Administrator's Guide

Volume II

3Plus®

3Com®

3+ Administrator's Guide

Volume II

A member of the 3+ family of products.
For use with DOS 3.1, DOS 3.2, or DOS 3.3.

Recognition

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Preface

This guide is designed for use by a network administrator in the day-to-day operation of the network.

If you need to install the software on a 3Server386, check the *3+ Installation and Setup Guide*. To tune the software to suit your particular needs on a 3Server386, refer to the *3+ Network Tuning Guide*.

If you have any other server, consult the *3+ Installation and Configuration Guide* for information on installing and tuning the software.

Chapter 7: Command Reference

This chapter is a complete reference to all administrator and server-user commands, including those user commands that provide additional capabilities to server-users and administrators.

Command descriptions are organized by service in the following order:

- ► 3+Backup (3B)
- ► 3+Share File service (3F)
- ► 3+Mail service (3M)
- ► 3+Name service (3N)
- ► 3+Share Print service (3P)

See Chapter 3 of this guide for a description of the command syntax notation used in this chapter.

See Chapter 4 of this guide for in-depth examples of using the most common administrator and server-user commands. For complete information on other user commands, see the *3+Share User Guide* and the *3+Mail User Guide*.

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3B AUTO

Automatic backup enabled or disabled. Not available for off-line mode.

Format

3B AUTO [/ON|/OFF]

Required Capability

Server-user or network administrator

Parameters

ON   Enables the automatic backup scheduling.

OFF   Disables the automatic backup scheduling.

none   Displays on the screen the current status of the automatic flag.

Remarks

When the automatic backup is enabled the server regularly checks the AUTOTIMS file you created and takes the actions you specified in that file.

Even if you have created an AUTOTIMS file and want to do automatic backups, you may want to disable automatic backup to change the schedule in the AUTOTIMS file or to avoid a problem situation such as a holiday when no one will be available to change tapes.

When you use the 3B AUTO command with no parameter, the current status of the automatic backup is displayed on the screen.

Examples

Example 1: Turning on the automatic backup.

```
3B  AUTO  /ON◄──┘
```

Example 2: Checking the status of the AUTO parameter.

```
3B  AUTO◄──┘
```

3B BACKUP

Backs up a source server's data onto tape.

Format

3B BACKUP [*server*][\p:[-q:]][/I][/A]

▶ **NOTE:** For off-line mode, enter 3BDOS followed by the
rest of the command, for example, 3BDOS BACKUP.

Required Capability

Server-user or network administrator

Parameters

server   The name of the server that contains the files you want
to back up. If you omit this parameter, BACKUP
assumes that you are backing up files on the server on
which you are logged in. You can also set this
parameter using the SERVER command. Not available
for off-line mode.

p   The first partition on the server which you want backed
up. If you do not specify any partitions, the entire
server (all partitions) are backed up. A leading
backslash is necessary only when you also specify the
server parameter.

q   The last partition on the server which you want backed
up. The hyphen (-) must separate a range of partitions.

I   An incremental backup for backing up only those files
that have been modified or added since the last backup.
If you do not use this parameter, 3+Backup backs up all
files. Not available for off-line mode.

A   Appends the current backup following the last record on
           the tape. If you omit this parameter, 3+Backup erases
           any records on the tape and begins writing at the
           beginning. Not available for off-line mode.

Remarks

The BACKUP command allows you to do a full or incremental
backup of server files onto tape. All of the filenames which are
being backed up are put into a log file while the backup is
being performed.

Examples

Example 1: Starting a full on-line backup of an entire server.

   `3B BACKUP \\SERVER1:SPD:3COM`◄┘

Example 2: Starting an incremental on-line backup of partition f.

   `3B BACKUP \\SERVER1:SPD:3COM\F: /I`◄┘

Example 3: Starting a full on-line backup of partitions f, g, and
h, and appending this to the end of the tape.

   `3B BACKUP \\SERVER1:SPD:3COM\F:-H: /A`◄┘

Example 4: Starting an incremental on-line backup of the
default server and appending it to the end of the tape.

   `3B BACKUP /I /A`◄┘

Example 5: Starting a full off-line backup of the entire server.

   `3BDOS BACKUP`◄┘

3B CANCEL
Cancels a BACKUP, RESTORE, or DIR /F operation currently in
progress. This command is only available in on-line mode.

Format
3B CANCEL

▶ **NOTE:** For off-line mode press **[Ctr]+[Break]**.

Required Capability
Server-user or network administrator

Parameters
None

Remarks
After you enter the CANCEL command, 3+Backup displays the
message: "Are you sure (No)?" To cancel the operation, type Y;
to continue with the operation, press Return.

