to install 3+Share on a fixed disk, see your network administrator or refer to the *3+ Installation and Configuration Guide*.)

The following procedure shows you how to start 3+Share from diskette.

1.

Insert the 3+ Local Workstation Startup diskette in drive A:.

2.

Turn on your personal computer, or if it is already on, press the **[Ctrl]+[Alt]+[Del]** keys to reboot (restart) the computer.

You see a copyright notice and version number and the DOS prompt (A>, for example) on the screen. Other statements may appear on the screen depending on how your network administrator has set up your AUTOEXEC.BAT file. The next three steps -- logging in to the network, linking files, and linking printers are provided later in this Chapter. These steps can also be automatically executed from the AUTOEXEC.BAT file on your 3+ Local Workstation Startup diskette. The AUTOEXEC.BAT file is described at the end of this chapter and in Appendix D.

## Starting with 3+Start

Your network administrator may have installed an EtherStart ROM (or chip) on the EtherLink board in your workstation. If your workstation is configured with an EtherStart ROM, you do not need a diskette to access the network. Instead, the EtherStart ROM will work together with the 3+Start software installed on a network server to start 3+Share automatically.

To start 3+Share from a workstation using 3+Start:

1.

Turn on your personal computer, or if it is already on, press the **[Ctrl]+[Alt]+[Del]** keys to reboot (restart) the computer. A banner similar to that shown in Figure 3-1 will display on your screen. Your network administrator may have customized the actual display for your network.

```

*****
*
*
*
*
*
*
*      33333      CCCCCC      000000      M      M
*      3      3      C      O      O      MM      MM
*      3      3      C      O      O      M      M      M      M
*      33      3      C      O      O      M      M      M
*      3      3      C      O      O      M      M
*      33333      CCCCCC      000000      M      M
*
*
*
*
*
*
*
*
*
*
*****

3+Start Volume name?  startvol
Password?  *****

```

**Figure 3-1. A 3+Start Banner**

2.

At the prompt, enter the name of the 3+Start volume assigned to you by your network administrator. If a password is required, you will be prompted for it. For example:

You see a copyright notice and version number and the DOS C> prompt on the screen. Other statements may appear on the screen depending on how your network administrator has set up the AUTOEXEC.BAT file in the 3+Start volume. If the 3+Start volume is designed for use by multiple users, your network administrator may have created a generic AUTOEXEC.BAT file which will satisfy the general needs of all users. If the 3+Start volume is designed for your own private use, you can customize the AUTOEXEC.BAT file to perform the next three steps -- logging in to the network, linking files, and linking printers. The AUTOEXEC.BAT file is described at the end of this chapter and in Appendix D.

When you use 3+Start, the volume name you specify is automatically linked to drive C:. You can access files within the volume just as you would if there were a diskette in a physical disk drive called C:.





**NOTE:** Starting your workstation with 3+Start does not log you in to the network. To access directories, files, and printers on the network, you **must** complete the log in procedures in the following section.

---

## Logging in to the 3+Network

After you start 3+Share and before you use any other commands, you must identify yourself to the network with the LOGIN command.

At the DOS prompt, type the LOGIN command. Type your user name or alias when prompted, as shown in the following example:

```
A>LOGIN ↵
```

```
User Name? linday ↵
```

```
Linda Young:HQ:3Com logged in.
```

The message confirms that you are logged in.

You can type the LOGIN command as shown in this example and be prompted for your user name, or you can enter your user name directly after the LOGIN command as shown in the following example:

```
A>LOGIN linday ↵
```

```
Linda Young:HQ:3Com logged in.
```

Even if you type only your alias, the 3+Share Name service always returns your full three-part name. Colons (:) separate the three parts of a three-part name. If you include only the first part of the three-part name, omit the colon:

```
linda young:hq:3com  
linda young
```



**NOTE:** You can also log in from 3N, 3F, or 3P. Refer to the LOGIN section in Chapter 6 for more information about logging in from these programs.

---

## Passwords

The first time you log in to 3+Share, you do not have a login password. If you want a login password (to increase the security of your files), you must create one. For instructions on creating a login password, refer to the 3N MODIFY command in Chapter 8.



**NOTE:** If you want your name and password to be read automatically by the user software when you log in, you can create a PROFILE.SYS file on your 3+ Local Workstation Startup diskette or 3+Start volume. Refer to "The PROFILE.SYS File" in Appendix D for more information.

---

## Workstation Drive Assignments

Examples in this guide use drive identifiers D: through G: as follows:

- ▶ D: linked to the APPS directory
- ▶ E: linked to the user's home directory (HOMEDIR)
- ▶ F: linked to shared data directories, if any
- ▶ G: linked to application directories, if any

If you are using drive identifiers in a different manner, adjust the examples accordingly.

## Linking Your Home Directory

After logging in to the network, you need to make your files available for your use by linking your home directory. When you have files on diskette, insert the diskette into drive A: or drive B: of your computer. When you have files in a network directory, link the directory to a drive identifier (D:, E:, G:, etc.). Remember that a drive identifier is always followed by a colon (:). The 3F LINK command links a drive identifier to a directory on the server's hard disk.



**CAUTION:** If you have two drives and a hard disk in your personal computer, avoid using A:, B:, or C:, as drive identifiers with the 3F LINK command. If you do, the logical drives on the network with the same names will override the physical drives in your system. That is, if you link a drive identifier A: on the network, you will temporarily disable your computer physical drive A:. You can re-enable your physical drives by using the 3F UNLINK command to unlink the drive identifiers. The number of drive identifiers available to you is determined by the LASTDRIVE= parameter in the CONFIG.SYS file on your startup diskette. For more information, refer to Appendix D.

To link your home directory:

1.

Start the 3F program, which lets you use the File service, by typing 3F. The 3F prompt appears:

```
A>3F ↵
```

```
3File 1.1 - Copyright (c) 3Com Corporation 1986.  
All rights reserved.
```

```
3F>
```

2.

Type the LINK command, followed by a drive identifier.

```
3F> LINK e: ↵
```

```
E: linked to \\LINDA YOUNG:HQ:3COM
```

The message returned confirms that your home directory is linked to drive E:. When you link to your home directory, you do not need to give a directory name; your home directory is automatically linked to the drive identifier you specify.

Once a drive identifier is linked to a directory, you can work with the directory as if it were a diskette. You can store files in the directory and use the files with software applications.

## Linking to the Applications Directory

(This section assumes that an applications directory, APPS, exists on your network. If you are unsure about this directory, ask your network administrator.)

After linking your home directory to a drive identifier, link the applications directory (APPS) to another drive identifier. A command has two parts, the command itself and its parameters. Parameters are the set of items which define the specific action of the command. In this example, the command is 3F LINK. The parameters are the drive identifier (**d:**), servername (**finance**) and the sharename (**apps**) of the directory. Separators, such as blank spaces and backslashes (\\ or \), are part of the command syntax.



**NOTE:** The 3F LINK command in its prompted form is shown in Example 1. If you prefer to type the full command and not be prompted, see Example 2.

---

### Example 1:

1.  After the 3F prompt, type **LINK ?** to be prompted for all parameters.

```
3F>LINK ?
```

2.  Enter the drive identifier:

```
Drive Id? d: ↵
```

3.  Enter the sharename of the applications directory.

```
Sharename? \\finance\apps ↵
```

4.

If the sharename requires a password, enter the password. (When you type the password, it does not appear on the screen.)

```
Password? ***** ↵
```

```
D: linked to \\FINANCE:HQ:3COM\APPS.
```

```
3F>
```

The message confirms that drive D: is linked to the directory with the sharename APPS.

## Example 2:

After the 3F prompt, type the LINK command followed by the sharename of the applications directory.

If the sharename has a password, type it, preceded by a slash (/), after the sharename.

```
3F>LINK d: \\finance\apps /PASS=secret ↵
```

The directory you want is APPS. However, the 3F program must know not only its name, but exactly where it is located. Hence, you give it the "path" of the sharename by telling 3F which server created the sharename APPS. The 3F program will then work with the 3+Name service to locate the proper directory. Precede the sharename with two backslashes to tell 3F that you are linking to a directory with a sharename created by someone else.



**NOTE:** You must include the spaces between each part of the command, the two backslashes (\\) before the server name, the single backslash before the directory name, and the slash before the password. The two backslashes indicate that you are linking to a sharename that was created by someone else.

---

You can now use the two linked drives just as if you had an application software diskette in one physical drive on your personal computer and your files on a diskette in the other.

## Linking to a Network Printer

To use a printer, you must link it to a printer identifier using the 3P LINK command, as shown below.

1.

Link the server's APPS directory to D:. (If you have already done this as described in "Linking to the Applications Directory" in this chapter, skip to Step 2.)

```
A>3F LINK d: \\finance\apps /PASS=secret ↵
```

```
D: linked to \\FINANCE:HQ:3COM\APPS.
```

```
A>
```

2.

Link to the printer using the 3P LINK command. You can omit the server name (in this case, finance) if the printer is connected to your home server.

```
D>3P LINK prn: \\finance\laserjet ↵
```

```
PRN: linked to \\FINANCE:HQ:3COM\LASERJET.
```

You can also move between services by pressing [Return] at the program prompt and entering the name of the program you want. For example, to move from the 3F program to the 3P program:

```
3F> ↵
```

```
A>3P ↵
```

```
3Print 1.1 - Copyright (c) 3Com Corporation 1986.  
All rights reserved.
```

```
3P>
```

You then link to the printer identifier as shown in steps 1 and 2 above.

## Using Applications on the Network

Once you have linked to the necessary directories, switch to the desired drive identifier, the way you would if you were using the diskette drives or hard disk in your personal computer. For example, to switch to drive D: from drive A:, type:

```
A>d:  ↵
```

```
D>
```

Run the desired application as you normally would on a stand alone personal computer. That is, switch to the physical drive (for example, A:) or drive identifier (for example, D:) where the application is located and issue the command to run it. Once you are in the application, you can retrieve files, work on them, and print them according to the application instructions; the difference is that you are using network resources automatically instead of using local disk space and printers. For more detailed information on printing documents, refer to Chapter 5.

## Logging Out

After you complete your work, end your connection with 3+Share and the network by using the LOGOUT command, as shown below. The LOGOUT command unlinks you from directories and printers. The LOGIN and LOGOUT commands can be issued from the 3N, 3P, or 3F programs or from the DOS prompt.

```
3F>LOGOUT  ↵
```

```
Linda Young:HQ:3Com logged out.
```

The message confirms that you are logged out of the 3+ network.

## Using the AUTOEXEC.BAT File

On your 3+ Local Workstation Startup diskette is a batch file called AUTOEXEC.BAT. A batch file contains several (a batch of) commands that execute automatically in the order that they appear in the file.

You can display a directory of all the files on your 3+ Local Workstation Startup diskette with the DOS command DIR by following these steps:

1.

Change the default drive to A:.

A: ↵

2.

Use the DOS TYPE command to display the contents of the AUTOEXEC.BAT file.

A>TYPE autoexec.bat ↵

Appendix D contains a detailed listing of a typical workstation AUTOEXEC.BAT file. In addition to the items shown there, your network administrator may have added commands to automatically log you in to the network and to automatically link your home directory and a printer. Such commands may look like this:

**3F LOGIN linda young; LINK d: \\finance\apps; LINK e:**  
*(log in to the network; link the applications directory to D: and link the home directory to E:)*

**3P LINK lpt1: \\finance\laserjet**  
*(link to a printer named Laserjet on the server named Finance)*

**d:**  
*(change the default drive to D:)*

**menus** *(run the application called Menus)*

For more detailed information on batch files, or if your batch file needs changing, refer to Appendix D.





## Chapter 4: Using File Service

Chapter 3 showed basic procedures for logging in, linking required directories, printing a file, and logging out. This chapter continues with 3F commands and discusses the following procedures:

- ▶ Listing 3+Share Directories
- ▶ Linking to a Shared Directory
- ▶ Creating a Directory
- ▶ Assigning a Sharename
- ▶ Managing Shared Directories
- ▶ Modifying Sharenames
- ▶ Deleting Sharenames
- ▶ Deleting a Directory

### Listing 3+Share Directories

To effectively use 3+Share directories, you must be able to identify them. To list the directories on your 3+ server:

Type the DIR command.

**3F>DIR \\finance** *(lists all directories for all users on the server)*

**3F>DIR** *(lists your directories)*

You can also use the 3F DIR command to list shared directories on another server, list another user's shared directories, or list users linked to a shared directory. For complete information about the 3F DIR command, refer to Chapter 7.

## Linking to a Shared Directory

Chapter 3 introduced the procedure for linking a shared directory by linking a directory that contains applications. The procedure for linking to any shared directory is essentially the same: you need to indicate the user to whom the directory belongs and the sharename of the directory. In other words, you have to specify the path of the directory. (See the example below.)



**NOTE:** Your home directory is the default for the 3F LINK command. If you do not specify a path, you will automatically be linked to your home directory.

---

To link to a shared directory, REPORTS, owned by Linda Young, type:

```
3F>LINK e: \\linda young\reports ↵
```

If the sharename requires a password as indicated by the prompt, type the password as supplied by the owner of the shared directory. (When you type the password it does not appear on the screen.)

```
Password? ***** ↵
```

## Creating a Directory

To create directories, use the DOS MKDIR (Make Directory) command. The first directory you create will be one level below your home directory. When you create a directory, you must specify the path to the directory. For complete information on creating directories and specifying paths, refer to your DOS manual.

To create a directory one level below your home directory:

1.



From 3F, 3N, or 3P, return to DOS by pressing [Return].

```
3F>↵
```

```
D>
```

2.



Use the DOS MKDIR command to create a directory. For example, to create the directory MEMOS under your home directory linked to drive E:, type:

```
D>MKDIR e:\memos ↵
```

The directory is created under your home directory.



**NOTE:** A directory name can be up to 8 characters long.

---

## Assigning a Sharename

You can make any of your directories available to other users by assigning a sharename and access rights. All subdirectories under a shared directory are also available to other users. For this reason, it is a good idea not to share your home directory.

You can assign more than one sharename to a directory. This lets you make a directory available to different users in different ways. For example, if you want some users to be able to read files in a directory, you can assign a sharename and Read access rights. If you want other users to both read and write to files in the same directory, you can assign it another sharename with Read/Write access rights. For added security, you can also assign a password to a sharename. Given the appropriate access rights, several users can use a directory at the same time.

## Access Rights

The access rights you can give to a sharename are listed below:

<b>Private (PRIV)</b>	The Default Access Right. Only one user at a time can have access to the directory. To give other users access to a private directory, the owner has to assign a password to the directory.
<b>Public (PUB)</b>	Users can read a file in a public directory, but cannot create or write to a file in the directory.
<b>Read (R)</b>	Users can read any files that are in the directory. This access right has the same effect as Public access.
<b>Write (W)</b>	Users can write to the files in the directory.
<b>Read, Write (R,W)</b>	Users can read from and write to the files in the directory.
<b>Write, Create (W,C)</b>	Users can write to, create, and delete files in the directory, but cannot not read them.
<b>Read,Write, Create (R,W,C)</b>	Users can read, write to, create, and delete files in the directory.
<b>Shareable (SHAR)</b>	Users can create sharenames to the directory, as well as read, write, create, and delete subdirectories and files in the directory.



**NOTE:** In addition to being able to modify and delete any sharename that you create (and thus own), you can assign a sharename to another user's directory to which you have SHAR access rights. You can also make it available to other users as long as the directory is on your home server (the server where your home directory is). For information on assigning a sharename to another user's directory, refer to the 3F SHARE command in Chapter 7.

To make a directory available to other users:

1.

Return to the 3F program by typing:

D>3F ↵

2.

Type the **SHARE** command, followed by a space, then a **?** to be prompted for all parameters, both required and optional. You can also type **SHARE** without the **?**; in this case, you are prompted for the required parameters, but not for the optional ones.

3F>SHARE ? ↵

3.

Enter the sharename you want assigned to the directory.

Sharename? sales ↵

4.

Enter the path, or location, of the directory to be shared.

Path? e:\finance ↵

5.

Enter a password if you want to assign one to the new sharename. A sharename's password can be up to eight characters long. When you type it, the password does not appear on the screen. If you do not want to assign a password to the sharename, just press **[Return]**.

Password? \*\*\*\* ↵

6.

Enter the access rights to be assigned to the new sharename.

```
Access Rights (/PRIV)? /rwc ↵  
\\LINDA YOUNG:HQ:3COM\SALES shared.
```

The message configms that the new sharename has been assigned.

You can also type the command in its unprompted form, for example:

```
3F>SHARE sales=e:\finance /PASS=secret /rwc ↵
```

## Managing Shared Directories

As circumstances change, you may want to change the way you share your directories with other users. 3+Share provides ways for you to do this.

This section describes the following procedures:

- ▶ Modifying sharenames
- ▶ Deleting sharenames
- ▶ Deleting a directory

## Modifying Sharenames

To change the password and/or access rights for a sharename you assigned to a directory, use the 3F MODIFY command. The 3F MODIFY command allows changes only to the sharename's password and access rights. If you want to change the sharename, you must first delete it by using the 3F UNSHARE command and then assign a new sharename with the 3F SHARE command.



**NOTE:** It is not necessary to unlink from a directory before modifying the sharename with the 3F MODIFY command.

---

To modify a sharename:

1.

Type the **MODIFY** command, followed by a space, then a ? to be prompted for all parameters, both required and optional as shown in the following example:

```
3F>MODIFY ? ↵
```

2.

Enter the sharename you wish to modify.

```
Sharename? memos ↵
```

3.

Enter the new password you are assigning to the sharename. If you do not wish to change the password, just press [Return].

```
Password (*****)? ***** ↵
```

4.

Enter the new access rights for the sharename. If you do not wish to change the access rights, just press [Return].

```
Access Rights (/PRIV)? /r ↵
```

```
\\LINDA YOUNG:HQ:3COM\MEMOS modified.
```

The message confirms that the sharename has been modified.