When you enter the CANCEL command during a backup or
restore operation, the current operation is terminated only after
the backup or restore of the current file is completed.
However, if you enter another CANCEL command before the
backup or restore of the file is completed, then the backup or
restore is halted immediately without regard to the state of the
file.

Example
Cancelling the current operation.

3B CANCEL ◄⎯⅃
Are you sure (No)? **Y** ◄⎯⅃

3B DIR

Displays a summary of the first block of the tape or creates a directory of the full contents of the backup tape.

Format

3B DIR [/F]

▶ **NOTE:** For off-line mode, enter 3BDOS followed by the rest of the command, for example, 3BDOS DIR.

Required Capability

Server-user or network administrator

Parameters

F   Creates a full directory listing of the tape currently in the tape drive, including all filenames on the tape organized by directory.

none   Without a parameter, 3+Backup prepares a brief summary listing the server, date, and starting directory on the tape and displays it on the screen.

Remarks

The DIR command creates two kinds of directories of backup tapes as defined by the presence or absence of the /F parameter.

The DIR command without the /F parameter creates an abbreviated directory that shows: backup class (usually "System level"), server name, backup date, full or incremental, and tape sequence number of the first backup on the tape.

Using the /F parameter creates a full directory that includes:
all the above information plus information on the complete path
of the partitions and all the filenames on the entire tape. A
full directory is written to the tape log.

Example

Example 1: Displaying a summary of the contents of the tape.

```
3B DIR  ◄┘
Wait...
```

```
Tape contents:             \\SERVER1:SPD:3COM
Backup date:               30-Jul-87, 16:01
Backup type:               Full
Tape sequence number:      22
Tape access:               System level
```

Example 2: Displaying a full directory listing of the tape to the
tape log file in on-line mode.

```
3B DIR /F  ◄┘
```

Example 3: Displaying a full directory listing of the tape to the
tape log file in off-line mode.

```
3BDOS DIR /F  ◄┘
```

3B ERASE

Erases the tape currently in the drive.

Format

3B ERASE

► **NOTE:** For off-line mode, enter 3BDOS followed by the rest of the command, for example, 3BDOS ERASE.

Required Capability

Server-user or network administrator

Parameters

None

Remarks

You will want to use the 3B ERASE command to prepare a new tape for backup. Note that 3B BACKUP automatically erases the tape at the beginning of a backup which does not append to the end of the tape. 3Com recommends that you **erase** a new tape twice so that the tape tension is correct before you use it.

Example

Erasing a new tape to prepare it for use.

```
3B ERASE ◄┘
Wait....

WARNING: THIS TAPE HAS DATA.  Continue
to erase (No)? Y ◄┘
```

3B HELP

Displays information about the 3B commands.

Format

3B HELP
3B ?
3B HELP *commandname*

▶ **NOTE:** For off-line mode, enter 3BDOS followed by the
rest of the command, for example, 3BDOS HELP.

Required Capability

Server-user or network administrator

Parameters

commandname   The 3B command about which you want more
information.

Remarks

For detailed information about a command use the command
name as a parameter (see example 3 below).

Examples

Example 1: Displaying a list of 3B commands in on-line mode
with a brief explanation of each.

```
3B HELP ◄─┘

3B Commands:

Help        Display helpful information.
Backup      Back up data to tape.
Restore     Restore data from tape.
Dir         Show contents of a tape.
Log         Show contents of an operation log.
Erase       Erase a tape.
Cancel      Cancel an operation in progress.
Stat        Show status of a 3+Backup server.
Server      Choose a 3+Backup server (N/A to
                server-user.)
```

Example 2: Displaying a list of available 3B commands in
on-line mode.

```
3B ? ◄─┘

Enter one of the following commands:
Help
Backup
Restore
Dir
Log
Server
Cancel
Status
Stat
Erase
Wait
Auto
```

Example 3: Displaying information about a specific 3B command.

```
3B HELP BACKUP ←┘

3B BACKUP Command:

The 3B BACKUP command is used to back up files from 3+Share servers to tape.
The user can back up all files on a server or servers to tape.  The user can
back up all files on a server or just those files which have been modified or
added since the last time they were backed up.  He can also choose to back up a
single partition or a range of partitions.  Use 3B BACKUP? to be prompted.
```

Example 4: Displaying information about a command parameter.

```
3B SERVER◄─┘

Which server? HELP◄─┘
Enter a server name.
Which server?
```

3B RESTORE
Restores files from the backup tape currently in the tape drive.

Format
3B RESTORE [*source*][\\p:[*path*[*file*[.*ext*]]] [*dest*][\\x:[*path*]]\
[/DATE=*dd-mmm-yy*[,*hh:mm*]]
or
3B RESTORE
[*source*][\\p:-*q*:][*dest*][\\x:-*y*:][/DATE=*dd-mmm-yy*[,*hh:mm*]]

▶ **NOTE:** For off-line mode, enter 3BDOS followed by the
rest of the command, for example, 3BDOS RESTORE.