You can also type the command in its unprompted form, for example:

```
3F>MODIFY memos /PASS=secret /r ↵
```

```
\\LINDA YOUNG:HQ:3COM\MEMOS modified.
```

## Deleting Sharenames

To delete a directory's sharename, along with the password and access rights assigned to that sharename, use the 3F UNSHARE command. Deleting a sharename does not delete the directory itself.



For example: You stored all the sales files for your department in a directory called SALES and you assigned two sharenames to SALES. One sharename, SALESR, has Read access rights to let everyone in your department read the sales information. The other sharename, SALESRW, has Read/Write access rights to let sales personnel update the sales information.

At the end of the sales quarter, when you do not want any new information added to the files, you can delete the sharename SALESRW, which has Read/Write access rights. The directory SALESR still exists and everyone can still use SALESR to link to the SALES directory and read files that are stored there. However, there is no longer a SALESRW sharename that allows users to link to the SALES directory and update information.

You cannot delete a sharename that was assigned to a directory by another user. You cannot delete a sharename while it is linked. To delete a sharename from a directory to which you are linked, use the 3F UNLINK command to unlink the directory. Use the 3F DIR command to make sure no other users are linked to the directory.

To delete a sharename:

Type the UNSHARE command, followed by the name of the directory you are deleting.

```
3F>UNSHARE sales ↵  
\\LINDA YOUNG:HQ:3COM\SALES unshared.
```

The message confirms that the directory's sharename has been deleted.

## Deleting a Directory

To delete a directory, use the DOS RMDIR command.



**CAUTION:** Before using the DOS RMDIR command to delete a directory, delete the directory's sharenames with the 3F UNSHARE command. Otherwise, the sharenames will still exist on the network and may cause confusion.

---

## Chapter 5: Printing Documents

The Print service lets you print documents on any shared printer (that is, a network printer that is made available to users by being assigned a printer sharename). You can print documents stored in files in 3+Share directories as well as files stored on a diskette or local hard disk. When you send a file to be printed on a shared printer, it is stored in a temporary file, called the **spool file**, and waits in the print queue. After the spool file is created, you can continue to work without waiting for the file to print.

To print documents on a shared printer, link to the printer with a print identifier. Once you link to the shared printer, you can print any file from within an application program. Print the file by issuing the "print" command for that application.

This chapter provides step-by-step instructions for the following procedures:

- ▶ Choosing a Printer
- ▶ Listing Shared Printers
- ▶ Listing a Printer's Queue
- ▶ Linking to a Printer
- ▶ Printing a Document
- ▶ Using CPRINT to Create Files with Text Editors
- ▶ Copying Files to Printers
- ▶ Unlinking from a Printer
- ▶ Managing Your Print Files

## Choosing a Printer

Before you link to a printer and send documents to it for printing, you may find the following information useful:

- ▶ Which printers are available? It is also useful to know what kinds of printers are available. You might, for example, have a choice of printing documents on a draft quality printer or on a letter quality printer.
- ▶ How long is the printer's print queue?

## Listing Shared Printers

The 3P DIR command lists the printer sharenames and descriptions of shared printers on your home server. You need to know a printer's name before you can link to it and print a document.

1.

If you have not already done so, link the APPS directory to D: and make it the default directory.

```
A>3P LINK d: \\finance\apps ↵
```

```
A>d: ↵
```

```
D>
```

2.

Start the 3P program.

```
D>3P ↵
```

3.

At the 3P prompt, type the DIR command.

```
3P>DIR ↵
```

The list shows the sharename of each printer shared on your home server, the printer's port identifier on the server, and the number of users linked to the printer.



**NOTE:** The printer identifier is the identifier you designate from your workstation; the port identifier is the identifier that the network administrator designates when connecting a printer to a server's printer port.

---

## Listing a Printer's Queue

The 3P QSTAT command lists the files in a printer's queue and provides information about each file. You can use it to determine how busy a printer is. For example, when you need to print a file quickly, you do not want to use a printer that has five long documents waiting in the queue. You do not have to be linked to a printer to see its queue.

---



**NOTE:** The following examples assume that you have started the 3P program as shown in the previous procedure, "Listing Shared Printers".

---

To list a printer's queue if you are not linked to a printer:

Specify the server and printer for the queue you want to see.

```
3P>QSTAT \\finance\laserjet ↵
```

To list a printer's queue if you are already linked to a printer:

Type the QSTAT command to display the queue for the printer to which you are linked.

```
3P>QSTAT ↵
```

To list a printer's queue if you are linked to more than one printer:

1.



Type the QSTAT command, followed by a space and a question mark (?), to tell the File service to prompt you for all the command parameters, both required and optional.

```
3P>QSTAT ? ↵
```

2.



Type the printer identifier.

```
Printer Id (PRN:)? 1pt2: ↵
```

3.



Type the spool identifier. (A **spool identifier** is an integer between 0 and 3200, or ALL, for every file within the queue.)

```
Spool Id? ALL ↵
```

You can also type the command in full, without asking for prompts, for example:

```
3P>QSTAT 1pt2: /SPOOL=ALL ↵
```

You see a list of the files in the print queue for the printer. The list gives each file's spool identifier, the size of the file, its status, its priority in the print queue (99 prints first and 1 prints last), and the number of copies that will be printed. You can distinguish one file from another by checking the file's size and the time it was sent to the printer.



**NOTE:** A print queue may exceed the length of one screen display page, and will scroll as a result. To see all the items in the queue, you may have to press [Ctrl]+[Num Lock] to stop scrolling. Press [Ctrl]+[Scroll] to resume scrolling.

## Linking to a Printer

To establish a link between a printer identifier and a shared printer, use the 3P LINK command. The printer identifiers you can link to a printer are: PRN: (also called LPT1:), LPT2:, or LPT3:.

It does not matter which local printer identifier you use. However, since PRN: is the default printer identifier, if you intend to link to more than one printer, use PRN: for the printer that you use most often.

If you do not give a printer identifier with the 3P LINK command, the default printer identifier, PRN:, is assigned. Refer to Chapter 9 for more detailed information on the 3P LINK command.

To link to a printer, type the 3P LINK command.

```
D>3P LINK lpt2: \\finance\laserjet ↵
```

```
LPT2: linked to \\FINANCE\LASERJET:HQ:3COM.
```

The parameters included in the example above are:

- ▶ The printer identifier, **LPT2:**. When not specified, the default, PRN: is assumed.
- ▶ The server name, **Finance**. If the printer is on your home server, you do not need to type the servername. If the printer is on another server, type the servername before the printer name, preceded by double backslashes (\\).
- ▶ The printer name, **Laserjet**.

The message confirms that the printer identifier is linked to the shared printer. As long as you are logged in to the network, you can now use the printer.



**NOTE:** 3+ does not support the DOS Print Screen feature.. If you attempt one of these operations -- **[Shift]+[PrtSc]** , or **[Ctrl]+[PrtSc]** -- the workstation will respond with a beep, indicating an invalid action.

---

## Printing a Document

The examples in this section show you how to do the following on a network printer:

- ▶ Print from a software application
- ▶ Use the CPRINT program to print documents created by a text editor
- ▶ Copy files to a network printer with the DOS COPY command

## Printing from a Software Application

The following example shows you how to print from a software application in a directory on a network server.

1.



Switch to the drive identifier to which you have linked the applications directory.

A>d:↵

2.



Run the software application and give print commands from the application as you normally would.

Your document waits in the printer's queue and will be printed after any other print jobs that are ahead of it in the queue.



**NOTE:** If you notice that files are not printing until you exit the software application, wait until the software indicates that it is finished printing and press **[Ctrl]+[Alt]+[PrtSc]**. This will signal 3+Print that the complete file has been sent to the queue and is ready to be printed. On newer IBM keyboards, use the combination **[Ctrl]+[Alt]+[\*]** (where the \* is the key located directly above the 9 on the numeric keypad) instead of **[Ctrl]+[Alt]+[PrtSc]**.

---

## CPRINT

CPRINT is a printing program supplied with the Print service. You can use it to format and print files created with a text editor, such as EDLIN (the DOS editor) or MED (the 3+Mail message editor).

The CPRINT program works differently from other programs in 3+Share. It has one command, the CPRINT command, which is typed after the DOS prompt. If you type only the CPRINT command, you are prompted for the name of the file you want to print. You can not enter any additional parameters. However, you can override these preset formats with parameters. If you want to include additional parameters with the CPRINT command, you must type them on the command line.

---



**NOTE:** To see help information about the program, type a question mark (?) after the CPRINT command.

---

## CPRINT's Preset Formats

If you do not include any parameters with the CPRINT command, your file is printed with the following settings:

Top Margin	1 inch
Bottom Margin	1 inch
Page Length	66 lines
Left Margin	8 characters
Right Margin	80 characters from the left side of the page
Page Numbers	Centered, beginning on page 2
Tabs	8 spaces are inserted between tabs



CPRINT automatically monitors page breaks so that one or two lines of text are not printed by themselves at the top or bottom of a page.

If you do not supply a printer name with the CPRINT command, your file is printed on the printer linked to the default printer identifier, PRN: .

### Printing with Preset Formats

Follow this example to print a document using the preset formats listed above:

1.            Type the CPRINT command.

```
D>CPRINT ↵
```

2.            Type the file name.

```
Enter file name to be printed (? for help, ENTER to  
exit): textfile ↵
```

As your document is printing (being sent to a spool file) you see the message **Printing Page #** on your screen. When spooling is complete, you see the message **Done**.

Your document then waits in the printer's queue and will be printed after any other print jobs that are ahead of it.

### CPRINT Parameters

If you do not want your document to be printed using CPRINT's preset formats, change the preset formats by following the CPRINT command with the name of the file you want to print and any specified parameters.

For example, to print a document on a printer that is not linked to the printer identifier PRN:, type:

```
D>CPRINT textfile /PRINTER=lpt2 ↵
```

You can enter any of the following parameters with the CPRINT command. Refer to Table 5-1 below.

Table 5-1. CPRINT Parameters

Parameter Name	Description	Default Value
/PRINTER= <i>prnid</i>	The name of the printer identifier linked to the printer you want to use -- PRN: (or LPT1:; LPT2:; or LPT3:.	PRN:
/LEFT= #	The size of the left margin in characters.	8
/RIGHT=#	The size of the right margin in characters, measured from the left side of the page.	80
/FORMLEN=#	The length of the form or page in lines.	66
/TABVALUE= #	The number of spaces inserted between tabs.	8
/LINENUMS	Prints line numbers in the first four columns of each line. If you include this parameter, your left margin must be 6 characters.	no line #'s
/PDATE	Prints the date and time the file was printed at the bottom left of the page.	no date
/MDATE	Prints the date and time the file was last modified at the bottom right of the page.	no date
/NONUM	Suppresses printing of page numbers.	Center number on pages, beginning on page 2.
/NODOT	Prints any special instructions (such as .page or .eof) or lines beginning with a period (.) within the specified file.	Do not print lines starting with a period.

## Using Special Instructions

You can type special instructions to CPRINT in your text file that further determine how the file is printed.

The following list describes the effect of special instructions you can type in a file.

**.page**            Type this instruction to force a page to eject.

**.eof**            Type this instruction to stop printing.

To use a special instruction, enter it in the far left column of the file. These instructions do not appear in your printed copy unless you include the /NODOT parameter with the CPRINT command.

## Stopping CPRINT

To stop at any time while your file is being sent to the print queue, press [Ctrl]+[Break].

## Copying Files to Printers

The following example shows how to use the DOS COPY command to copy a file to a shared printer from a directory. You can use the same procedure to copy files to a shared printer from a diskette or a hard disk.

To copy a file from a directory to a printer:

1.

From the DOS prompt type the COPY command followed by the drive identifier, the file name and the printer identifier. For example, if the directory that contains the file MAY is linked to drive E: and the printer is linked to LPT3:.

```
A>COPY e:may lpt3:↵
```

This copies the file from the 3+Share directory to the printer's queue, when it will be printed in turn.



**NOTE:** You cannot use the DOS PRINT command to print to a shared printer on the network.

---

## Unlinking from a Printer

To end a link between a printer identifier on your personal computer and a shared printer on the network, use the 3P UNLINK command.

1.

To unlink a printer, type the 3P UNLINK command.

```
A>3P UNLINK ↵
```

The message confirms that the printer is unlinked.

```
PRN: unlinked from \\FIANCE:HQ3COM\LASERSET.
```

## Managing Your Print Files

The Print service helps you manage your print files and lets you set special printing options.

The instructions in this section show you how to do the following:

- ▶ Release delayed files for printing
- ▶ Print multiple copies of a file
- ▶ Deleting a file from the print queue
- ▶ Delay the printing of files

## Setting Print Options

Except for deleting a file, you can set all of the options by using the 3P SET command.

You can use the 3P SET command to assign a priority status to a file or print files on special forms.

You can also use the 3P SET command to set options for all the files you send to a printer's queue, for files already in the print queue, or you can include a spool identifier with the command so that the options you set are only used for one, specific file. Refer to Chapter 9 for complete information on the 3P SET command.

## Printing Multiple Copies

When you send a file to a network printer, only one copy of the file is usually printed. You can use the 3P SET command to print up to 99 copies of a file at a time.

To print multiple copies of one file:

1.

Link to the printer for which you want to set options.

2.

Determine the file's spool identifier with the 3P QSTAT command. For example:

```
3P>QSTAT lpt2: ↵
```

The screen displays a list showing all your own files in the printer's queue and each file's spool identifier. If more than one file is in the queue, you can distinguish one file from another by checking the file size and the time it was sent to the printer.

3.

At the 3P prompt, type the SET command.

```
3P>SET lpt2: /COPIES=9 /SPOOL=203 ↵
```

The example above includes the following parameters:

- ▶ Printer identifier, LPT2:
- ▶ The number of copies, 9. (You can print up to 99 copies at a time.)
- ▶ The file's spool identifier, 203.

The Print service returns a message confirming that the printer will print multiple copies of your file.

You can also have 3P prompt you for the parameters by typing **3P SET**, followed by a space and a question mark (?).

```
3P>SET ? ↵
```

After each prompt, enter the desired information. To use the default option for a parameter, press **[Return]** in response to the parameter prompt.

## Holding Files

Normally, the files you send to a printer are immediately placed in the print queue and are printed in turn. To temporarily delay entering each file into the print queue, you can use the **/HOLD** parameter of the **3P SET** command. All the files you send to a printer will be batched (entered into the print queue as one entry) and printed together after you set **/HOLD** to **OFF** or unlink the printer.

You can release files held for printing in either of two ways. You can use the **3P UNLINK** command to unlink from the printer or you can use the **3P SET** command to set the **/HOLD** parameter to **OFF**. When you release held files for printing in either of these two ways, the files are placed at the end of the printer's queue and are printed together. A single spool identifier is assigned to the entire group of files released.

To hold all files for later printing:

1.

Type the SET command:

3P>SET /HOLD ↵ *(Assumes default printer identifier PRN:.)*

A message confirms that the /HOLD parameter is set. All files you send to the printer's queue will be held and batched until you enter the 3P UNLINK command or set the /HOLD parameter to OFF.

To set the /HOLD parameter to OFF:

2.

Type the SET command:

3P>SET /HOLD=OFF ↵

## Deferring Printing

There may be times when you decide you do not want a file printed after you have sent it to the printer's queue. To temporarily prevent it from printing, use the /DEFER parameter of the 3P SET command.

When you defer a file from printing, the file keeps its place in the print queue. When you release the file for printing by using /RELEASE parameter of the 3P SET command or by setting /DEFER to OFF, the file is printed in turn, as if it had never been deferred. If the file's place in the queue has already been passed, it moves to the top of the print queue and prints next.

To defer the printing of a file:

1.

Determine the file's spool identifier with the 3P QSTAT command. For example:

```
3P>QSTAT lpt2: ↵
```

The screen displays a list showing all your files in the printer's queue and each file's spool identifier for each file. If more than one file is in the queue, you can distinguish one file from another by checking the file's size and the time it was sent to the printer.

2.

Type the SET command, providing the printer identifier (omit this parameter if you want to use the default PRN:), the DEFER parameter, and the file's spool identifier.

```
3P>SET lpt2: /DEFER /SPOOL=203 ↵
```

The message returned confirms that the file's printing is deferred. The file will not be printed until you release it with the /RELEASE parameter or set the /DEFER parameter to OFF.

To release the file with the /RELEASE parameter, type the SET command as follows:

```
3P>SET /RELEASE ↵
```

To set the /DEFER parameter to OFF, type the SET command as follows:

```
3P>SET /DEFER=OFF ↵
```



## Deleting a File from the Print Queue

To delete your file(s) from a print queue use the 3P DELETE command. You may want to do this if you sent the wrong file to the print queue, or if you decided that you would rather print the file on a different printer.

To delete a file from the print queue:

1.



Link a printer identifier to the printer whose queue contains the file you want to delete. For example:

```
3P>LINK lpt2: laserjet ↵
```

2.



Determine the file's spool identifier with the 3P QSTAT command.

```
3P>QSTAT ↵
```

3.



Type the DELETE command, specifying the spool identifier of the file you want to delete (you can type either DELETE or DEL).

```
3P>DEL /SPOOL=245 ↵
```

In this example, 245 is the spool identifier.

The message confirms that the file was deleted from the print queue.



**NOTE:** You can delete from the print queue only those files that belong to you.

## Chapter 6: Command Reference Introduction

Part II is a complete reference to 3+Share user commands. The chapter provides the following:

- ▶ A 3+Share user command overview
- ▶ The command syntax notation used throughout this section.
- ▶ Descriptions of the LOGIN and LOGOUT commands

User command descriptions for 3F, 3N, and 3P are provided in the following chapters.

For complete information on the 3+Share administrator commands, see the *3+ Administrator's Guide*.

## Command Overview

Table 6-1, below, provides an overview of 3+Share commands.