Required Capability
Server-user or network administrator

Parameters

source   The name of the server from which the files you
                want to restore were backed up. If you omit this
                parameter, 3B RESTORE assumes that you want to
                restore files from the server on which you are
                logged in or which you set with the SERVER
                command.

dest   The name of the server to which the files are to be
                restored. If you omit this parameter, 3B RESTORE
                assumes that you want to restore files to the same
                server as the source parameter. Not available for
                off-line mode. For off-line restores, the backup
                server is always the destination server.

p: The partition to be restored.

p:-q: The range of partitions to be restored.

path   One path identifying which directory to restore
                  from or restore to. Do not use this parameter
                  when you specify a partition range (parameter
                  p:-q:).

file.ext   The name of a file or group of files to be restored.
                  You can use DOS wildcards (* and ?) to specify a
                  group of files. Do not use this parameter when you
                  specify a partition range (parameter p:-q:).

DATE=dd-mmm-yy,hh:mm
                  The date of the most recent backup copy of the
                  files you want to restore. Enter the day number,
                  the first three characters of the month name, and
                  the year number separated by hyphens. To enter
                  the hour and minutes, type a comma after the year,
                  then type the hour and minutes separated by a
                  colon. You can find the date and time information
                  in the log files of the BACKUP or DIR /F
                  operations.

Remarks

You may want to specify only one file path from which to
restore the files. However, if you want to restore full
partitions, you can specify either one or a range of partitions.
In this case, you must specify the same number of partitions as
in the source. If the partition numbers do not match, you will
receive an error message.

To restore files, the file system on the destination server may
need to be rebuilt. 3+Backup rebuilds the file system
automatically if it is necessary.

The date is necessary if more than one copy of the file is present on the tape you are using for the restore and you want an earlier version of the file(s). The time is necessary only if two backups were made on the same day and contain different information.

To determine whether your files were restored successfully, review the restore log.

Examples

Example 1: Starting a full restore of the default server.

```
3B DOS RESTORE ◄─┘
```

Example 2: Starting a full restore of a specific server.

```
3B RESTORE \\ARIES:SPD:3Com ◄─┘
```

Example 3: Restoring a single partition to the same partition in off-line mode.

```
3B DOS RESTORE C: ◄─┘
```
or
```
3B DOS RESTORE \\ARIES:SPD:3Com\C: ◄─┘
```

Example 4: Restoring a range of partitions to their original locations.

```
3B RESTORE C:-D: ◄─┘
```
or
```
3B RESTORE \\ARIES:SPD:3Com\C:-D: ◄─┘
```

Example 5: Restoring a single partition to a different partition.

```
3B RESTORE C: D: ◄─┘
```
or
```
3B RESTORE \\ARIES:SPD:3Com\C: D: ◄─┘
```

Example 6: Restoring a range of partitions to a different range
of partitions.

```
3B RESTORE C:-D: E:-F: ◄─┘
```
or
```
3B RESTORE \\ARIES:SPD:3Com\C:-D: E:-F: ◄─┘
```

Example 7: Restoring files to a particular path.

```
3B RESTORE C:\rickc\ ◄─┘
```
or
```
3B RESTORE \\ARIES:SPD:3Com\C:\rickc\ ◄─┘
```

Example 8: Restoring a file or files.

```
3B RESTORE C:\rickc\plans.1987 ◄─┘
```
or
```
3B RESTORE \\ARIES:SPD:3Com\C:\rickc\
    plans.1987 ◄─┘
```

Example 9: Restoring directories from one partition to a
different partition.

```
3B RESTORE C:\rickc\ D: ◄─┘
```
or
```
3B RESTORE \\ARIES:SPD:3Com\C:\rickc D: ◄─┘
```

Example 10: Restoring a file or group of files from one
partition to another.

```
3B RESTORE C:\rickc\plans.1987 D: ←┘
or
3B RESTORE \\ARIES:SPD:3Com\C:\rickc\plans.1987 D: ←┘
```

Example 11: Restoring directories and their structure.

```
3B RESTORE C:\rickc\ D:\rickplans\ ←┘
or
3B RESTORE \\ARIES:SPD:3Com\C:\rickc\ D:\rickplans\ ←┘
```

Example 12: Restoring a file or group of files from one path to
another path.

```
3B RESTORE C:\rickc\plans\plan.1987 D:\rickplans\ ←┘
or
3B RESTORE \\ARIES:SPD:3Com\C:\rickc\plans\plan.1987 D:\rickplans\ ←┘
```

Example 13: Restoring directories and their structure to a
different directory structure.

```
3B RESTORE C:\rickc\ \rickplans\←┘
or
3B RESTORE \\ARIES:SPD:3Com\C:\rickc\\rickplans\ ←┘
```

Example 14: Restoring a file or group of files from one
directory structure to a different directory structure.

```
3B RESTORE C:\rickc\plans.1987 \rickplans\ ←┘
or
3B RESTORE \\ARIES:SPD:3Com\C:\rickc\plans.1987\rickplans\ ←┘
```

Example 15: Restoring files from one server onto another one.

```
3B RESTORE \\OLDSERVER:PUBS\C:\PUBS\*.* \\NEWSERVER:PUBS\E:\NEWPUBS\ ←┘
```

3B SERVER
Changes the backup server and the default source servers for all future operations. Not available in off-line mode.

Format
3B SERVER \\servername:domain:organization

Required Capability
Network administrator only

Parameters
servername:domain:organization
> The name of the server with a tape backup unit attached that you are going to use for all future operations. Use the full three-part name if necessary.

Remarks
The 3B SERVER command is available only to the network administrator. It changes your default server until you leave 3+Backup or enter the 3B SERVER command again.

Use this command if your default server (home server) does not have a tape backup unit attached to it, or if you want to use a different one.

This command also modifies the default source server for all future backups and restores.

Example

Backing up partition D on server named \\ARIES:SPD:3Com.

```
C>3B  ◄─┘
3+Backup 1.3

3B>SERVER \\ARIES:SPD:3COM  ◄─┘
3B>BACKUP D:  ◄─┘
```

or

```
C:\> 3B SERVER \\ARIES:SPD:3COM; BACKUP D:  ◄─┘
```

In this example, if you do not use the 3B SERVER command before entering the 3B BACKUP command, you will back up partition D on your home server using your home server's tape backup unit.

3B STATUS

Determines the status of the backup server. In off-line mode the status is always displayed, so it is not necessary to use this command.

Format

3B STAT[US]

Required Capability

Server-user or network administrator

Parameters

None

Remarks

The 3B STATUS command gives you the following information about the backup server:

- ► Whether it is currently in use
- ► What operation is being performed
- ► How many megabytes of information have been processed so far during the operation
- ► The status of the AUTO flag
- ► Who is performing the operation
- ► The number of files restored, if a restore is in progress.

You can use the 3B STATUS command at any time to find out whether the backup server is busy or available to you. (See also the 3B WAIT command).

Example
Viewing the status of the backup server.

3B STAT ◄—┘

```
Operation in progress:   Backup
Backing up \\server1:    SPD:3COM

Time operation started:  31-Jul-87, 3:04
Operation status:        Need operator
                          attention, see LCD
Operator:                Auto
Amount transferred:      180 MB
AUTO status:             ON
```

3B WAIT

Freezes the netstation until the current operation is completed
or you cancel the command. When the operation is done, the
netstation beeps. Not available in off-line mode.

Format

3B WAIT

Required Capability

Server-user or network administrator

Parameters

None

Remarks

You use this command when you are at the netstation and need
to be informed when the current operation is complete. This is
also handy in batch files when you want to perform sequential
operations. When you enter the command, the following
messages appear on the screen:

```
Operation in progress...
Waiting for completion.  Press [Esc] to cancel.
```

Press **[Esc]** at any time to cancel the WAIT. When the
operation is complete, the netstation beeps and the following
message is displayed:

```
Operation completed
```

Example

Freezing the netstation while the operation is in progress.

```
3B WAIT ◄─┘

Operation in progress: Dir/F
Waiting for completion.  Press [ESC] to cancel

Operation completed.
```

3F MOD
Modifies the password and access rights of a first-level
directory's sharename.

Format
3F MOD[IFY] *sharename*|*path* [/PASS=*pass*] [/*access*]

Required Capability
Server-user

Parameter

sharename   The sharename you want to modify. This is the
                    name assigned to a directory when the directory
                    is shared with the 3F SHARE command. If the
                    directory has multiple sharenames, you must
                    modify each sharename individually.

path   The path you want to modify. If the directory
                    was shared and not assigned a sharename, you
                    must specify the directory by its path. The
                    path is specified beginning with the root
                    directory of the disk drive on which the
                    directory resides. The path specification cannot
                    include a drive identifier or a leading backslash.

pass   The new password you are assigning to the
                           sharename. If you include the /**PASS=** keyword
                           and omit the pass parameter, the current
                           password is deleted. If you omit /**PASS=pass**
                           altogether, the current password does not
                           change. A password is eight characters or
                           fewer. The allowed characters are: letters (A
                           through Z and a through z), digits (0 through
                           9), the special characters $&#@!%"()-{}_, and
                           the international characters supported by the
                           IBM PC.

access   The new access rights you are assigning to the
                           sharename. The access rights must be one of
                           the following: PUB, R, RW, RWC, WC, W, or
                           SHAR. If you omit /**access,** the access rights
                           for the sharename do not change. For a
                           discussion of access rights, see the 3F SHARE
                           command in this chapter.