**Table 6-1. 3+Share Command Overview**

COMMAND	FUNCTION
LOGIN LOGOUT	Login to the network Logout from the network
<b>3F User Commands</b> 3F 3F DIR 3F HELP 3F LINK 3F MODIFY 3F SHARE 3F STAT 3F UNLINK 3F UNSHARE	Start 3F (File) program List names of shared directories Display 3F command information Link to a shared directory Modify a shared directory Share a directory Display information about 3F Share file server Unlink from a shared directory Delete a shared directory
<b>3N User Commands</b> 3N 3N ASSIGN 3N DIR 3N HELP 3N MODIFY 3N SET 3N STAT	Start 3N (Name) program Assign a sharename for 3Share List 3N names Display 3N command information Modify 3N information Set 3N defaults Display 3N status information
<b>3P User Commands</b> 3P 3P DELETE 3P DIR 3P HELP 3P LINK 3P QSTAT 3P SET 3P STAT 3P UNLINK	Start 3P (Print) program Delete a file from the print queue List names of shared printers Display 3P command information Link to a shared printer List a printer queue Set printer options Display network printer information Unlink from a shared printer

## Command Syntax Conventions

Commands are presented using the following notation:

CAPITAL LETTERS are used for keywords. You may use either upper or lower case when entering keywords.

However, the spacing between keywords is important; enter spaces exactly as they appear in this guide.

*Italics* indicate a command line parameter for which you must supply information. For example, *servername* would be a command line parameter indicating that you need to enter the name of a particular server.

[*parameter*], a command line parameter enclosed in square brackets, indicates an optional parameter. When you supply optional parameters, do not type the brackets.

? indicates a prompted parameter. When prompted, enter the information requested.

[/*option*] is an optional keyword that you can include on the command line to alter the operation of the command. Through the use of optional parameters, you can use a single command in several different ways. When the number of optional keywords and optional parameters is large, the options are stacked one below the other, each enclosed in square brackets ([ ]). You can enter as many of the optional keywords as you want in one command line. Do not enter the square brackets.

A vertical bar (|) represents an exclusive choice; when two or more items are separated by vertical bars you must choose only one of those items. For example, in the expression `item1|item2|item3`, you would enter one, and only one, of the items in the command line.

Slashes (/), backslashes (\), double backslashes (\\), and colons (:) must be entered as shown in the command line. For example:

```
3F DIR [\\username\\servername] [\\sharename]] [/LINK]
```

If the special characters are part of an optional parameter and you omit the parameter, do not type the special characters.

## LOGIN

Allows you to enter on to the network by identifying you as a registered 3+Share user and also allows you access to your home directory.

### Format

LOGIN [[\\]username] [/PASS=password]

### Parameters

*username*

The three-part name that identifies you as a 3+Share user. (The double backslash (\\) preceding the name is optional.)

If your domain and organization are the same as the defaults in the Name service, you do not have to include the domain and organization parts of your name.

If you have an alias, you can use your alias to log in to 3+Share.

If you have a user profile (refer to Chapter 3) that includes your user name, you can omit this parameter.

*PASS=password*

If you have a password, you must include your password whenever you log in unless your password is included in your user profile. If you have a password and do not specify it, 3+ will prompt you for it before completing login.

## Remarks

You must log in before you can use 3+ commands. You can log in from any personal computer in the network. You can also log in and out from the 3F, 3N, and 3P programs.

## Examples

Example 1: Logging in if you have a password.

```
A>LOGIN linda young /PASS=secret ↵
```

Login 1.1 - Copyright (c) 3Com Corporation 1986. All rights reserved.

Linda Young:HQ:3Com logged in.

A>

Example 2: Logging in if you do not have a password.

```
A>LOGIN linda young ↵
```

Login 1.1 - Copyright (c) 3Com Corporation 1986. All rights reserved.

Linda Young:HQ:3Com logged in.

A>

Example 3: Logging in from another domain and organization with a password.

```
A>LOGIN linda young:hq:3com /PASS=secret ↵
```

Login 1.1 - Copyright (c) 3Com Corporation 1986. All rights reserved.

Linda Young:HQ:3Com logged in.

A>

Example 4: Logging in if your user profile includes your user name and login password.

```
A>LOGIN ↵
```

Login 1.1 - Copyright (c) 3Com Corporation 1986. All rights reserved.

Linda Young:HQ:3Com logged in.

```
A>
```

## LOGOUT

Ends your connection to the 3+ network and automatically unlinks you from shared network directories and printers.

### Format

LOGOUT

### Parameters

none

### Remarks

The LOGOUT command ends the connection to 3+Share that you established with the LOGIN command. It also ends all links to 3+Share directories and printers that you established with the 3F LINK and 3P LINK commands.

You can issue the LOGOUT command from 3F, 3N, 3P, or after a DOS prompt.

## Examples

Example 1: Logging out of 3+Share.

A>LOGOUT ↵

Linda Young:HQ:3Com logged out.

Example 2: Logging out from within the 3P program.

3P>LOGOUT ↵

Linda Young:HQ:3Com logged out.





## **Chapter 7: 3F User Commands**

This chapter provides a description of 3F user commands. 3F is the user interface for 3+Share's File service.

For easy reference, the commands are described in alphabetical order. (For definitions of key terms used in this chapter, refer to Chapter 11. For information on command syntax notation, refer to Chapter 6.)

## 3F

Starts the 3F program (File service).

### Format

3F

### Parameters

none

### Remarks

The 3F command starts the 3F program and displays a copyright notice and version number. The DOS prompt (for example, A>) changes to 3F>. After starting the 3F program, you can enter any 3F command without including the command prefix (3F). After each 3F program command is completed you return to the 3F program prompt (3F>).

You can leave the 3F program and return to DOS and the DOS prompt (A>, for example) by pressing **[Return]** without typing a command.

You can also execute a 3F command by typing the command prefix (3F) and the command in one step. However, when the command is completed, you return to DOS and the DOS prompt instead of remaining in the 3N program.

You cannot type a 3F command following the prompt for another service. Do not, for example, type **3N>3F LINK**.

You can type multiple commands on one line by separating the commands with semicolons. For example:

```
3F>LINK e:; LINK d: \\finance\apps
```

## **Example**

Example: Starting the 3F program.

A>3F ↵

3File 1.1 - Copyright (c) 3Com Corporation 1986. All  
rights reserved.

3F>

## 3F DIR

Displays information about shared directories.

### Format

3F DIR [/\\*username*\\*servername*\\][*sharename*[/LINK]

### Parameters

*username*|*servername*

The owner of the shared directory or the name of the server about which you want information. If you omit this and all other parameters, you see a list with information about your own directories.

*sharename*

The name of the directory you want to see.

LINK

Displays information about existing links to shared directories and printers.

If you include only this parameter, a list of the shared directories currently linked to drive identifiers on your workstation will be displayed.

If you include this parameter and a server name, a list of users linked to shared directories and printers on that server will be displayed.



**NOTE:** If you are a user on the specified server and you logged in at two different workstations, your name will be listed twice.

---

## Examples

Example 1: Listing all your shared directories.

3F>DIR ↵

\\LINDA YOUNG:HQ:3COM	D:\LINDAY	/HOME 1 users
INBOX	D:\LINDAY\INBOX	/PRIV 1 users
DOCUMENT	D:\LINDAY\PAPERS	/PUB 2 users

3F>

Example 2: Listing all the directories currently linked to drive identifiers on your workstation.

3F>DIR /LINK ↵

D: \\FINANCE:HQ:3COM\APPS  
E: \\FINANCE:HQ:3COM\LINDADIR

Example 3: Listing another user's shared directories.

3F>DIR \\peter jones ↵

\\PETER JONES:HQ:3COM	C:\PETERJ	/HOME 1 users
INBOX	C:\PETERJ\INBOX	/PRIV 1 users
LETTERS	C:\PETERJ\LETTERS	/PRIV 1 users

3F>

Example 4: Listing all users and shared directories on a server.

```
3F>DIR \\finance ↵
\\FINANCE:HQ:3COM
    3ROOT                C:\3ROOT                0x327  0 users
    APPS                  C:\APPS                  /PUB   2 users
    APPSADM               C:\APPS                  /RWC   0 users

\\LINDA YOUNG:HQ:3COM D:\LINDAY                /HOME  1 users
    INBOX                 D:\LINDAY\INBOX         /PRIV  1 users
    DOCUMENT              D:\LINDAY\PAPERS        /PUB   2 users

\\PETER JONES:HQ:3COM C:\PETERJ                /HOME  1 users
    INBOX                  C:\PETERJ\INBOX         /PRIV  1 users
    LETTERS                C:\PETERJ\LETTERS       /PRIV  1 users

3F>
```

Example 5: Listing all users linked to a shared directory with a specific sharename.

```
3F>DIR \\finance\apps /LINK ↵
Users linked to \\FINANCE:HQ:3COM\APPS ...
    LINDA YOUNG:HQ:3COM
    PETER JONES:HQ:3COM

3F>
```

Example 6: Listing all users linked to shared directories and printers on a server in another domain but same organization.

```
3F>DIR /LINK \\sales:se ↵
Users linked to \\SALES:SE:3COM ...
    STUART BIGGS:SE:3COM
    SUSAN SMITH:SE:3COM
    DE MOORE:SE:3COM
    PAUL STEVENS:SE:3COM
    LINDA YOUNG:HQ:3COM

3F>
```

## 3F HELP

Displays information about 3F commands.

### Format

3F HELP [*commandname*]

### Parameters

*commandname*

The 3F command about which you want information.

### Remarks

Help information is displayed in three levels.

The first level lists all 3F commands and a brief description of each command.

The second level gives detailed information for one specific 3F command. You can go directly to the second level by including the command name parameter.

The third level gives help information for a specific parameter. You can get help with a specific parameter when you are entering it in the prompted form by typing **HELP** after the parameter prompt.



**NOTE:** You can type a question mark (?) instead of **HELP** for the first and third (but not the second) levels of help information. If you type a question mark (?) instead of **HELP** after a command at the second level you are prompted for all the command parameters. In 3F, 3N, and 3P, typing ? at the first level displays a list of commands; typing **Help** or **HELP ?** displays a list of commands and a description of each command.

---



## Examples

Example 1: Listing all 3F commands and a brief description of each.

```
3F>HELP ↵
```

3F Commands:

Help	- Display helpful information.
Login	- Login to the network.
Logout	- Logout from the network.
Link	- Link to a shared directory.
Unlink	- Unlink from a shared directory.
Dir	- List names of shared directories.
Stat	- Show 3Share server information.
Share	- Share a directory.
Mod	- Modify a shared directory.
Unshare	- Stop Sharing a directory.
Shutdown	- Shutdown 3Share server (Admin only).

```
3F>
```

Example 2: Displaying detailed information about one specific command. In this example, the command is LINK.

```
3F>HELP LINK ↵
```

3F LINK Command:

The 3F LINK command is used to establish a link between a DOS drive identifier on your PC, such as D:, and a shared directory on a 3Share server. Use 3F LINK ? to be prompted.

```
3F>
```

Example 3: Displaying information about a command parameter.

3F>LINK ? ↵

Drive Id? **HELP** ↵

Enter DOS drive id such as C:

Drive Id?

## 3F LINK

Links a drive identifier on your workstation to a shared directory on a server's disk.

### Format

3F LINK *drive id*: [\username\\servername[N]] [*sharename*]  
[*/PASS=password*] [*NP*]

### Parameters

*drive id*:

The drive identifier that you want to link to a shared directory. If the drive identifier is the only parameter you include, it is linked to your home directory.

*username/servername*

The name of the user or server that you are linking to. If the user or server is in your own domain and organization, you can omit the domain and organization parts of the name.

*sharename*

The name assigned to the shared directory that you are linking to.

*password*

The password for the sharename, if one is required.

*NP*

Suppresses prompts, such as "Drive already linked ... OK to unlink [Y/N]?".

## Remarks

You must establish a link between a drive identifier and a directory before you can use files stored in that directory.

---



**CAUTION:** Do not specify a drive identifier which corresponds to a physical drive on your workstation (i.e., A: or B:). If you link a sharename to a physical drive identifier in this manner, you will be unable to access information on the physical drive until you unlink the sharename.

---

## Examples

Example 1: Linking a drive identifier to your home directory.

```
3F>LINK e: ↵
E: linked to \\LINDA YOUNG:HQ:3COM.

3F>
```

Example 2: Linking a drive identifier to another user's shared directory using a sharename that requires a password.

```
3F>LINK E: \\tom smith\ourmemos /PASS=secret ↵
E: linked to \\TOM SMITH:HQ:3COM\OURMEMOS.

3F>
```

You can only modify the password or the access rights for your own shared directories.

While you are modifying a sharename, users can be linked to the directory using that sharename. The new password and access rights you assign to a sharename do not affect any current links using the sharename.

3F MODIFY does not let you change or delete the sharename. To assign a new sharename to the same directory use 3F SHARE. To delete a sharename use 3F UNSHARE.

## Examples

Example 1: Modifying a sharename password.

```
3F>MOD memos /PASS=secret /NP ↵
\\LINDA YOUNG:HQ:3COM\MEMOS modified.

3F>
```

Example 2: Removing a sharename's password.

```
3F>MOD memos /PASS= ↵
\\LINDA YOUNG:HQ:3COM\MEMOS modified.

3F>
```

Example 3: Modifying a sharename's access rights to Read only prompted form.

```
3F>MOD ? ↵

Sharename? memos ↵

Password (*****)? ↵

Access rights (/PRIV)? /r ↵
\\LINDA YOUNG:HQ:3COM\MEMOS modified.

3F>
```

## 3F SHARE

Makes a directory on a server available to users.

### Format

3F SHARE *sharename=path[/PASS=password][/access]*

### Parameters

<i>sharename=</i>	The sharename you want to assign to the directory followed by an equal sign (=).
<i>path</i>	The path to the directory you are making available for sharing. The first step in the path is a drive identifier to which you are linked. Each following step in the path is a directory name preceded by a backslash (\).
<i>password</i>	The password you can assign to the sharename to control who has access to the directory.
<i>access</i>	The access rights you can assign to the sharename to control the kind of access users have to the directory. Access rights can be any of the following:

<u>Parameter</u>	<u>Access rights</u>
/PRIV	Private
/PUB	Public
/R	Read
/RW	Read/Write
/RWC	Read/Write/Create
/WC	Write/Create
/W	Write
/SHAR	Read/Write/Create/Share.

If you omit this parameter, the default is Private.

## Remarks

The 3F SHARE command lets you make a DOS directory on a server available to other users by assigning a sharename to the directory. When you assign a sharename to a directory, you and other users can use the directory by linking to the assigned sharename.



**NOTE:** International characters may be used for sharenames and file names.

---

You can control access to a shared directory by assigning a password and access rights to the sharename. Only users who know the password can use the sharename to link to the directory and use files stored in the directory.

When you make a directory available to other users, keep in mind that all subdirectories under this directory are also available to them with the same access rights.

Each sharename can have only one set of access rights. You can give different users different access rights to the same directory by creating several sharenames, each with different passwords and access rights.

## Assigning a Sharename to Another User's Directory

You can assign a sharename to another user's shared directory to make it available for sharing. To do this, the other user must have specified /SHARE access when he assigned a sharename to the directory (with the 3F SHARE command). The user's home directory must also be on your home server.

When you create a sharename for another user's directory, you must first link to the user's directory (with a sharename). You then supply the drive identifier to which the directory is linked, followed by a colon (:), as the path to the directory. The drive identifier is optional. If you omit it, the current default drive is assumed.



## Examples

Example 1: Assigning a sharename to a directory under your home directory linked to E:.

```
3F>SHARE memos=e:\wordpros ↵  
\\PETER JONES:HQ:3COM\MEMOS shared.
```

3F>

Example 2: Assigning a sharename, password and access rights to a directory under your home directory.

```
3F>SHARE ourdata=e:\sharedir /PASS=secret /RWC ↵  
\\PETER JONES:HQ:3COM\OURDATA shared.
```

3F>

Example 3: Assigning a sharename to a directory that is already shared. This example assumes that the user is linked to G:.

```
3F>SHARE sales=g: ↵  
\\PETER JONES:HQ:3COM\SALES shared.
```

3F>

## 3F STAT

Displays status information for shared disks on a server.

### Format

3F STAT[US][\\*servername*]

### Parameters

*servername*

The name of the server about which you want status information.

If you omit this parameter, the default displays the status for your home server.

### Remarks

3FSTAT (you can type either **STAT** or **STATUS**) displays your login name, network address, capability class, share server, and home directory name. In addition, it displays the size of each hard disk on the server along with the amount of room available for use.

### Examples

Example 1: Displaying status information for your home server.

3F>STAT ↵

Login Name:	LINDA YOUNG:HQ:3COM
Address:	02608C170439
Capability Class:	User
Share Server:	Finance:HQ:3Com
Homedir:	linday

Drive Status for \\FINANCE:HQ:3COM ...

Drive: C:	Total bytes: 33507328	Avail bytes: 4096008
Drive: D:	Total bytes: 33513472	Avail bytes: 6305792
Drive: E:	Total bytes: 3919872	Avail bytes: 3332096

3F>

Example 2: Displaying status information for a server other than your home server.

```
3F>STAT \\otherserver ↵
```

```
Login Name:          LINDA YOUNG:HQ:3COM
Address:             02608C170439
Capability Class:    User
Share Server:        Finance:HQ:3Com
Homedir:             linday
```

```
Drive Status for \\CORPORATE:HQ:3COM ...
```

```
Drive: C: Total bytes: 10584064 Avail bytes: 100452
Drive: D: Total bytes: 10584064 Avail bytes: 2883584
```

```
3F>
```

## 3F UNLINK

Ends a link between a drive identifier on your workstation and a shared directory on the server's disk.

### Format

3F UNLINK *driveid*:

### Parameters

*driveid*:

The drive identifier you want to unlink from the shared directory.