Remarks
Although the 3F MOD command is both a user and server-user
command, these remarks concern capabilities reserved for
server-users. For a complete discussion of the capabilities
available to all users, see the *3+Share User Guide*.

The 3F MOD command modifies the password and access rights
associated with a first-level directory's sharename. It shares
the directory and assigns it a sharename. If the directory was
shared but not assigned a sharename, you must specify the
directory's path instead of a sharename. For information on
using the 3F SHARE command with first-level directories, see
the 3F SHARE command in this chapter.

You can only modify the sharenames of first-level directories residing on the server for which you are logged in as the server-user. To modify the sharename of a first-level directory on another server, you must first log in as that server's server-user.

You can use the 3F MOD command to modify the password and access rights associated with the sharename but not the sharename itself. To change a directory's sharename, use the 3F UNSHARE command to delete the sharename and then use the 3F SHARE command to assign a new sharename.

You can assign the same directory several different sharenames. Each sharename can have a different password and access rights. For more information, see the 3F SHARE command in this chapter.

You can modify a sharename even while users are linked to the directory through that sharename. Changing the password and access rights does not affect users currently linked through the sharename, only new links. You can, for example, prevent users from establishing new links through a sharename by giving the sharename a new password. If a directory has several sharenames, the modifications only affect the specified sharename. Linking to the directory through other sharenames is unaffected.

Examples

Example 1: Changing the password of a sharename.

`3F MOD apps /PASS=newpass` ◄⏎
`\\FINANCE:HQ:3COM\APPS modified.`

Example 2: Deleting the password for a sharename.

`3F MOD apps /PASS=` ◄⏎
`\\FINANCE:HQ:3COM\APPS modified.`

Example 3: Changing the password and access rights of a sharename.

`3F MOD apps /PASS=newpass /ACCESS=rwc` ◄⏎
`\\FINANCE:HQ:3COM\APPS modified.`

Example 4: Changing access rights using prompted mode.

`3F MODIFY ?` ◄⏎
`Name?` **`share1`**
`New Password (****)?` ◄⏎
`New Access (/RWC)?` **`/pub`** ◄⏎

`\\FINANCE:HQ:3COM\SHARE1 modified.`

3F SHARE

Creates a first-level directory and shares it.

Format

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

Required Capability

Server-user

Parameters

sharename   A name that identifies the directory on the
                 network. All users may link to the directory
                 through its sharename(s). A single directory
                 can have multiple sharenames, each with
                 different passwords and access rights. If you
                 do not assign a sharename, users must identify
                 the directory by its path.

                 A sharename is eight characters or fewer. The
                 allowed characters are: letters (A through Z and
                 a through z), digits (0 through 9), the special
                 characters $&#@!%"()-{}_, and the international
                 characters supported by the IBM PC. Each
                 sharename for directories on the same server
                 must be unique.

path   The path to the directory you want to share.
                 The path must begin with the drive identifier of
                 the drive on which the directory resides. If
                 you do not assign the directory a sharename,
                 users must specify its path (without the leading
                 drive identifier) when they want to link to it.

pass   The password you are assigning to a particular
                         sharename. If assigned, all users, except the
                         server-user, must supply the password to link to
                         the directory through that sharename. If you
                         do not assign the password, any user can link
                         to the directory through that sharename. A
                         password is eight characters or fewer. The
                         allowed characters are: letters (A through Z and
                         a through z), digits (0 through 9), the special
                         characters $&#@!%"()-{}_, and the international
                         characters supported by the IBM PC.

access   The type of operations users can perform on
                         the contents of the directory. The access
                         rights must be one of the following: PUB, R, W,
                         RW, RWC, WC, and SHAR. If you do not assign
                         access rights, the 3+Share File service assigns
                         /RWC by default. A server-user cannot assign
                         PRIV (private) access rights to a directory.
                         See the following remarks for more information
                         on access rights.

Remarks

Although the 3F SHARE command is both a user and server-user
command, these remarks concern the capabilities reserved for
server-users. For a complete discussion of the capabilities
available to all users, see the *3+Share User Guide*.

The 3F SHARE command shares a first-level directory, allowing
network users to link to it. If the directory you specify does
not exist, the 3F SHARE command creates it.

Typically, administrators use the 3F SHARE command to create
and share first-level directories that contain files used by many
network users. One such directory is an APPS directory
containing program files.

Sharenames

Using the 3F SHARE command, you can assign a sharename to
the specified directory. Once assigned, the sharename then
identifies that directory on the network . You can use the 3F
SHARE command several times on the same directory, assigning
a different sharename each time. Each sharename can have a
different password and access rights.

If you share a directory and do not assign a sharename, all
users must specify the directory by its path. To link to a
directory in this case, users must specify the path in place of a
sharename in the 3F LINK command. In general, assigning a
sharename is preferable, but some applications may require
directories specified by paths. For such applications, you can
share a directory with the 3F SHARE command without assigning
a sharename.

If you do not assign a sharename, you can use the 3F SHARE
command on a directory only once. Before using the 3F SHARE
command on the same directory a second time, you must assign
it a sharename.

The number of sharenames you can assign to a directory is
limited only by the number of shared directories and shared
printers the 3+Share File and Print services can support. Each
different sharename counts as one shared directory. For
information on changing the number if you have a 3Server386,
see the *3+ Network Tuning Guide.* Otherwise, refer to the *3+
Installation and Configuration Guide.*

Passwords

If you share a directory and assign a password to that
sharename, all users must supply the password before linking to
the directory with that sharename. The server-user, however,
need not supply the password before linking to the directory.

If you share a directory without a password, no password is
required to link to the directory with that sharename. If you
want to share a directory with all users, do not assign a
password to the directory's sharename.

Access Rights

Server-users can assign the following access rights:

▶   PUB, or public, allows users to read but not alter the
     contents of the directory and its subdirectories.

▶   R, or read, allows users to read but not alter the contents
     of the directory and its subdirectories. R is the same as
     PUB.

▶   W, or write, allows users to write to files in the directory
     and its subdirectories. Users cannot read the files.

▶   RW, or read and write, allows users to read from and write
     to files in the directory and its subdirectories. Users
     cannot create or delete files and subdirectories.

▶   RWC, or read, write, and create, allows users to read from,
     write to, create, and delete files and subdirectories in the
     directory and its subdirectories.

▶   WC, or write and create, allows users to write to, create,
     and delete files and subdirectories in the directory and its
     subdirectories. Users cannot read files in the directory and
     its subdirectories.

► SHAR, or share, allows the user all the access rights of RWC and the right to share the directory and its subdirectories.

Most first-level directories contain shared program and data files. For directories containing shared programs, PUB or R are usually the appropriate access rights. For directories containing shared data files, RW or RWC are usually the appropriate access rights. If you are using a multiuser network application, refer to that application's documentation for more information on the access rights you should assign to the directories for its data files.

If you do not assign access rights, the 3+Share File service assigns RWC access rights, the default for server-users. The default for users is PRIV (private) access rights.

Examples

Example 1: Making a directory of public programs available for sharing, and assigning the directory APPSV1 the sharename APPS.

```
3F SHARE apps=c:\apps /PUB ◄──┘
\\FINANCE:HQ:3COM\APPS shared.
```

Example 2: Making the same directory as above available for sharing with no sharename, RWC access rights, and a password.

```
3F SHARE c:\apps /PASS=qyx31 /RWC ◄──┘
\\FINANCE:HQ:3COM\C:\APPSV shared.
```

Example 3: Making a directory available for sharing with public access rights, using the prompted mode.

```
3F SHARE ? ◄──┘
Sharename? wordstar ◄──┘
Path? c:\apps\wordstar ◄──┘
Password? ◄──┘
Access (/RWC)? /pub ◄──┘
\\FINANCE:HQ:3COM\WORDSTAR shared.
```

3F SHUTDOWN

Shuts down the 3+Share File and Print services on the specified
server.

Format

3F SHUTDOWN [\\server] [/NEW] [/NP]

Required Capability

Administrator

Parameters

server   The three-part name of the server whose
                        3+Share File and Print services you want to
                        shut down. If you omit this parameter, the
                        default is your File server.

NEW   Disables new links to shared directories and
                        printers on the specified (or default) server.
                        Users with existing links to shared directories
                        and printers on the specified server can
                        continue to establish new links. NEW does not
                        shut down the services or break existing links.

NP   Suppresses the request for verification.

Remarks

The 3F SHUTDOWN command stops the 3+Share File and Print
services on the server. 3F SHUTDOWN is the same as the 3P
SHUTDOWN command described later in this chapter. The 3F
(or 3P) SHUTDOWN command is the only correct way to stop
the 3+Share File and Print services on a server. Use the 3F
SHUTDOWN command whenever you need to stop network
operations.