### Remarks

Unlinking makes a drive identifier available to link to another directory.

---



**NOTE:** Logging out of 3+Share automatically ends all links you have established. Rebooting (restarting) your personal computer also ends all your links.

---

### Example

Example: Unlinking a drive identifier.

```
3F>UNLINK d: ↵
```

```
D: unlinked.
```

```
3F>
```

## 3F UNSHARE

Deletes a sharename.

### Format

3F UNSHARE *sharename*

### Parameters

*sharename*

The sharename you want to delete.

### Remarks

The 3F UNSHARE command deletes one sharename of a shared directory. When a sharename is deleted, you and other users can no longer use it to link to a shared directory. Deleting one sharename does not affect any other sharename. (A directory can have several different sharenames to a directory with different passwords and access rights to each sharename.

Delete a sharename if you no longer want to make a directory available to other users who have the password and access rights associated with that sharename.

### Examples

Example: Deleting a sharename.

```
3F>UNSHARE ourdir ↵  
\\LINDA YOUNG:HQ:3COM\OURDIR unshared.  
  
3F>
```

### Requirements

You can delete only those directory sharenames that you assigned.

You can only delete sharenames that are not currently linked to a drive identifier. (Use the 3F DIR command to make sure no one is currently linked to the sharename.)

## **Chapter 8: 3N User Commands**

This chapter provides a description of 3N user commands. 3N is the user interface for 3+Share's Name service.

For easy reference, the commands are described in alphabetical order. For definitions of key terms used in this chapter, refer to Chapter 11. For information on command syntax notation, see Chapter 6.

## 3N

Starts the 3N program (Name service)

### Format

3N

### Parameters

none

### Remarks

The 3N command starts the 3N program and displays a copyright notice and version number. The DOS prompt (for example, A>) changes to 3N>.

After you start the 3N program, you can enter any 3N command without including the command prefix (3N). After each 3N command is completed you return to the 3N prompt (3N>).

You can leave the 3N program and return to DOS and the DOS prompt (A>, for example), by pressing [Return] without typing a command.

You can also execute a 3N command by typing the command prefix (3N) and the command in one step. However, when the command is completed, you return to DOS and the DOS prompt, instead of remaining in the 3N program.

You cannot type a 3N command following the prompt for another service. Do not, for example, type 3F>3N DIR.

You can type multiple commands on one line by separating the commands with semicolons. For example:

```
3N>STAT; MOD /PASS=secret
```

### **Example**

Example: Starting the 3N program.

A>3N ↵

3Name 1.0 - Copyright (c) 3Com Corporation 1986. All  
rights reserved.

3N>



## 3N ASSIGN

Assigns an IBM-compatible name to represent the three-part name of a server.

### Format

3N ASSIGN *IBMname*=[\]*name*

### Parameters

*IBMname*=

The IBM-compatible name you want to assign to a server. An IBM name can be up to 15 characters long.

*name*

The three-part name of the user or server to which you are assigning an IBM-compatible name.

If the user or server is in 3N's current domain and organization, you can omit the domain and organization parts of the name.

### Remarks

You need to assign an IBM-compatible name only when a 3+Share servename does not match IBM rules for names, and you want to run an application that is dependent on using an IBM name.

For example, if a 3+Share name is longer than 15 characters or includes blanks, you need to assign an IBM-compatible name before you can use it with IBM applications.



**NOTE:** You will rarely encounter a "hard coded" servename in an application.

---

### **Example**

Example: Assigning an IBM-compatible server name to a three-part name.

```
3N>ASSIGN fileserver=\\myserver:hq:3Com ↵
```

FILESERVER assigned to MYSERVER:HQ:3COM.

## 3N DIR

Lists names of items on the network -- aliases, domains, groups, members, organizations, servers, or users -- or displays detailed information about a specific item.

### Format

3N DIR [*itemtype*] [[\] *name*]

### Parameters

*itemtype*

The type of item for which you want a list. The item can be any of the following parameters:

- ▶ alias
- ▶ domain
- ▶ group
- ▶ user
- ▶ member
- ▶ organization
- ▶ server

If you omit this parameter, you see a list of all aliases, groups, servers, and users on the network.

*name*

The three-part name of the item you want to list. (The double backslash (\\) preceding the name is optional. )

To display detailed information about a specific item, include the item's name.

If you omit this parameter, 3+Share lists all the items in the current domain and organization.



**NOTE:** To list groups of items, you can use the DOS wildcard character (\*) in place of the three-part name.

---

### Remarks

The current domain and organization is either the Name service's default domain and organization or the last domain and organization you specified in a 3N command. You can reset the current default domain and organization explicitly with the 3N SET command.

If the list shown by the 3N DIR command is too long to fit on your screen, use the DOS command MORE to view one screen at a time. (See Example 5.)

The 3N DIR SERVER command lists only servers with the 3+Share File/Print service installed.

---



**NOTE:** The **current domain** is in the 3N program and does not effect the Name service. The **default domain** is set in the Name server during installation of the Name service and cannot be changed.

---

## Examples

Example 1: Listing detailed information about a specific network user.

```
3N>DIR peter jones ↵
```

Looking for peter jones:HQ:3Com ...

Name:	Peter Jones:HQ:3Com
Type:	User
Comment:	Marketing manager
CreateDate:	7-28-86 8:30am
ModifyDate:	7-31-86 9:45am
Password:	*****
Capability Class:	User
3MailServer:	Corporate:HQ:3Com
3ShareServer:	Finance:HQ:3Com
HomeDir:	peterj

```
3N>
```

Example 2: Listing all servers with File and Print services in the default domain and organization.

```
3N>DIR SERVER ↵
```

Finding Server \*:HQ:3Com ...

Corporate  
Finance

```
3N>
```

Example 3: Listing aliases for all users in another domain in your organization.

```
3N>DIR ALIAS *:se ↵
Finding Aliases *:se:3Com ...
StuartB
SusanS
DeM
Pauls

3N>
```

Example 4: Listing groups in a domain of another organization.

```
3N>DIR GROUP *:sw:othercorp ↵
Finding Group *:sw:othercorp ...
ExecCom
NewStaff
Payroll
Product1

3N>
```

Example 5 : Listing all name service entries for the default domain and organization using the DOS MORE command.



**NOTE:** When you use the DOS MORE command with 3N DIR, you must type the command from a DOS prompt, not the 3N prompt.

---

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## 3N User Commands

---

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```
D>3N DIR | MORE ↵
Finding *:Finance:3Com ...
Finance
LindaY
Linda Young
Peter Jones
PeterJ
.
.
.
-- More -- ↵
SusanS
Susan Smith
.
.
.
D>
```

## 3N HELP

Displays information about 3N commands.

### Format

3N HELP [*commandname*]

### Parameter

*commandname*

The 3N command about which you want information.

If you omit this parameter, you see a list of all 3N commands and a brief description of their functions.

### Remarks

Help information is displayed in three levels.

The first level lists all 3N commands and a brief description of each command.

The second level gives detailed information for one specific 3N command. You can go directly to the second level by including the command name parameter.

The third level gives help information for a specific parameter. You can get help with a specific parameter when you are entering a command in the prompted form by typing **HELP** after the parameter prompt.



**NOTE:** You can type a question mark (?) instead of **HELP** for the first and third (but not the second) levels of help information. If you type a question mark (?) instead of **HELP** after a command at the second level you are prompted for all the command parameters. In 3F, 3N, and 3P, typing ? at the first level displays a list of commands; typing **Help** or **HELP ?** displays a list of commands and a description of each command.

---



## Examples

Example 1: Listing all 3N commands and a brief description of each command.

```
3N>HELP ↵
```

3N Commands:

Help	-	Display helpful information.
Login	-	Login to the network.
Logout	-	Logout from the network.
Dir	-	List 3Name names.
Stat	-	Show 3Name server information.
Set	-	Set 3N defaults.
Add	-	Add a name to 3Name server (Admin only).
Mod	-	Modify 3Name information.
Del	-	Delete a 3Name name (Admin only).
Assign	-	Assign a share name for 3Share.
Shutdown	-	Shutdown 3Name (Admin only).

3N>

Example 2: Displaying detailed information about one specific command. In this example, the command is DIR.

```
3N>HELP DIR ↵
```

3N DIR Command:

The 3N DIR command is used to list names and information from the 3Share Name service. Use 3N DIR ? to be prompted.

3N>

Example 3: Displaying information about a command parameter.

3N>LOGIN

Name? **HELP** ↵

Enter name [:domain[:org]].

Name?

## 3N MODIFY

Adds, changes or removes your login password.

### Format

3N MOD[IFY] /PASS=*password*

### Parameters

*password*

Your password. A login password can be up to 12 characters long.

### Remarks

You can type either MODIFY or MOD.

Your password protects the confidentiality of all the information you have stored on the network. If you do not have a login password, anyone who knows your name can log in and use information you have stored in 3+Share directories.

When you use the unprompted form of the 3N MODIFY command to create or change your login password, your new password appears on the screen as you type it.

### Examples

Example 1: Creating a login password.

```
3N> MOD ?
```

```
Password (*****)? secret ↵
```

```
Password modified
```

```
3N>
```

Example 2: Changing your login password.

```
3N>MOD /PASS=quiet ↵
```

Password modified.

3N>

Example 3: Removing your password.

```
3N>MOD /PASS= ↵
```

Password modified.

3N>

## 3N SET

Temporarily resets 3N's default server, domain, or organization.

### Format

3N SET [/SERVER=\\*server*] [/DOMAIN=*domain*] [/ORG=*organization*]

### Parameters

*server*

The three-part name of the server you want to use as the current 3N server.

(If the server is part of the Name service's current domain and organization, you can omit the domain and organization parts of the name.)

*domain*

The name of the domain you want to use as the 3N default domain.

(If the new domain is part of 3N's current organization, you can omit the organization part of the name.)

*organization*

The name of the organization you want to use as the current 3N organization.

### Remarks

3N SET assigns temporary defaults that 3N uses in its parameter prompting. It does not affect 3N's permanent defaults.

The defaults that you set with the 3N SET command will change if you enter a 3N command using a new server, domain, or organization. They will also change if you leave the Name service and return to DOS.

For example, you can reset the default domain and then enter 3N DIR commands for the new default domain without including the domain and organization as part of the name. However, if you then enter a 3N DIR command for a new domain, the new domain becomes the current default domain.

## Examples

Example 1: Temporarily resetting the default server.

```
3N>SET /SERVER=corporate ↵
```

Set complete.

```
3N>
```

Example 2: Temporarily resetting the default domain.

```
3N>SET /DOMAIN=hq ↵
```

Set complete.

```
3N>
```

Example 3: Temporarily resetting the default organization.

```
3N>SET /ORG=far corp ↵
```

Set complete.

```
3N>
```

## 3N STAT

Displays detailed information about your user name.

### Format

3N STAT[US]

### Remarks

For information about another user, use the 3N DIR USER command.

You can type either STAT or STATUS.

### Parameters

None

### Example

Example: Displaying your user information.

3N>STAT ↵

Login Name:	Linda Young:HQ:3Com
Address:	02608C170439
Capability Class:	User
Share Server:	Finance:HQ:3Com
Homedir:	linday
Mail Server:	Corporate:HQ:3Com
Default Domain:	HQ:3Com
Network Number:	00040010
Last Started:	7-20-86 4:21pm
Server Time:	8-1-86 10:46am
Current Domain:	HQ:3Com
Current Server:	
Current Group:	

3N>



**NOTE:** Information for the **Current Server** and **Current Group** will be shown only if you have changed the defaults using the 3N SET command.

---





## **Chapter 9: 3P User Commands**

This chapter provides a description of 3P user commands. 3P is the user interface for 3+Share's Print service.

For easy reference, the commands are described in alphabetical order. For definitions of key terms used in this chapter, refer to Chapter 11. For information on command syntax notation, see Chapter 6.

## 3P

Starts the 3P program (Print service)

### Parameters

none

### Remarks

The 3P command starts the 3P program and displays a copyright notice and version number. The DOS prompt (for example, A>) changes to 3P>.

After starting the 3P program, you can enter any 3P command without including the command prefix (3P). After each 3P command is completed, you return to the 3P prompt (3P>).

You can leave 3P and return to DOS and the DOS prompt (A>, for example), by pressing [Return] without typing a command.

You can also execute a 3P command by typing the command prefix (3P) and the command in one step. However, when the command is completed, you return to DOS and the DOS prompt, instead of remaining in the 3P program.

You cannot type a 3P command following the prompt for another service. Do not, for example, type 3F>3P LINK.

You can type multiple commands on one line by separating the commands with semicolons. For example:

```
3p>LINK prn: laserjet; SET /hold
```

### Example

Example: Starting the 3P program.

```
A>3P ↵
```

```
3Print 1.1 - Copyright (c) 3Com Corporation 1986. All  
rights reserved.
```

```
3P>
```

## 3P DELETE

Deletes a spool file from a print queue.

### Format

3P DEL[ETE] [*prinid*]/SPOOL=*spoolid*[/NP]

### Parameters

*prinid*

The printer identifier that is linked to the printer whose queue contains the file you want to delete. The printer identifier is one of the following:

► PRN: or LPT1:

► LPT2:

► LPT3:

The colon (:) is part of the printer identifier (for example, PRN:).

If you omit this parameter the file is deleted from the queue of the that is printer linked to PRN:.

*spoolid*

The spool identifier of the file you want to delete from the print queue. A spool identifier is a number that 3P assigns to a file when the file is placed in the print queue.

To determine a file's spool identifier, use the 3P QSTAT command.

To delete all your files from the print queue, include an asterisk (\*) in place of the spool identifier.

NP

Suppresses prompts such as "Are you sure?  
[Y/N]".**Remarks**

When you use the 3P DELETE command (you can type either DELETE or DEL), you must be linked to the printer whose queue contains the files you want to delete. You cannot delete another user's files from a print queue.

**Examples**

Example 1: Deleting a file from the print queue of a printer that is linked to the printer identifier PRN: without a prompt.

```
3P>DEL /SPOOL=102 /NP ↵
/SPOOL=102 deleted from //FINANCE:HQ:3COM/LASERJET.

3P>
```

Example 2: Deleting a file from the print queue of a printer that is linked to a printer identifier other than PRN:.

```
3P>DEL lpt2: /SPOOL=102 ↵

Are you sure [Y/N]? y ↵
/SPOOL=102 deleted from \\FINANCE:HQ:3COM\EPSON.

3P>
```

Example 3: Deleting all your files from a print queue.

```
3P>DEL lpt2: /SPOOL=* ↵

Are you sure [Y/N]? y ↵
/SPOOL=* deleted from \\FINANCE:HQ:3COM\EPSON.

3P>
```

## 3P DIR

Lists shared printers or links to shared printers and directories.

### Format

3P DIR [*\\servername*] [*[\\]printersharename*] [/LINK]

### Parameters

*servername*

The three-part name of the server whose printers you want to list, preceded by a double backslash (\\).

If the server is in your own domain, you can omit the domain and organization.

If you omit this parameter, you see a list of all the printers on your home server.

*printersharename*

The name of the shared printer for which you want information.

To display information about a printer not on your home server, you must precede the printer sharename with the server name.

If you omit this parameter, you will see a list of the shared printers on your home server or the server specified by *servername*.

**LINK**

If you include this parameter, the command will list all users linked to the server and printer specified. For example:

```
3PDIR [ [\\] printersharename ]  
      [/LINK]
```

If you omit this parameter, the command will list the shared printers on the specified server. For example:

```
3P DIR [\\ servername ]  
      [ [\\] printersharename ]
```

If you include only this parameter, but omit the *servername* and *printersharename* parameters, the command will list all the printers to which you are currently linked. For example:

```
3P DIR [/LINK]
```

If you include this parameter and a server name only, you will see a list of all users linked to printers and shared directories on the server. For example:

```
3P DIR [\\ servername ] [/LINK]
```



**NOTE:** If a user on the specified server is logged in at two different workstations, that user name will be listed twice. Even if you are not linked, your name will always be displayed when you include this parameter.

---

## Remarks

To determine which printer will be best for your job, use the 3P DIR and 3P QSTAT commands to find out which printers are available and how busy they are.

## Examples

Example 1: Listing all shared printers on your home server.

```
3P>DIR ↵
\\Finance:HQ:3Com
LASERJET          COM1:      5 users
EPSON             LPT1:      2 users
```

3P>

Example 2: Listing all shared printers on a specified server.

```
3P>DIR \\corporate ↵
\\Corporate:HQ:3Com
LASERJET          COM1:      2 users
OLIVETTI          LPT1:      2 users
EPSON             LPT2:      3 users
```

3P>

Example 3: Listing printers to which you are currently linked.

```
3P>DIR /LINK ↵
LPT1:             \\FINANCE:HQ:3COM\LASERJET
LPT2:             \\FINANCE:HQ:3COM\EPSON
```

3P>



Example 4: Listing users linked to a specific printer.

```
3P>DIR \\corporate\laserjet /LINK ↵
Users linked to \\CORPORATE:HQ:3COM\LASERJET ...
PETER JONES:HQ:3COM
STEVEN BROWN:HQ:3COM
```

3P>

Example 5: Listing all users linked to printers and shared directories on a specific server.

```
3P>DIR \\corporate /LINK ↵
Users linked to \\CORPORATE:HQ:3COM ...
PETER JONES:HQ:3COM
STEVEN BROWN:HQ:3COM
RICHARD GOMEZ:HQ:3COM
ROBERT CANTU:HQ:3COM
```

3P>

## 3P HELP

Displays information about 3P commands.

### Format

3P HELP [*commandname*]

### Parameters

*commandname*

The 3P command about which you want information. If you omit this parameter, you see a list of all 3P commands and a brief description of their functions.

### Remarks

Help information is displayed in three levels.

The first level lists all 3P commands and a brief description of each command.

The second level gives the format and describes the parameters for each command. You can go directly to the second level by including the command name parameter.

The third level gives help information for a specific parameter. You can get help with a parameter when you are entering a command in the prompted form by typing **HELP** after the parameter prompt.



**NOTE:** You can type a question mark (?) instead of **HELP** for the first and third (but not the second) levels of help information. If you type a question mark (?) instead of **HELP** after a command at the second level you are prompted for all the command parameters. In 3F, 3N, and 3P, typing ? at the first level displays a list of commands; typing **Help** or **HELP ?** displays a list of commands and a description of each command.

---

## Examples

Example 1: Displaying a list of 3P commands and a brief description of each command.