The 3+Name service should always be the last service to be shut down. Shut down the network one server at a time, ending with the 3+Name service server. To start network operations again, you must restart each server. Always restart the 3+Name service server first, then restart any remaining servers, in any order.

You can use the NEW option to prevent users who have no existing links from linking to shared directories and printers on the server. Users with existing links can still establish new links to shared directories and printers on the server. Using the 3F SHUTDOWN command with this option does not shut down the 3+Share File and Print services; the command just prevents new users from establishing new links. Typically, this form of the 3F SHUTDOWN command is used before a full network shutdown, preventing new links while giving users on the network time to finish before the network shuts down altogether.

Examples

Example 1: Shutting down the 3+Share File and Print services on a server.

```
3F SHUTDOWN \\Finance  ◄─┘
Shutdown File and Print Service on
\\Server1:HQ:3Com [Y/N]? Y ◄─┘
\\FINANCE:HQ:3COM shutdown.
```

Example 2: Preventing new links to a server, with no verification.

```
3F SHUTDOWN \\Finance /NEW /NP ◄─┘
NEW LINKS TO \\FINANCE:HQ:3COM DISABLED.
```

Example 3: Preventing new links to a server, using the prompted mode.

```
3F SHUTDOWN? ◄─┘
ServerName? finance ◄─┘
Disallow New Links [Y/N]? y ◄─┘
Shutdown File and Print Service on
\\Finance:HQ:3Com [Y/N]? n ◄─┘
NEW LINKS TO \\FINANCE:HQ:3COM DISABLED
```

3F UNLINK

Unlinks a user from shared directories and printers on the specified server.

Format

3F UNLINK \\user [\\server] /NP]

Required Capability

Administrator

Parameters

user   The three-part name of the user you want to
                    unlink.

server   The three-part name of the server from which
                    you want to unlink the user. If you do not
                    specify a server, the 3+Share File service
                    unlinks the user from your default File server.

NP   Suppresses the request for verification.

Remarks

Although the 3F UNLINK command is both a user and an
administrator command, these remarks concern the capabilities
reserved for administrators. For a complete discussion of the
capabilities available to all users, see the 3+Share User Guide.

The 3F UNLINK command breaks all links between the specified
user and shared directories and printers on the specified server.
If you do not specify the server, the command affects your
default File server.

The 3F UNLINK command breaks the links at the server. The user software, and consequently the user, is not informed of the break. After the forced unlink, any attempts by the user software to use the broken links will produce NET804 and NET805 errors. Before continuing with network operations, the user's netstation should be restarted.

If the user is logged in more than once, all links by that user are broken, even if the links are from separate netstations.

Examples

Example 1: Unlinking a user from your default file server.

```
3F UNLINK \\fred jones ◄—┘
CAUTION: Unlinks both 3F and 3P links!
Unlink \\Fred Jones:HQ:3Com from
\\Finance:HQ:3Com [Y/N]? y ◄—┘
\\Fred Jones:HQ:3Com unlinked from
\\Finance:HQ:3Com.
```

Example 2: Unlinking a user from a specified file server, without verification.

```
3F UNLINK \\fred jones \\finance /NP ◄—┘
CAUTION: Unlinks both 3F and 3P links!
\\fred jones:HQ:3Com unlinked from
\\finance:HQ:3Com.
```

3F UNSHARE
Deletes a sharename.

Format
3F UNSHARE *sharename* | *path*

Required Capability
Server-user

Parameters

sharename   The sharename you are deleting. This is the
                     name assigned to the directory when it was
                     shared with the 3F SHARE command. If the
                     directory has several sharenames, you must
                     delete each individually.

path   The name of the path to the specified
                     directory. If this particular directory was
                     shared and not assigned a sharename, you must
                     identify the directory by its path. The path
                     name begins with the root directory of the disk
                     drive on which this particular directory resides.
                     The path name cannot include a drive identifier
                     or a leading backslash.

Remarks
Although the 3F UNSHARE command is both a user and
server-user command, these remarks concern the capabilities
reserved for server-users. For a complete discussion of the
capabilities available to all users, see the *3+Share User Guide.*

The 3F UNSHARE command deletes the specified sharename. If
the deleted sharename was the directory's only sharename, the
directory is no longer available for use on the network. If the
directory had more than one sharename, the directory can still

be linked to through its other sharenames. For more
information on multiple sharenames, see the 3F SHARE command
earlier in this chapter.

You can only use the 3F UNSHARE command with a sharename
whose directory resides on the server for which you are logged
in as the server-user. You cannot use the 3F UNSHARE
command on a sharename that is in use. If a user is linked to
the directory through the specified sharename (or path), the 3F
UNSHARE command will return an error message and the
sharename will not be deleted.