```
3P>HELP ↵
```

3P Commands:

Help	-	Provide helpful information.
Login	-	Login to the network.
Logout	-	Logout from the network.
Link	-	Link to a shared printer.
Unlink	-	Unlink from a shared printer.
Dir	-	List names of shared printers.
Qstat	-	Display a printer's queue.
Set	-	Set printer options.
Del	-	Delete a print queue entry.
Stat	-	Show 3Share printer information.
Movq	-	Move print queue to another printer (Admin only).
Stop	-	Stop a printer (Admin only).
Resume	-	Resume a printer (Admin only).
Share	-	Share a printer (Server user only).
Mod	-	Modify a shared printer (Server user only).
Unshare	-	Stop sharing a printer (Server user only).
Shutdown	-	Shutdown 3Share server (Admin only).

```
3P>
```

Example 2: Displaying help information for a Print command.

```
3P>HELP LINK ↵
```

3P LINK Command:

The 3P LINK command is used to establish a link between a DOS printer identifier on your PC, such as PRN:, and a shared printer on a 3Share server. Use 3P LINK ? to be prompted.

```
3P>
```

Example 3: Displaying help information for a specific parameter.

```
3P>LINK ↵
```

```
Printer Id (PRN:)? HELP ↵
```

Enter printer drive id, such as PRN:

Printer Id (PRN:)?

## 3P LINK

Links between a printer identifier that you designate from your workstation to a shared printer on a server.

### Format

3P LINK [*prnid*.:] [\\servername\] *printersharename* [/PASS=*password*] [/NP]

### Parameters

*prnid*

shared printer on a server.

The printer identifier that you use to link to a

identifiers:

Use one of the following four printer

► PRN: or LPT1:

► LPT2:

► LPT3:

The colon (:) is part of the printer identifier (for example, PRN:). If you omit this parameter, the printer you specify is linked to printer identifier PRN:.

*servername\printersharename*

The name of the shared printer that you want to link to a printer identifier.

If you are linking to a printer on your home server, you can omit the server name.

If you are linking to a printer connected to a server in your own domain and/or organization, you can omit the server's domain and organization.

*password*

The password for the printer, if one is required.

NP

Suppresses prompts, such as "PRN already linked ... OK to unlink [Y/N]?".

## Remarks

You can establish up to three printer links at the same time. You can link one printer to the printer identifier PRN: or LPT1:, one printer to LPT2:, and one printer to LPT3:.

If you do not know what printer will be best for your print job, you can use the 3P DIR and 3P QSTAT commands to find out which printers are available and how busy they are.

## Examples

Example 1: Linking a shared printer on your home server to the printer identifier PRN:.

```
3P>LINK laserjet ↵
```

```
PRN: linked to \\FINANCE:HQ:3COM\LASERJET.
```

```
3P>
```

Example 2: Linking a shared printer on a server other than your home server to a drive identifier other than PRN:.

```
3P>LINK lpt2: \\corporate\laserjet ↵
```

```
LPT2: linked to \\CORPORATE:HQ:3COM\LASERJET.
```

```
3P>
```

## 3P QSTAT

Lists files in a printer's queue and provides each file's spool identifier (number), size, status, priority in the print queue, the number of copies that will be printed, and the form on which the file will be printed.

### Format

3P QSTAT [*prnid*:| [\servername\]printersharename] [/SPOOL=#]

### Parameters

*prnid*

The printer identifier linked to the printer whose queue you want to list. Use one of the following printer identifiers:

► PRN: or LPT1:

► LPT2:

► LPT3:

You must include the colon (:).

Include this parameter when the printer whose queue you want to list is linked to a printer identifier on your workstation.

If you omit this parameter or the printer sharename parameter, you see a list of files in the queue of the printer linked to PRN:.

*servername\printersharename*

The name of the printer whose print queue you want to list.

Include this parameter when you want to list the print queue for a printer that you have not linked to a printer identifier.

If the printer is shared on your home server, you can omit the server name.

If the shared printer is on a server in your own domain, you can omit the server's domain and organization.

**SPOOL=#**

The number of the spool file. To list all spool files, type **ALL**.

If you omit this parameter, you see a list of your own files that are waiting in the printer's queue.

## Remarks

Files are stored in a print queue and printed on a first come, first served basis. You can delete your own files from a queue with the 3P DELETE command. You can also assign a priority to your own files in a print queue with the /PRI= parameter of the 3P SET command. A network administrator can delete any user's files from a print queue.

The 3P QSTAT command displays the following information about the files in the print queue:

Spool number

This is the first number shown in the display. Each file in the print queue is assigned a unique spool number.



Size	The size, in bytes, of the file.
Status	This tells you the current status of the file in the print queue by displaying one of the following:
Printing	The file is currently being printed.
Waiting	Another file is currently printing. Files with a status of waiting will be printed in the order they were sent to the queue.
Intercept	The user has issued the 3P SET /HOLD command. All files being sent to the printer after issuing this command are intercepted and held in the queue as a single entry until the user releases them with the 3P SET /HOLD=OFF command or by unlinking from the printer using 3P UNLINK.
Deferred	The user has issued the 3P SET /DEFER command which causes the specified spool file to be deferred in the print queue until the 3P SET /DEFER=OFF or 3P RELEASE command is issued. If the user issued the 3P SET /DEFER command without a specified spool file number, each file he sends to the printer will be shown in the queue with a status of deferred until released.
Printer Error	Something is wrong with the printer. Check to see if it is off or out of paper
Time	The date and time the file was sent to the queue.

Pri	The priority of the print job. Priorities range from 0 - 99 with 99 receiving first priority.
Copies	The number of copies to be printed.
Form	The form number on which the job will be printed.

There are several circumstances in which you might use 3P QSTAT:

- ▶ To compare the length of the print queues when choosing a printer.
- ▶ To estimate when your job will be printed (i.e., it's priority in the print queue).
- ▶ To determine the spool identifier of a print job in order to delete it or set special print options for it.

## Examples

Example 1: Displaying a list of your files in the print queue for a printer linked to PRN:.

```
3P>QSTAT ↵
```

```
Queue for \\FINANCE:HQ:3COM\LASERJET:
```

```
46 Size: 340    Status: Waiting  Time: 7-31-86    12:30p
    Pri:  50    Copies: 1        Form: 1
```

```
3P>
```

Example 2: Displaying all files in the print queue for a printer linked to a printer identifier.

3P>QSTAT lpt2: /SPOOL=ALL ↵

Queue for \\FINANCE:HQ:3COM\LASERJET:

43 Size: 239 Status: Printing Time: 7-31-86

12:25p

Pri: 50 Copies: 1 Form: 1

Owner: PETER JONES

3 Size: 21270 Status: Intercept Time: 7-31-86 11:35a

Pri: 50 Copies: 1 Form: 1

Owner: SUSAN SMITH

15 Size:14440 Status: Deferred Time: 7-31-86

12:05p

Pri:50 Copies: 1 Form: 1

Owner: KEITH ADAMS

46 Size:340 Status: Waiting Time: 7-31-86

12:30p

Pri: 50 Copies: 1 Form: 1

Owner: LINDA YOUNG

3P>

Example 3: Displaying all files in the print queue for a printer that is not linked to a printer identifier from your workstation.

```
3P>QSTAT \\corporate\laserjet /SPOOL=ALL ↵
```

```
Queue for \\FINANCE:HQ:3COM\LASERJET:
```

```
43 Size: 239    Status: Printing    Time: 7-31-86  12:25p
   Pri: 50      Copies: 1           Form: 1
   Owner: STUART BIGGS
```

```
3  Size: 21270 Status: Intercept    Time: 7-31-86  11:35a
   Pri: 50      Copies: 1           Form: 1
   Owner: DE MOORE
```

```
15 Size:14440   Status: Deferred    Time: 7-31-86  12:05p
   Pri: 50      Copies: 1           Form: 1
   Owner: FRANK STEINER
```

```
3P>
```

## 3P SET

Sets special printing options for a printer or file.

### Format

3P SET [*prnid*:] [/HOLD[=OFF]] [/COPIES=#] [/PRI=#] [/DEFER[=OFF]]  
[/RELEASE] [/FORM=#] [/SPOOL=#]

### Parameters

*prnid*

The printer identifier that is linked to the printer for which you want to set options. Use one of the following printer identifiers:

► PRN: or LPT1:

► LPT2:

► LPT3:

If you omit this parameter, options are set for the printer linked to the printer identifier PRN:.

HOLD[=OFF]

HOLD holds the printing of all print jobs that you send to a printer until you enter the 3P UNLINK command or /HOLD=OFF. When you hold files with the /HOLD parameter, the files you send to a printer are batched and lose their place in the print queue.

When you release the held files for printing, the files are placed at the bottom of the print queue as though they had just been sent to the printer, and they are printed together.

If you omit this parameter, the state of /HOLD remains unchanged.



**NOTE:** The parameter can not be used in conjunction with the SPOOL=# parameter.

---

COPIES=#

Prints multiple copies of a document. Enter /COPIES, followed by an equal sign (=), followed by the number of copies you want printed. You can print up to 99 copies at one time.

If you omit this parameter, the quantity remains unchanged. The default is 1.

PRI=#

The priority you can assign to your own files in a print queue. It can be any number from 1 to 99; 1 is the lowest priority and 99 is the highest priority.

If you omit this parameter, the priority is unchanged. The default is 50.

DEFER[=OFF]

DEFER defers printing of a file until you release the file for printing with the /RELEASE parameter or /DEFER=OFF. When you defer the printing of a file with the /DEFER parameter, the file maintains its place in the print queue.

When you release a deferred file for printing, the file is printed in turn. If you release a deferred file after its place in the queue has passed, it is moved to the top of the queue.

If you omit this parameter, the /DEFER state is unchanged.

**RELEASE**

Releases deferred files for printing.

**FORM=#**

The number of the form on which you want your file to print. The printer waits until that form is loaded before it prints your file.

If you omit this parameter, your file is printed on form number one.

**SPOOL=#**

The spool identifier of the file for which you are setting options. The spool identifier is the number that 3P assigns to a file when the file is placed in the print queue. Include this parameter if you want to set options for one file.

If you omit this parameter, the options you set apply to all files you send to the printer.



**NOTE:** For the /COPIES, /PRI, /DEFER, and /FORM parameters, you must specify the spool number affected, unless you want to set those parameters for all subsequent files. Compare Examples 3 and 4.

---

## Remarks

You can set one or all of the 3P SET command parameters.

The RELEASE parameter releases for printing those files that were deferred with the DEFER parameter. It does **not** release files whose printing was held with the HOLD parameter.

To see the current state of these option settings use 3P STAT command.

## Examples

Example 1: Holding printing of files.

```
3P>SET lpt2: /HOLD ↵
\\FINANCE:HQ:3COM\OLIVETTI set.

3P>
```

Example 2: Releasing held files for printing.

```
3P>SET lpt2: /HOLD=OFF ↵
\\FINANCE:HQ:3COM\OLIVETTI set.

3P>
```

OR

```
3P>UNLINK lpt2: ↵
LPT2: unlinked from \\FINANCE:HQ:3COM\OLIVETTI.

3P>
```

Example 3: Printing multiple copies of all files that you are sending to the printer. This command does not change the characteristics of files that are already in the print queue.

```
3P>SET lpt2: /COPIES=10 ↵
\\FINANCE:HQ:3COM\OLIVETTI set.

3P>
```

Example 4: Setting a high priority for a file.

```
3P>SET lpt2: /PRI=99 /SPOOL=105 ↵
\\FINANCE:HQ:3COM\OLIVETTI set.

3P>
```



Example 5: Deferring printing of a file, using prompted mode.

```
3P>SET ? ↵  
  
Printer Id (PRN:)? 1pt2: ↵  
  
Hold [On/Off]? ↵  
  
Copies? ↵  
  
Priority? ↵  
  
Defer [ON/OFF]? on ↵  
  
Form Number? ↵  
  
Spool Id? 105 ↵  
\\FINANCE:HQ:3COM\OLIVETTI set.  
  
3P>
```

Example 6: Releasing a deferred file for printing.

```
3P>SET 1pt2: /DEFER=OFF /SPOOL=105 ↵  
\\FINANCE:HQ:3COM\OLIVETTI set.  
  
3P>  
  
OR  
  
3P>SET 1pt2: /RELEASE /SPOOL=105 ↵  
\\FINANCE:HQ:3COM\OLIVETTI set.  
  
3P>
```

Example 7: Specifying the forms on which all your files (in the print queue) will be printed.

```
3P>SET lpt2: /FORM=7 ↵
```

```
\\FINANCE:HQ:3COM\OLIVETTI set.
```

```
3P>
```

## 3P STAT

Displays status information about the current logged-in users and the shared printers on a server.

### Format

3P STAT[US] [\servername] | [\servername\printersharename] | [pnid:]

### Parameters

*servername*

The three-part name of the server about whose shared printers you want to display information.

If the server is in your own domain and organization, you can omit the domain and organization.

If you omit this parameter, you see status information for all printers on your home server.

*printersharename*

The printer about which you want to display information.

If the printer is connected to a server other than your home server, you must precede the printer sharename with the name of the server followed by a backslash (\).

If you omit this parameter, you see status information for all printers on your home server.

*pnid*

The printer identifier that is linked to a printer for which you want to display status information. Use one of the following printer identifiers: PRN:, LPT1:, LPT2:, or LPT3:. (PRN: is the same as LPT1:.) You must include the colon (:).

If you omit this parameter, you see status information for all printers on your home server.

## Remarks

The 3P STAT command (you can type STAT or STATUS) displays the status information either for all printers shared on a server or for one specific printer.

## Examples

Example 1: Displaying status information for all printers shared on a server.

```
3P>STAT \\corporate ↵
```

```
Login Name:          Linda Young:HQ:3Com
Address:             02608C170439
Capability Class:    User
Share Server:        Finance:HQ:3Com
```

Printer Status for \\CORPORATE:HQ:3COM ...

```
Device: COM1:  Description:hplaserjet
Type:  Serial  Shares:      1      Reset Len: 18
Baud:  9600    Parity:      8 Bit  Protocol:  H/W XOn/X Of
Buffer: 512    I/O Base:    3F8    Int:      4
Retry:  50     Reset Retry:100    Status:   Started
FF:     ON     New Links?  YES    Banner:   ON
Form:    1
```

```
Device: LPT1:  Description: epson
Type:  Parallel Shares:      1      Reset Len: 0
Buffer: 512    I/O Base:    3BC    Int:      7
Retry:  50     Reset Retry: 0     Status:   Started
FF:     ON     New Links?  YES    Banner:   ON
Form:    1
```

\*\*\*End of list.

```
3P>
```

Example 2: Displaying status information for all printers on your home server.

3P>STAT ↵

Printer Status for \\FINANCE:HQ:3COM ...

Device:COM1:	Description:hplaserjet
Type: Serial	Shares: 1 Reset Len:18
Baud: 9600	Parity: 8 Bit Protocol: H/W XOn/X Of
Buffer:512	I/O Base: 3F8 Int: 4
Retry: 50	Reset Retry:100 Status: Started
FF: ON	New Links? YES Banner: ON
Form: 1	

Device:LPT1:	Description:olivetti
Type: Parallel	Shares: 1 Reset Len:0
Buffer:512	I/O Base: 3BC Int: 7
Retry: 50	Reset Retry:0 Status: Started
FF: ON	New Links? YES Banner: ON
Form: 1	

\*\*\*End of list.

3P>

Example 3: Displaying status information for a shared printer linked to your workstation.

3P>STAT lpt2: ↵

Status of LPT2: (linked to \\FINANCE:HQ:3COM\OLIVETTI):  
Copies:1 Pri:50 Form:1 Hold:OFF Defer:OFF

3P>

## 3P UNLINK

Ends a link between a printer identifier you designate from your workstation and a shared printer on a server.

### Format

3P UNLINK [*prnid*:]

### Parameters

*prnid*  
printer. Use one of the

The printer identifier to be unlinked from the following printer identifiers:

- ▶ PRN: or LPT1:
- ▶ LPT2:
- ▶ LPT3:

If you omit this parameter, it defaults to the printer identifier PRN:, (as shown in example 1).

### Remarks

The 3P UNLINK command ends a link between a printer identifier you use from your workstation and a printer connected to a server. Unlinking a printer identifier makes it available to link to another printer.

When you enter the 3P UNLINK command, any files held from printing with the /HOLD parameter of the 3P SET command are released for printing.

**NOTE:** You can end all your links to printers either by logging out of 3+Share or rebooting (restarting ) your workstation.

**Examples:**

Example 1: Ending a link between a printer and the printer identifier PRN:.

```
3P>UNLINK ↵
```

```
PRN: unlinked from \\FINANCE:HQ:3COM\LASERJET.
```

```
3P>
```

Example 2: Ending a link between a printer and a printer identifier other than PRN:.

```
3P>UNLINK lpt2: ↵
```

```
LPT2: unlinked from \\FINANCE:HQ:3COM\OLIVETTI.
```

```
3P>
```

## Chapter 10: Command Summary

This chapter summarizes LOGIN, LOGOUT, and 3F, 3N, and 3P user commands.

**LOGIN** [[\]username] [/PASS=password]

Identifies you as a registered 3+Share user and allows you to access your home directory.

**LOGOUT**

Ends your connection to the 3+ network. Automatically unlinks you from shared printers and directories.

**3F**

Starts the 3F program.

**3F DIR** [\username\\servername] [sharename] [/LINK]

Displays information about shared directories.

**3F HELP** [commandname]

Displays information about 3F commands.

**3F LINK** driveid: [\username\\servername [\\]] [sharename]  
[PASS=password] [/NP]

Links a drive identifier on your workstation to a shared directory on a server's disk.



- 3F MOD[IFY] *sharename* [/PASS=*newpass*] [/newaccess] [/NP]**  
Changes the password and access rights for the *sharename* of a shared directory.
- 3F SHARE *sharename=path* [/PASS=*password*] [/access]**  
Makes a directory on a server available to users.
- 3F STAT[US] [\\servername]**  
Displays status information for shared disks on a server.
- 3F UNLINK *driveid*: [/NP]**  
Ends a link between a drive identifier on your workstation and a shared directory on the server's disk.
- 3F UNSHARE *sharename***  
Deletes a *sharename*.
- 3N**  
Starts the 3N program.
- 3N ASSIGN *IBMname*=[\\name]**  
Assigns an IBM-compatible name to represent the three-part name of a server.
- 3N DIR [*itemtype*] [\\name]**  
Lists names of items on the network -- aliases, domains, groups, members, organizations, servers, or users -- or displays detailed information about a specific item.
- 3N HELP [*commandname*]**  
Displays information about 3N commands.
- 3N MOD[IFY] /PASS=*password***  
Adds, changes, or removes your login password.
- 3N SET [/SERVER=\\server] [/DOMAIN=*domain*] [/ORG=*organization*]**  
Temporarily resets the 3N's default server, domain, or organization.
- 3N STAT[US]**  
Displays detailed information about your user name.

**3P**

Starts the 3P program.

**3P DEL[ETE] [*prnid:*] /SPOOL=*spoolid* [/NP]**

Deletes a spool file from a print queue.

**3P DIR [*\\servername*][*\\*]*printersharename*] [/LINK]**

Lists shared printers or links to shared printers and directories.

**3P HELP [*commandname*]**

Displays information about 3P commands.

**3P LINK [*prnid:*] [*\\servername*]*printersharename* [/PASS=*password*] [/NP]**

Establishes a link between a printer identifier that you designate from your workstation and a shared printer on a server.

**3P QSTAT [*prnid:*] [*\\servername*]*printersharename*] [/SPOOL=*#*]**

Displays a printer's queue.

**3P SET [*prind:*] [/HOLD [=OFF]] [/COPIES=*#*] [/PRI=*#*] [/DEFER [=OFF]]  
[/RELEASE] [/FORM=*#*] [SPOOL=*#*]**

Sets special printing options for a printer.

**3P STAT[US] [*\\servername*] | [*\\servername*]*printersharename*] | [*prind:*]**

Displays status information about the current shared printers on a server.

**3P UNLINK [*prnid:*]**

Ends a link between a printer identifier that you designate from your workstation and a shared printer on a server.



## Chapter 11: Glossary

This glossary is a summary of terms and concepts used in this guide.

<b>Access rights</b>	Attributes that you assign to a sharename to control how other users access the directory through that sharename.
<b>Administrator</b>	A network user who can access commands that allow him to set up and manage the network.
<b>Alias</b>	A shorter or alternate version of a user's name service. Aliases must be specified as three-part names when three-part names are required.
<b>Directory</b>	A named logical grouping that contains entries for other directories and files. Network users can share directories with other users.
<b>Domain</b>	The second part of a three-part name (Name:Domain:Organization). A category of an organization that is usually a geographical location or a department of an organization.
<b>Drive identifier</b>	A single letter (A: through Z:) that can be linked to a directory on a server. Used to refer to a logical drive on the network.

<b>File service</b>	The software that manages the sharing of directories and disk space on the network.
<b>Home directory</b>	A directory created for each network user by 3+Share when the user is added to the Name service.
<b>Linking</b>	Establishing a connection between a drive identifier and a shared directory or a printer identifier and a shared printer.
<b>Name service</b>	The software that stores the names of, and information about, users and servers.
<b>Network</b>	Servers and workstations with installed network software that are connected by cable to allow communication and sharing of resources.
<b>Organization</b>	The third part of a three-part name (Name:Domain:Organization). The largest category to which a user or server on the network belongs, usually the name of a company.
<b>Password</b>	A word that can be assigned to a user name or a sharename to control access to files. Passwords for user names can be up to twelve characters long. Passwords for sharenames can be up to eight characters long. Once a password is assigned to the name of a user, directory, or printer, it must be entered with the name to which it is assigned.
<b>Path</b>	A path provides the location of a directory in relation to directories above it. The first step in a path is a drive identifier. Each following step is a directory name preceded by a backslash (\), except that a user or server name is preceded by a double backslash (\\).

<b>Printer identifier</b>	A printer identifier is a name used by a workstation to link to a shared printer. (The default printer identifier is PRN:.)
<b>Print queue</b>	An ordered list of files waiting to be printed.
<b>Print service</b>	The software that manages shared printers on a server.
<b>Printer sharename</b>	The name assigned to a printer when it is shared using the 3P SHARE command. Printer sharenames may consist of up to 8 characters.
<b>Server</b>	Either a personal computer, or a 3Server with installed 3+Share server software, that manages network resources.
<b>Servename</b>	The three-part name of a server on the network. (If the server is in your own domain, you can omit the domain and organization parts of the name.)
<b>Shared directory</b>	A directory that can be used by other users. Directories are made shareable with the 3F SHARE command.
<b>Share list</b>	A collection of the sharenames of directories and printers for the respective server. The File and Print services use the share list during a link procedure to access those shared resources. The database SHRLIST is kept in the \3PLUS subdirectory and contains this information.
<b>Sharename</b>	A name assigned to a directory when it is declared shareable; used for linking to a shared directory.
<b>Spool file</b>	A temporary file on a shared printer's server that stores a file sent for printing.
<b>Spool id or identifier</b>	A number assigned by the Print service to identify a spool file in a print queue.

<b>Subdirectory</b>	A directory that is below another directory in the DOS hierarchal file structure.
<b>Three-part name</b>	<p>The name by which Name service identifies network users and servers. User and server names are in three-part heirarchical format separated by colons (:):</p> <p><code>name:domain:organization</code></p> <p><b>Name</b> is the user's name. <b>Domain</b> is a geographical location or a department within an organization. <b>Organization</b> is usually the company name. For example:</p> <p><code>Linda Young:HQ:3Com</code></p> <p>Three-part names are limited to 40:20:20 characters and may consist of up to a combined total of 58 characters, including the colons (:).</p> <p>(If the user is in your own domain, you can omit the domain and organization parts of the name.)</p>
<b>3+Share</b>	The server and user for the 3+ network software that comprises of the Name, File, and Print Services.
<b>3F</b>	The user interface for 3+Share's File service.
<b>3N</b>	The user interface for 3+Share's Name service.
<b>3P</b>	The user interface for 3+Share's Print service.
<b>Unlinking</b>	Breaking a logical connection between a shared directory and a drive identifier, or between a shared printer and a print identifier.

**Users**

A category of those who use network resources, but do not manage the network.

**Workstation**

A personal computer connected to the network with installed user software.





## Appendix A: Error Messages

The following messages are returned from the 3+Share client user software:

### **A value is required**

Meaning	You have omitted a required parameter from a command.
Action	Check the command format and supply the required parameters.

### **Access denied**

Meaning	You are trying to link to a private directory (access rights /PRIV) that is currently in use.
Action	Try again later.

### **Alias points to an alias**

Meaning	A Name service error occurred causing the alias you specified to point to a name that is also an alias; it is no longer usable.
Action	Delete the alias, and recreate it.

**Alias' name doesn't exist**

Meaning	The name for the alias you are trying to create has been deleted.
Action	Delete the alias and recreate it for an existing name. (Use 3N DIR to get a listing of all names in the Name service.)

**Already shared**

Meaning	You tried to share a directory that is a home directory of another user.
Action	None. You cannot share this directory.

**Bad device type**

Meaning	When issuing a LINK command, you tried to link to an unidentifiable device type.
Action	Try the link again.

**Bad DOS path name**

Meaning	The path name given for the command you issued is unidentifiable.
Action	Check the path name and try again.

**Bad Drive**

Meaning	You specified a drive identifier that is out of the current range.
Action	Edit the LASTDRIVE= line in the CONFIG.SYS file on your 3+ <i>Local Workstation Startup</i> diskette, increasing the specified parameter; or, use a drive specifier within the limits of the existing network drives. (Refer to Appendix D for complete information about the LASTDRIVE command.)

**Bad form type**

Meaning        You entered an illegal value while specifying a form type.

Action         Specify a valid form type in the range of 1 to 99.

**Bad name**

Meaning        You entered an illegal character in a Name service name.

Action         Type the name again, correctly.

**Bad or closed session**

Meaning        A network link has been disconnected due to a network problem.

Action         Relink. If that fails to solve the problem, then log out and log in again; or reboot.

**Bad password**

Meaning        You have included an incorrect password with a 3F or 3P link.

Action         Re-enter the command with the correct password.

**Bad path**

Meaning        The path name is invalid.

Action         Check the path name and try again.

**Bad printer name**

Meaning	You specified a printer that is not on the server.
Action	Use 3P DIR to display the names of the printers on the server.

**Bad queue entry (*Number*)**

Meaning	You gave a spool identifier that does not exist. The file may have already been printed.
Action	Use 3P QSTAT to get a correct spool identifier.

**Bad request**

Meaning	A disk error has occurred on the server.
Action	Retry the operation. If the message appears again, have your network administrator check the server hardware.

**Bad sharename**

Meaning	The sharename you entered is formatted incorrectly.
Action	Re-enter using a maximum of eight DOS characters.

**Bad short name**

Meaning	You entered an illegal character while trying to ASSIGN a short name to a three-part name.
Action	Re-enter the command using a maximum of 15 characters (no blanks).

**Bad state**

Meaning            This is an internal 3+ program error.

Action            Log in again, or reboot.

**Bad values**

Meaning            You entered an illegal value while trying to change the form type.

Action            Specify a form type in the range of 1 to 99.

**BUF not loaded**

Meaning            BUF.SYS has not been booted.

Action            Check that your CONFIG.SYS file references the correct BUF.SYS file, then reboot. (Refer to Appendix D for complete information on the CONFIG.SYS file.)

**Cache error**

Meaning            There was a problem getting information from the Name service (out of the login cache or information storage). If the error occurs when logging out, there was a problem getting the user name or setting the cache.

Action            Make sure your CONFIG.SYS file references the correct version of LGL.SYS. Reboot the workstation and try again. (Refer to Appendix D for complete information about the CONFIG.SYS file.)

**Cancelled**

Meaning	You have used the [Esc] key to cancel a command.
Action	Continue with the next command.

**Can only clear another user's password**

Meaning	When you modify another user's password, you can only clear the existing one; you cannot assign a new password.
Action	At the prompt, press [Return] to indicate no change; or press [Esc] then [Return] to clear the old value.

**Can't access 3Com Process Manager MINDSPRO**

Meaning	Either the AUTOEXEC.BAT file does not contain the driver MINDSPRO on the RUNMINDS line, or you have just formatted a floppy diskette.
Action	Check that your AUTOEXEC.BAT file contains the MINDSPRO driver. If you receive this message after formatting a floppy diskette, list a directory of the diskette using the DOS DIR command. You should then be able to continue network operations. (For more information about the AUTOEXEC.BAT file, consult your network administrator or refer to Appendix D of this guide.)

**Can't change while printing**

Meaning	You are trying to change the priority or form type of a file while it is being printed.
Action	Let the file print, or delete it from the print queue.

**Can't link to someone's homedir**

**Meaning**            You are trying to link to a home directory that is not your own.  
                              (That is possible only if the user has explicitly assigned a  
                              sharename to his or her home directory. )

**Action**             None. You cannot link to this home directory.

**Can't use /HOLD with /SPOOL=num**

**Meaning**            The 3PSET Command does not support the /HOLD  
                              parameter if you also include a spool identifier.

**Action**             Enter the command again, omitting the spool identifier.

**Can't use a pattern**

**Meaning**            Wildcard characters are not allowed with the command you  
                              entered.

**Action**             Re-enter the command.

**Domain already exists**

**Meaning**            You are trying to add a domain that is already registered  
                              under the specified organization.

**Action**             Use 3N DIR DOMAIN [*organization*] to get a listing of domains  
                              for either the specified or the default organization.

**Drive in use**

**Meaning**            You tried to link to a drive identifier that is already linked.

**Action**             Link to another drive identifier.



**Drive not linked**

**Meaning** You are trying to enter a 3P command using a printer drive identifier that has not been linked.

**Action** Link the drive identifier and re-enter the command.

**End of list**

**Meaning** The list was changing when you entered a 3P DIR or 3P STAT command.

**Action** Re-enter the command.

**Enter printer drive, such as PRN:**

**Meaning** Supply the printer drive identifier followed by a colon (:).

**Action** Supply a printer identifier, such as PRN:, LPT1:, LPT2:, or LPT3:.

**Enter valid DOS identifier**

**Meaning** The drive identifier you specified is not valid.

**Action** Enter a letter (A - Z) followed by a colon (:). Make sure the drive identifier used is within the range allowed by the LASTDRIVE statement in the AUTOEXEC.BAT file. For more information, see Appendix D.

**Enter Yes or No**

**Meaning** When you were prompted to answer Y (Yes) or N (No), you entered a value other than Y or N.

**Action** Answer the prompt with a Y or N.

**Error (Number)**

Meaning	System error.
Action	Write down the error number and a description of the operation you were doing when the error message appeared, then contact your network administrator.

**Error closing connection to Share server**

Meaning	There was a general failure at the Share server.
Action	Make sure the Share server is on-line, then check for general network problems.

**Error getting homedir  
(specific error message)**

Meaning	During login, the Name service encountered the specified problem while trying to find the user's home directory. Look up the specific error message for more information.
Action	Make sure the Name service is on-line, and make sure the information is correct for the user in question. If possible, follow the recommended action for the specific error. Otherwise, delete and recreate the user with another home directory.

**Error getting Mail server address  
(specific error message)**

Meaning	During login, the Name service encountered the specified problem while trying to find the user's home directory.
Action	Look up the specific error message for more information, and follow the recommended action.

**Error getting Mail server name  
(*Specific error message*)**

Meaning	During login, the Name service encountered the specified problem while trying to find the user's Mail server.
Action	Look up the specific error message for more information, and follow the recommended action.

**Error getting Share server address  
(*Specific error message*)**

Meaning	During login, the specified problem was encountered while trying to find the Share server address.
Action	Look up the specific error message for more information, and follow the recommended action.

**Error getting Share server name  
(*Specific error message*)**

Meaning	During login, the specified problem was encountered while trying to find the Share server name.
Action	Look up the specific error message for more information, and follow the recommended action

**Error loading LOGIN.EXE**

Meaning	The program tried to load LOGIN.EXE but was unable to find it.
Action	Make sure that your path is set up so that the program can find LOGIN.EXE.

### **Error loading LOGOUT.EXE**

Meaning	The program tried to load LOGOUT.EXE but was unable to find it.
Action	Make sure that your path is set up so that the program can find LOGOUT.EXE.

### **Error transmitting to Share server**

Meaning	There was a problem when sending a request to the Share server.
Action	Check to make sure the Share server is on-line, then look for general network problems.

### **File is being spooled**

Meaning	You tried to change information about a file that is being spooled.
Action	Wait until the file has been spooled, then try again.

### **General failure**

Meaning	There is a disk error on the server.
Action	If recurrent, check the hardware on the server.

### **Get machine name filled**

Meaning	There is some inconsistency between the MS-DOS Redirector and the 3+ software.
Action	Logout and reboot.

## **IDP not loaded**

Meaning	The IDP driver is required.
Action	Check that your CONFIG.SYS file references the correct IDP.SYS driver. (Refer to Appendix D for complete information on the CONFIG.SYS file.)

## **In use**

Meaning	You tried to delete a directory that is linked.
Action	Unlink the directory, then try the command again.

## **Inadequate capability**

Meaning	You tried to perform a task that requires administrator capability.
Action	Ask your network administrator to perform the task for you.

## **Incorrect password**

Meaning	The password you specified is incorrect.
Action	Check your spelling and try again.

**Internal Error**

Meaning	The maximum number of map entries allowed in the Login Library has been exceeded. This can occur when you attempt to link (3F or 3P LINK) or list directories (3F or 3P DIR) to more than eight different servers. In addition, each time you use the 3N ASSIGN command to assign an IBM-compatible name to represent the three-part name of a server, you use one of the map entries.
Action	Reboot the workstation to clear the Login Library map entries. (If you need to link to more than eight servers on a regular basis, consult your network administrator or refer to Appendix D of this guide for information on increasing the -m parameter on the line DEVICE=LGL.SYS in your CONFIG.SYS file.)

**Invalid domain**

Meaning	You entered illegal characters when specifying the domain.
Action	Check the spelling and try again.

**Invalid name**

Meaning	You entered illegal characters when specifying the name.
Action	Check the spelling and try again.

**Invalid organization**

Meaning	You entered illegal characters when specifying the organization.
Action	Check the spelling and try again.

## **LGL not loaded**

Meaning	Either the CONFIG.SYS file does not contain the driver LGL.SYS, or you have just formatted a floppy diskette.
Action	Check that your CONFIG.SYS file contains the LGL.SYS driver. If you receive this message after formatting a floppy diskette, list a directory of the diskette using the DOS DIR command. You should then be able to continue network operations. (For more information about the CONFIG.SYS file, consult your network administrator or refer to Appendix D of this guide.)

## **Login name not found**

Meaning	A user has been deleted from the Name service while still logged in, or the client-side login library has been corrupted.
Action	Reboot and try logging in again. If the message persists, ask the network administrator to recreate your user name in the Name service.

## **Mail error (*Number*)**

Meaning	The mail server returned an unexpected error.
Action	Write down the error number and the operation you were trying to perform when the error message appeared and contact your network administrator for help.

## **Max server links**

Meaning	The server is handling the maximum number of sessions possible.
Action	Unlink a directory or printer that you are not currently using, then try the link again.

### **Max sessions**

**Meaning** You are trying to link to more objects than are allowed by the session parameters of the NB and MSREDIR command lines in your AUTOEXEC.BAT file.

**Action** Use EDLIN, MED or another text editor to change your AUTOEXEC.BAT file. To increase the session parameters, edit the NB and MSREDIR command lines. Numbers shown below in *italics* should be increased.

NB *5 4 3*  
MSREDIR /S:*5*

The number you enter should be the same on the NB command line as on the MSREDIR command line. If other parameters are included in the AUTOEXEC.BAT file, do not delete them. Instead, change their value or add the additional parameter shown above. Log out, restart your workstation, and try again. (For complete information about the available parameters, refer to Appendix D.)

### **Max Sharenames on Server**

**Meaning** The maximum number of sharenames allowed have already been created.

**Action** Contact your network administrator and request that the maximum number of sharenames allowed be increased, or use the 3F UNSHARE command to unshare one of your other directories.

### **Max short name length is 15**

**Meaning** Short names can have up to 15 characters. (You tried to ASSIGN a name with more than 15 characters.)

**Action** Try the command again using a shorter name.



**Must be a legal DOS directory name**

Meaning	The home directory must contain only legal DOS characters (no embedded spaces, etc.)
Action	Re-enter a legal DOS name.

**Must be a valid DOS drive id, such as C:**

Meaning	You have specified a drive identifier out of the range of the LASTDRIVE command in your CONFIG.SYS file.
Action	Check the CONFIG.SYS file entry LASTDRIVE= <i>n</i> to find out which drive identifiers are valid. Re-enter a valid drive identifier or increase the parameter. (Refer to Appendix D for complete information on the CONFIG.SYS file.)

**Must be Admin**

Meaning	You have tried to use a command that is restricted to users with administrator status.
Action	Ask your network administrator to complete the command for you.

**Must be an Admin or a Server user**

Meaning	To issue this command you must be either an administrator, or a user logged in as the server.
Action	Ask your network administrator to complete the command for you.

**Must be Server user**

Meaning	You must be logged in using the server name.
Action	Ask your network administrator to complete the command for you.

**Must supply a printer sharename**

Meaning	The command requires that you include a printer sharename.
Action	Supply a printer sharename.

**Name not found**

Meaning	The name included in the command does not exist in the Name service.
Action	Check that the name you are entering is correct, then try again with the correct name.

**Name server not responding**

Meaning	You are trying to get information about a user or server from the Name server and the server is not responding.
Action	Make sure that the Name server is working. Then re-enter the command.

**Need \ before sharename**

Meaning	An unidentifiable character precedes the sharename.
Action	Re-enter the sharename.

**NET804: Network busy**

Meaning	Either the service is busy, or someone has disconnected some part of the network.
Action	Unlink and relink, then re-enter the command. If the error persists, contact your network administrator.

**NET 805: Network device no longer exists**

Meaning	Either the resource may no longer be shared on the network, or a link was broken due to a network problem.
Action	Try relinking. If the problem persists, contact your network administrator.

**NET 825: Network data fault error writing to drive x:  
Abort, Retry, Ignore**

Meaning	The disk containing the shared directory that is linked to drive x has run out of space.
Action	Type an A to abort, and contact your network administrator.

**Network error**

Meaning	The network may be unterminated; something may be wrong with the network adapter board; the drivers may be out of sync.
Action	Make sure that the network is intact, then reboot and log in as needed; make sure your CONFIG.SYS file is correct; then consult your network administrator. (Refer to Appendix D for complete information on the CONFIG.SYS file.)

**Network retrying ... Retry can be stopped by pressing < CTRL><BREAK>**

Meaning	A timeout has occurred on the network.
Action	If you have issued a DOS DELETE command to a large number of files, give the operation ample time to complete. If the message continues to appear, use the [Ctrl]+[Break] option to stop the retry process. Try the operation again. If the message still appears, reboot (restart) your workstation. If the message persists, ask the network administrator to check the network cabling for broken connections.

**No homedir**

Meaning	Due to an internal error the Name service has lost the homedir entry for the user.
Action	Consult your network administrator.

**No share access**

Meaning	You tried to share a directory that belongs to another user and that does not have a /SHARE access right.
Action	The owner of the directory has to modify the sharename of the directory so that it has /SHARE access.

**No such domain**

Meaning	The domain you typed does not exist within the organization that you specified.
Action	Check your spelling; if it is correct, use 3N DIR DOMAIN to get a listing of domains registered in the Name service.

**No such name**

Meaning	The name you typed does not exist within the domain that you specified.
Action	Check your spelling; if it is correct, use 3N DIR to get a listing of names registered in the Name service.

**No such organization**

Meaning	The organization you typed does not exist.
Action	Check your spelling; if it is correct, use 3N DIR ORGANIZATION to get a listing of organizations registered in the Name service.

**No user logged in**

Meaning	You tried to log out without first being logged in.
Action	No action is necessary.

**Not a server**

Meaning	You entered a name that is not a server name.
Action	Try again with the correct server name.

***(Three part name)* not a user or server**

Meaning	You tried to log in using a name that is incorrect.
Action	Try the operation again with a correct login name.

**Not enough memory**

Meaning	There is not enough available memory remaining to run 3N.
Action	Add more memory or cut down on the number of programs (such as MailMinder) that load and stay resident.

**Not owner**

Meaning	You tried to modify or unshare a directory owned by another person.
Action	None. You cannot modify or unshare this directory.

**Nothing to set**

Meaning	You entered a set command without supplying information about options.
Action	Re-enter the command, supplying the options you want to set.

**Number of copies must be 1-99**

Meaning	The number of copies that can be printed at one time is 1 through 99.
Action	Supply a value for the number of copies within the range above.

**Object is a homedir**

Meaning	You cannot unshare a home directory.
Action	None.

**ON or OFF**

Meaning	You may only enter either ON or OFF.
Action	Enter either ON or OFF.

**Password required**

Meaning	To do the link, you need to enter a password.
Action	Enter the password.

**Password too large**

Meaning	You entered a password with too many characters. (Login passwords can have up to 12 characters, and 3N and 3P passwords can have up to 8 characters.)
Action	Re-enter the password with the correct number of characters.

**Path too big**

Meaning	The path you entered is too big.
Action	Re-enter the path.

**Pattern not allowed**

Meaning	You cannot include a wild character (*) in the command that you entered.
Action	Omit the asterisk (*).

**Please log in first**

Meaning	You must log in to the network before you can enter 3F or 3P commands.
Action	Log in.

**Please log in first OS error**

Meaning	The Name service has returned an unexpected error.
Action	Consult your network administrator; or use 3N DIR to make sure the domain has not been corrupted. If it has, ask your network administrator to restore from a backup.

**Printer not found**

Meaning	You specified the printername of a printer that is not on the server.
Action	Specify a valid printername.

**PRO not loaded**

Meaning	PRO.SYS has not been loaded.
Action	Check that your CONFIG.SYS file has a valid PRO.SYS entry. (Refer to Appendix D for complete information on the CONFIG.SYS file.)

**Queue is empty**

Meaning	You tried to move or delete entries from a queue that is empty.
Action	Use 3P QSTAT to verify that the entries are in the queue, then retry the operation.



**Queues must be on same server**

Meaning	You are allowed to move only those queues that are on the same server.
Action	Re-enter the command.

**Queue not empty**

Meaning	You tried to unshare a printer on which there are still some files waiting to be printed.
Action	Wait until all the files have been printed, or delete the files from the print queue, and then re-enter the command.

**Read fault**

Meaning	There is a disk error on the server.
Action	Retry the operation. If the message appears again, ask your network administrator to check the server hardware.

**Redir error 84**

Meaning	You exceeded the number of links allowed by the redirector.
Action	Increase the <i>/L:n</i> parameter on the MSREDIR command line in your <i>3+ Local Workstation Startup</i> diskette. (Refer to Appendix D for information on this parameter.)

### **Redirector not loaded**

Meaning	The Microsoft redirector must be fully loaded to run 3F or 3P.
Action	Re-enter the command. If the error persists, check your CONFIG.SYS and AUTOEXEC.BAT files to make sure the correct drivers are being loaded. (Refer to Appendix D for complete information on these two files.)

### **Sector not found**

Meaning	There is a disk error on the server.
Action	Retry the operation. If the message appears again, ask your network administrator to check the server hardware.

### **Seek error**

Meaning	There is a disk error on the server.
Action	Retry the operation. If the message appears again, ask your network administrator to check the server hardware.

### **Server error**

Meaning	An unexpected error has occurred in the server.
Action	Call your network administrator.

## **Server not responding**

**Meaning**        There is a timeout in the Name server.

**Action**         Check that the Name server is running, then re-enter the command. Log in again, if necessary.

## **Share server not responding**

**Meaning**        There is an unspecified problem with Share server.

**Action**         Make sure the Share server is running, and that there is no problem with the network in general.

## **Sharename already in use**

**Meaning**        The sharename you chose is already in use.

**Action**         Choose another name.

## **Sharename missing**

**Meaning**        The command you entered had a syntax error.

**Action**         Correct the syntax and re-enter the command. (Refer to Chapter 6: Command Reference Introduction for more information about syntax.)

## **Sharename not found**

**Meaning**        You tried to modify or share a directory that does not exist.

**Action**         Check that you are using the correct sharename and re-enter the command.

**Sharename too big**

Meaning	The sharename you tried to assign has more than the allowable maximum of 8 characters.
Action	Re-enter a smaller sharename.

**Short name already in use**

Meaning	You tried to assign a short name that has already been assigned or is already in use.
Action	Re-enter the command, using another short name.

**Spool id must be 0 to 32000**

Meaning	The spool identifier you entered had a syntax error, or exceeded the acceptable range of 0 to 3200.
Action	Provide a spool identifier within the range 0 to 32000.

**Too busy**

Meaning	The Name server is already performing at maximum capacity.
Action	Wait 30 seconds and try the operation again.

**Too many redirections**

**Meaning**      You tried to link to more printers and/or sharenames than are allowed by the NETBIOS and Redirector parameters in the AUTOEXEC.BAT file.

**Action**        Use EDLIN, MED or another text editor to change your AUTOEXEC.BAT file. To increase the session parameters, edit the NB and MSREDIR command lines. Numbers shown below in *italics* should be increased.

**NB** 543  
**MSREDIR** /S:5

The number you enter should be the same on the NB command line as on the MSREDIR command line. If other parameters are included in the AUTOEXEC.BAT file, do not delete them. Instead, change their value or add the additional parameter shown above. Log out, restart your workstation and try again. (For complete information about the available parameters, refer to Appendix D.)

**Too many sessions**

**Meaning**      The NETBIOS session limit on the server has been exceeded.

**Action**        Consult your network administrator. Request that the maximum number of sessions be increased on the server.

**Transmission failed**

**Meaning**      The network is down.

**Action**        Check with the network administrator.

**Type is /PRIV, /R, /W, /RW, /RWC, /WC, or /SHAR**

**Meaning**        You must enter one of the type listed above, including the slash (/).

**Action**        Re-enter the correct type.

**Unknown command**

**Meaning**        There is a disk error on the server.

**Action**        Retry the operation. If the message appears again, ask your network administrator to check the server hardware.

**Unknown command (*Specific string*)**

**Meaning**        The command you entered was not a defined command.

**Action**        Re-enter the correct command.

**Unknown media type**

**Meaning**        There is a disk error on the server.

**Action**        Retry the operation. If the message appears again, ask your network administrator to check the server hardware.

**Unknown type**

**Meaning**        You specified a type other than user or server.

**Action**        Re-enter the command, specifying either user or server.

**Unknown unit**

**Meaning**        There is a disk error on the server.

**Action**         Retry the operation. If the message appears again ask your network administrator to check the server hardware.

**Unknown value**

**Meaning**        There is an unidentifiable syntax or field in the command line prompt.

**Action**         Correct and re-enter the command. (Refer to Chapter 6: Command Reference Information for more information about syntax.)

**Use drive id**

**Meaning**        If you linked using a drive identifier, you need to unlink with a drive identifier.

**Action**         Issue the UNLINK command again using a drive identifier.

**User name required**

**Meaning**        You must enter a user name with this command.

**Action**         Enter a user name.

**User not on server**

**Meaning**        The path name you specified is on a server that does not contain your home directory.

**Action**         Share the directory on a server that contains your home directory.

**Value entered is too big**

Meaning        The value you entered at the prompt was too large.

Action         Re-enter the correct value.

**Value is required**

Meaning        You must include a value.

Action         Enter the correct value and press **[Return]**. To cancel the command, press **[Esc]**.

**Write fault**

Meaning        There is a disk error on the server.

Action         Retry the operation. If the message appears again, ask your network administrator to check the server hardware.

**Write protected**

Meaning        There is a disk error on the server.

Action         Retry the operation. If the message appears again, ask your network administrator to check the server hardware.





## Appendix B: EtherPath

EtherPath lets you access EtherSeries volumes stored on 2.2 and 2.4 EtherSeries servers from a 3+ workstation. This allows EtherSeries and 3+ to coexist on the same network, thereby allowing a user to concurrently access EtherSeries volumes and 3+ directories.

With EtherPath, you can use 3+ servers and services with 3+ software commands or you can use EtherSeries servers and services with EtherSeries commands. You can also include both types of software programs and commands in the same batch file as long as they are never combined on the same line.

EtherPath is an important migration aid because it provides access to both 3+ and EtherSeries programs, files, and features. During the process of converting from EtherSeries to 3+, you can run EtherSeries applications or you can use 3+ for new applications and for previously converted applications. You can also copy files from an EtherSeries volume to a 3+ directory.

If your network has servers that are running on 2.2 or 2.4 EtherSeries software, your network administrator can modify your startup diskette or the startup file on your hard disk so that you can use EtherPath to access both EtherSeries and 3+ software programs.

## Why EtherPath is Needed

EtherSeries network protocols are imbedded in the network application and a network driver called ENET.SYS, while 3+ uses a standard set of protocols called MINDS (MS-DOS Internal Network Driver Scheme). The two protocols are mutually exclusive since each thinks it has total control of the Ethernet connection. Therefore, to run EtherSeries software with 3+, some adaptation must take place. EtherPath provides that adaptation through the driver, EPATH.SYS, which is added to the MINDS protocol interface on a 3+ workstation or concurrent server.

## Installing EtherPath

To use the EtherPath program to access both EtherSeries and 3+ servers and services, your workstation startup diskette must contain the file EPATH.SYS. The CONFIG.SYS file on your startup diskette must contain a line that loads the EPATH.SYS during the bootup sequence, for example: DEVICE=EPATH.SYS. In addition, MINDSDRV must be specified in the RUN MINDS line of the AUTOEXEC.BAT file.

Your network administrator will set up your startup diskette and tailor the files on the startup diskette accordingly. If you wish to create or modify your own startup diskette or volume, see in the *3+ Installation and Configuration Guide*.

## EtherSeries Versus 3+

There are several distinctions between 3+ and EtherSeries software that are important to know and understand in order to take advantage of EtherPath and make use of both programs. These differences are listed below and described in the following paragraphs.

- ▶ The number of drive identifiers
- ▶ EtherSeries and 3+ program organization
- ▶ Volumes versus directories
- ▶ The conventions used for naming
- ▶ New commands in 3+

## Drive Identifiers

EtherSeries provides only four DOS drive identifiers in addition to the physical drives on your personal computer. 3+ can provide up to 26 drive identifiers (A -Z). The actual number of drive identifiers available to you is dependent upon the LAST DRIVE parameter specification in your CONFIG.SYS file. The CONFIG.SYS file is located on your workstation startup diskette or hard disk startup volume, and is set up by your network administrator.



**NOTE:** If a conflict with disk drive designations occurs, the 3+ designation takes priority over the EtherSeries designation. In other words, if the same drive identifier is assigned via both 3+ and EtherSeries, the 3+ use overrides until it is unlinked, at which time the EtherSeries assignment takes over.

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## EtherSeries and 3+ Software Programs

EtherSeries 2.4 is divided into two required software programs: EtherShare, which manages file access and names of users, servers, and volumes; and a separate program, EtherPrint, which manages printer access and printing operations. 3+Share is divided into three services: the Name service, the File service, and the Print service. The print program has been incorporated into the 3+Share product. EtherShare features, such as creating users and linking to network drives, have been greatly expanded in 3+Share and divided between the two services, Name and File.

## Volumes Versus Directories

EtherShare stores information in volumes. 3+Share File service stores information in directories. However, a volume is not a one-for-one replacement for a directory. A volume is a fixed amount of storage space on an EtherSeries network server hard disk. This is not true for a 3+ directory. For 3+ directory files, there is no defined space limit; storage space is not allocated or limited in advance. Directory files are dynamically stored and retrieved as needed from the available pool of hard disk storage space on a 3+ network server.

Although volumes do not equal directories, you may find it useful initially to equate the two if you are used to working with a 2.4 EtherSeries network. In EtherSeries, you store your files in volumes. In 3+, you store your files in a hierarchy of directories starting at your home directory. You or your network administrator can exchange the contents of volumes with the contents of directories on a one-for-one basis.

A directory managed by the 3+Share File service is a DOS directory and is part of the hierarchical file structure of the disk where it resides. A directory does not have a password or an access type as do volumes in EtherShare. In the File service, passwords and access rights are assigned to the sharenames of shared directories. Thus, the closest approximation to an EtherSeries volume in the 3+ File service is a directory and one of its sharenames.

## Conventions for Naming

The naming scheme is different between EtherSeries 2.4 and 3+ software. In EtherSeries software, each network server keeps track of its own users. In 3+Share software, the Name service keeps track of all users known to the network.

Names of network components, such as users, servers, printers, and volumes or directories, are set up differently in each of the two software programs. EtherSeries names are local to EtherSeries (there is no central registry for names). Server names and printer names are created using EtherShare and EtherPrint administrative software programs. User names are created using the ES UCREATE command. Volume names are created using the ES CREATE command.

3+ user and server names are created, registered, and maintained by the Name service using 3N program commands. Printer names are created, registered in, and maintained by the Print service using 3P commands. Directory names are created using the DOS MKDIR command, and are registered, maintained and assigned shareable (access) by the File service using 3F commands.

While the names in EtherShare have a single-part format, the names in the 3+Share Name service are composed of three standard parts: name, domain, and organization. The 3+ rules for forming names allow you to use your complete name or a shortened version as an alias. The three-level hierarchy of the 3+Share Name service takes advantage of the capability to communicate between networks and to support remote personal computer users. Typically, this means grouping names into domains (departments or locations of an organization), and grouping domains into organizations (a network location).

## New Commands

In addition to the differences already noted, 3+Share has many new commands that were not available in EtherShare. For information on all 3+Share commands, see Chapters 6 through 9 of this guide.



## Appendix C: Copying Files Using 3COPY

3COPY is a general purpose file copy utility that runs on an IBM PC or compatible computer with 256K memory and DOS version 2.1 or higher. It is similar to the DOS COPY command, but provides added flexibility. For example, you can request date-sensitive copy, configuration prompts, or a dry run (an explanation of what will be copied and a prompt that requests confirmation).

You can run 3COPY from the distribution disk or from a backup copy. You can also install 3COPY on a fixed disk or on a network volume or directory. To install 3COPY, copy the 3COPY.EXC program file to the desired location using the DOS COPY command.

### 3COPY Command Format

3COPY *fromspec* [*tospec*] [/s] [/c] [/n] [/d] [/u] [/e] [/h] [/f=*file*]



## Parameters

<i>fromspec</i>	The source file specification of the files to be copied. You can specify a drive identifier and path name or you can allow it to default to the current drive and path. You can also specify * and ? wildcards. For more information on DOS filespecs, see your DOS manual.
<i>tospec</i>	The destination drive identifier and path name. (Do not include a file name and extension; 3COPY does not rename files as it copies.) If you omit this parameter, 3COPY will copy to the current default drive and directory.
<i>/c</i>	Prompts for confirmation of each file before copying.
<i>/n</i>	Displays the results of the parameter settings (dryrun) and prompts for confirmation before printing.
<i>/d</i>	Checks the dates and copies only if either the source file datetime is newer than the destination file datetime or if the file does not exist in the destination directory. The file will not be copied unless one of these conditions exists. Also, multiple diskette output is disabled when this parameter is selected.
<i>/u</i>	Checks the dates and copies only if the source file datetime is newer than the destination file datetime. If file does not exist in the destination directory, it is not copied. Multiple diskette output is disabled with this option.
<i>/s</i>	Creates empty subdirectories in the destination directory structure in order to mirror the source directory structure, even if no files are to be copied to those destination directories.
<i>/h</i>	Displays help information only. When this parameter is selected, nothing else is processed.

**/f=file**

Routes output to a report file as well as to an onscreen display. Character device designators such as /prn work as expected. (If the report file is in the source file path, it will be copied incorrectly)

## Remarks

The parameters /s, /c, /d, /n, /u, /e, /h, and /f=*file* can either be concatenated (linked together) or separated. The /f=*file* parameter must be the last or only parameter in a group. For example, the following combinations are all valid:

```
3COPY *.* a: /s/d
3COPY *.* a: /sd
3COPY *.* a: /s/d/n
3COPY *.* a: /s/f=report
3COPY *.* a: /sf=report /d
```

## Copying Directory Structures

When you use the /s parameter, the destination directory structure of the files that you create or overwrite mirrors the source directory structure. The starting point of the destination structure may have a different name than that of the source structure, but the subdirectory names will be identical. 3COPY will create subdirectories in the target structure if they do not already exist. For example, assume you have a working disk drive C: and a finance department archive disk drive D:, and the directory structures look like this:

```
C:\MONEY\MODELS
C:\MONEY\MODELS\ENG
C:\MONEY\MODELS\MFG
C:\MONEY\MODELS\FIN

D:\FIN
D:\FIN\PVT
D:\FIN\MFG
```

# C

Copying  
Files Using  
3COPY

---

C-4

If you used the following command:

```
3COPY C:\money\models\*.wks D:\fin /s
```

3COPY would then create the following new directories on D:

```
D:\FIN\ENG
```

```
D:\FIN\FIN
```

The file C:\MONEY\MODELS\SUMM.WKS would be copied to D:\FIN\SUMM.WKS. The file C:\MONEY\MODELS\ENG\PROJ.WKS would be copied to D:\FIN\ENG\PROJ.WKS.

## To Cancel a Copy

During copy operations, 3COPY continually scans for the keyboard entry of the escape [Esc] character. If you enter [Esc], 3COPY cancels the copy operation at the end of the current file. You may also cancel a copy by entering [Esc] in response to the prompt **Copy [filename]? (Y/N)>**.

## Multiple Diskette Output

If your output volume is a diskette and it fills up, 3COPY will give you the option to insert another diskette and continue copying. (Using the /d parameter disables this option.) However, if you opt to insert another diskette and keep copying, the directory structures on the multiple output diskettes may appear to be either incomplete or duplicated. For example, assume your source directory is DIRA and contains subdirectories DIRA\SUB1, DIRA\SUB2, and DIRA\SUB3. If it takes two output diskettes to

hold all the files, then you could end up with \SUB1 and \SUB2 on the first diskette and \SUB2 and \SUB3 on the second diskette. The files from DIRA\SUB2 end up split between the two output diskettes. When you restore from multiple diskettes, you can use the same command for each one in order to reestablish the original directory structure on a large output fixed disk.

## Restrictions

1. 3COPY does not enable output verification. If you want verification, use the DOS VERIFY command. For example:

```
C>VERIFY ON
C>3COPY c:\mypath\*.dat d:\yourpath /s
C>VERIFY OFF
```

2. 3COPY creates subdirectories beneath the destination directory, as necessary, to mirror the source directory tree structure. When selecting copies with wildcard characters or multiple diskette output sequences, empty subdirectories may be created in order to provide this mirrored structure. If you try to copy to a very full diskette or network volume, 3COPY might create one or more subdirectories before discovering that the next file it needs to copy will not fit. When this happens, 3COPY *does not* remove the subdirectories that it created. You can remove them with the DOS RMDIR command.
3. Typing commands "ahead" of 3COPY while it is running can cause unpredictable results. You can, however, execute multiple 3COPY commands from within a .BAT batch file.



## Appendix D: Workstation Configuration

Workstation configuration is largely determined by the files that initialize the workstation during its boot process. The CONFIG.SYS file loads network driver software, while the AUTOEXEC.BAT initializes the drivers and loads additional software.

The ideally configured workstation needs only to be powered on to begin network operation. It automatically links the user to default network directories and printers, automatically sets any environmental parameters, and finally, brings the user to a point where the first required choice (that is, which application to run) is obvious and easy to invoke.



**NOTE:** Unless you are a 3+Start user, your network administrator has provided you with a 3+ Local Workstation Startup diskette. Most systems conform to the guidelines presented in this Appendix. If you are a 3+Start user, the files discussed in this Appendix exist in the public or private 3+Start volume you are using. If the files on your diskette or in your 3+Start volume do not look similar to the examples presented here, check with your network administrator before changing them. Make sure the changes you plan to make are compatible with the way your network is configured.

---

## Workstation Drive Assignments

Your network administrator was able to set up batch files or public menus for many users by defining conventions for the relationship between shared directories and the drive letters by which users will refer to them. Application software often requires a configuration that defines where data is expected to live (for example, the /Worksheet-Global-Default-Directory command in Lotus 1-2-3). By standardizing drives and directory names, it is not necessary to reconfigure these applications for each user.

3Com recommends assigning drive letters D: - G: as follows:

- ▶ Link D: to the APPS directory
- ▶ Link E: to the user's home directory (HOMEDIR)
- ▶ Link F: to shared data directories, if any
- ▶ Link G: to application directories, if any



**Note:** D: and E: are always linked. When designing batch files or menu selections, try not to violate this convention. By using drive F: for data outside the home directory, and drive G: for application programs you can meet the needs of almost every application.

---

## Workstation Startup Files

The AUTOEXEC.BAT and CONFIG.SYS files are used by DOS when you first start your PC. Each file contains information that is stored in the machine's memory for use during normal operation. In addition to this information, the AUTOEXEC.BAT file can contain 3+ or DOS commands (LOGIN, PATH=C:\, etc.) which are executed during the machine's startup.

## The CONFIG.SYS File

The CONFIG.SYS file is invoked when the user's PC is powered on. It causes various drivers to be loaded into memory which are essential to access your 3+ network. The following is a sample CONFIG.SYS file:

```
device=eth.sys
device=pro.sys 8 20 2
device=buf.sys
device=idp.sys
device=spp.sys
device=lgl.sys
buffers=6
files=20
lastdrive=g
```

Each line in the file has a specific function. These functions are explained below, along with any parameters that can be changed to support your particular configuration.

### **device=eth.sys**

Loads the device driver for the network adapter that is installed in your computer. The exact wording of the line depends on the type of network adapter or medium being used. Listed below are the various types of network adapters and the device driver used for each.

<u>Network Adapter</u>	<u>Device Driver</u>
EtherLink	eth.sys
EtherLink Plus	eth505.sys
IBM Token Ring	tokibm.sys
TokenLink Plus	tok605.sys

If you are using a PC, and your network adapter is an EtherLink or EtherLink Plus, you can specify parameters in the following format:

```
device=eth.sys int i/obase dmachan dmatype
device=eth505.sys int i/obase dmachan
```



Normally, no parameters are specified, causing default values to be used. Parameters are identified by their location. Using the letter *x* in place of a parameter's value causes the default value to be accepted. Default values are also accepted for parameters omitted at the end of the line. For example, if your EtherLink board has been changed to have an interrupt level of 7, and if DMA is set to channel 2, the line must be changed to:

```
device=eth.sys 7 x 2
```

In this case the I/O base address and DMA type remain at the default values. If an EtherLink Plus network adapter is used, the line reads:

```
device=eth505.sys 7 x 2
```



**CAUTION:** Any one or all of these parameters can be changed from their default values; however, the jumpers on the network adapter board must correspond to the parameter settings specified. If the specified parameters do not match the settings on the network adapter, the system will not function properly.

---

*int*

The interrupt level number of the network adapter. On an EtherLink board, the range is 2 through 7. On an EtherLink Plus board, the range is 2 through 15. The default value for both boards is 3, corresponding to the factory switch setting.

<i>/obase</i>	The I/O (Input/Output) base address. It is a three-digit hexadecimal number with a range of 0 to 3F0. The last digit must always be 0. The default is 300 hex, corresponding to the factory switch setting on the board.
<i>dmachan</i>	The DMA (Direct Memory Access) channel number. On an EtherLink board, the range is 1 through 3. On an EtherLink Plus board, the range is 0 through 3 when the board is used in an 8-bit slot; and 4 through 7 when the board is used in a 16-bit slot. The default for both boards is 1, corresponding to the factory switch setting.
<i>dmatype</i>	Specifies the type of DMA and programmed I/O used by your computer.



**NOTE:** The value can be 1, 2, 3, or 4, where the numbers reflect the settings outlined below. The default value is 3 on an IBM XT or compatible, and 4 on an IBM AT or compatible. (Consult the documentation for your computer to determine the correct setting.)

- |   |  |
|---|--|
| 1 | DMA byte mode transfer - gives control back to the CPU after each byte is transferred. The CPU gives control back to the DMA device after each full machine cycle. |
|---|--|

- 2**      Programmed I/O loop -  
         - performs input and output  
         to ports and loops until the  
         packet has been received  
         or sent.
- 3**      DMA block mode transfer -  
         - the DMA channel is active  
         continuously until the entire  
         transfer has completed.  
         Accelerated refresh  
         ensures no loss of data  
         integrity.
- 4**      Programmed I/O using REP  
         instruction -- substitutes this  
         instruction instead of loop.  
         This can only be used with  
         Intel 80186- or 80286-class  
         machines.

Set the value for 2 or 4 when there  
is no DMA channel installed or when  
memory problems are suspected.



**NOTE:** Some accelerator cards  
substitute a faster CPU for the one  
originally installed. See the ROM on  
your system board to verify the  
original CPU type.

---

**device=pro.sys**

Allocates the processor time between user (DOS) and background processes. Parameters are always specified for this driver. Each parameter must be separated from the next one by a space.

---



**CAUTION:** If incorrect parameter values are specified, the system will not function properly.

---

The format for these parameters is:

**device=pro.sys** *processes user services*

*processes*

The maximum number of separate processes that the system can manage at once. Each process requires 38 bytes of memory. The range is from 4 to 64. Normally, there is no need to change the value from the default of 8 on a workstation, and 32 on a server.

*user*

The amount of time (measured in timer clock ticks) spent performing tasks for the user before switching to background processes. Each timer clock tick lasts .055 seconds. The range is from 0 to 255. For normal operation of a workstation, 0 should never be specified; setting this parameter to 0 impairs keyboard input. The default is 20 on a PC workstation, 0 on a 3Server, and 2 on a PC server.

*services* The amount of time (measured in timer clock ticks) spent performing tasks for the background processes before switching to user processes. Each timer clock tick lasts .055 seconds. The range is from 0 to 255. For normal operation of a workstation, 0 should never be specified; setting this parameter to 0 impairs keyboard input. The default is 2 on a PC workstation or server, and 0 on a 3Server.

**device=buf.sys** The Buffer manager used internally by 3+. There are no parameters for this driver.

**device=idp.sys** The Internet Datagram Protocol driver used internally by 3+. There are no parameters for this driver.

**device=spp.sys** The Sequenced Packet Protocol driver used internally by 3+. There are no parameters for this driver.

**device=lgf.sys** The Login Library manager used internally by 3+. There is one optional parameter for this driver.

The format for this parameter is:

**device=lgf.sys [-mx]**

**mx** Sets the maximum number of map entries available in the Login Library. The x specifies the maximum number of map entries allowed. Each time a 3F or 3P LINK, 3F or 3P DIR, or 3N ASSIGN command is issued, an entry is made in the Login Library. If the number of entries exceeds the maximum set with this

parameter, the error message "Internal error" will be returned. Rebooting the workstation clears all entries in the current Login Library name map. Each map entry requires 88 bytes of memory. The default is 8.

**buffers=6**

The number of disk buffers used by DOS to temporarily hold data being written to or read from a disk. Each additional buffer requires 512 bytes of memory. The default setting depends upon the type of workstation or server used. (Refer to your DOS manual for more information.)

**files=20**

The maximum number of file handles that DOS will allow to be open at the same time. Each file requires 48 bytes of memory. The default setting depends upon the type of workstation used. (Refer to your DOS manual for more information.)

**lastdrive=g**

A DOS command that limits the number of drive identifiers available to the user.

The format of this command line is:

**lastdrive=***letter*

*letter*

This is the last drive identifier that can be accessed. For example, if G: is assigned as the last drive, the user can access the drive identifiers A: through G:, but not H: or higher. The range is A: through Z:. The default is G:.



---

**NOTE:** Increasing the number of available drive identifiers may necessitate editing the AUTOEXEC.BAT file. If the error message "Too many redirections" is returned, increase the /L parameter (number of links) on the MSREDIR line of AUTOEXEC.BAT.

---

## The AUTOEXEC.BAT File

The AUTOEXEC.BAT file is invoked immediately after the CONFIG.SYS file has loaded. It causes initialization of the drivers and loads additional software. A sample AUTOEXEC.BAT file is:

```
echo off
echo 3+ Workstation Startup batch file - version 1.1
runminds mindspio mindsbufo mindseth mindsidp mindsspp
mindslgl
nb
minses
msredir /z:4096
setname $$$com$$
prtsc
```

Each line in the file has a specific function. These functions are explained below, along with any parameters that can be changed to support your particular workstation configuration.

- |                                |  |
|--------------------------------|--|
| <b>echo off</b>                | Prevents commands from printing on the screen while the batch file is being executed.  |
| <b>echo 3+ Workstation ...</b> | Prints the title of the batch file on the screen.  |
| <b>runminds</b>                | RUNMINDS binds MINDS (MS-DOS Internal Network Driver Scheme) drivers together so that they can call one another. The names of the individual MINDS drivers are listed following RUNMINDS and must be on the same line. |

**nb**

Loads the 3Com NETBIOS. Parameters may be set to indicate the maximum number of sessions, packet transmit buffers, and packet receivebuffers that are supported on your machine. Additional parameters allow you to specify the retry display mode, local timeout and remote timeout values. Each of these parameters are explained below.

Normally, no parameters are specified, causing the default values to be used. The NB parameters interact with those specified for MSREDIR in the AUTOEXEC.BAT file.

The format of the NB command is:

**nb** *sessions transbuf recbuf retdisp lcltime rmttime*

Parameters are identified by their location. Using the letter x in place of a parameter's value causes the default value to be accepted. Default values are also accepted for parameters omitted at the end of the line. For example, to change only the number of sessions and the retry display mode parameters, the line must read:

**nb** 4 x x 1

The transmit and receive buffers and local and remote timeout values all remain at the default values.





# INDEX



**NOTE:** To locate references to particular commands, please look under DOS, File Service, Name Service, or Print Service. Also, the 3 or 3+ that precede some terms has been ignored for purposes of alphabetizing. For example, 3+Share is listed in the S section of the index.

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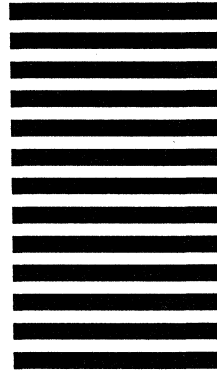
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