Examples

Example 1: Deleting a sharename.

```
3F UNSHARE apps ◄─┘
\\FINANCE:HQ:3COM\APPS unshared.
```

Example 2: Making a directory without a sharename unavailable
for sharing.

```
3F UNSHARE apps ◄─┘
\\FINANCE:HQ:3COM\C:\APPS unshared.
```

Example 3: Deleting a sharename, using prompted mode.

```
3F UNSHARE ? ◄─┘
Sharename?share2 ◄─┘
\\FINANCE:HQ:3COM\SHARE2 unshared.
```

7 Command Reference

3M DELM

Deletes undelivered mail (mail that has been sent to but not yet retrieved by users).

Format
3M DELM *user* [/NP]

Required Capability
Administrator

Parameters

user   The three-part name of the user whose
                          undelivered mail you are deleting. To delete
                          undelivered mail for all users on the server,
                          enter an asterisk (*).

NP   Suppresses the request for verification.

Remarks
The 3M DELM command deletes all mail that has not been retrieved by the user you specify or by all users on the server. DELM does not delete mailboxes.

If an employee changes location or leaves the company, you can delete mail waiting to be delivered to that employee by using the DELM command.

If you do not specify the domain and organization, 3+Mail uses the last specified domain and organization, usually the domain and organization you logged in with before executing the command.

Examples

Example 1: Deleting a specific user's mail.

```
3M DELM Barbara Cole ◄─┘
Are you sure ? (Y/N) y ◄─┘
Deleting contents of mailbox
for Barbara Cole:HQ:3Com
on corporate:HQ:3Com...
Done
```

Example 2: Deleting all users' mail with no verification.

```
3M DELM * /NP ◄─┘
Deleting contents of mailbox for *:HQ:3Com on
Corporate:HQ:3Com...
Done
```

Example 3: Deleting a specific user's mail, using a prompted mode.

```
3M DELM ? ◄─┘
Name? barbara cole ◄─┘
Are you sure ? (Y/N) y ◄─┘
Deleting contents of mailbox
for barbara cole:HQ:
3Com on Corporate:HQ:3Com...
Done
```

3M DEL1M

Deletes the first message in the queue waiting to be delivered
to a user.

Format
3M DEL1M *user*

Required Capability
Administrator

Parameters

user   The three-part name of the user whose
                      undelivered first message you want to delete.

Remarks
The 3M DEL1M command deletes the first message in the queue
of messages waiting to be delivered to a user. This may be
necessary if a message is undeliverable because of improper
formatting. It may also be necessary when a message with a
particularly large attachment is not deliverable due to lack of
disk space, is blocking the delivery of subsequent mail, and is
causing an error condition for that user.

Examples
Example 1: Deleting the first message in a user's message
queue.

```
3M DEL1M roger bowman  ◄┘
Deleting earliest message for roger
bowman:HQ:3Com on Corporate:HQ:3Com...
Done
```

Example 2: Deleting the first message in a user's message queue, using a prompted mode.

```
3M DEL1M ? ◄─┘
Username? roger bowman ◄─┘
DELETING EARLIEST MESSAGE FOR
ROGER BOWMAN:HQ:3COM ON CORPORATE:HQ:3Com...
DONE
```

3M DELO
Deletes outgoing mail waiting to be relayed to another server.

▶ **NOTE:** The "O" in this command refers to the letter O, not the number zero.

Format
3M DELO *network:server* [/NP]

Required Capability
Administrator

Parameters

network   The number assigned to the network on which the specified server resides.

server   The network address of the server for which outgoing mail is destined and should be deleted.

▶ **NOTE:** Server addresses and associated server names are registered in the 3+Name service.

NP   Suppresses the request for verification.

Remarks

The 3M DELO command deletes all outgoing mail destined for
the specified server or for all servers when the wildcard *:* is
used.

▶ **NOTE:** Only mail being sent to the specified server is
deleted. The 3M DELO command does not affect mail
that has been received and is waiting to be
delivered.

The 3M DIRO command can be used to display a list of servers
to which outgoing mail is addressed and waiting to be sent.
Details on this are shown later in this chapter.

Examples

Example 1: Deleting outgoing mail for a specific server.

3M DELO 0040400:02608C392084 ◄──┘
Are you sure [Y/N]? **y** ◄──┘
Deleting mail on Corporate:HQ:3Com
outbound to network 0040400:Server
address 02608C392084...
Done

Example 2: Deleting all outgoing mail without verification.

3M DELO *:* /NP ◄──┘
Deleting mail on corporate:HQ:3Com outbound to
network *: Server address *...

Example 3: Deleting outgoing mail for a specific server, using a prompted mode.

```
3M DELO ? ◄─┘
Network Address ? 0040400 ◄─┘
Server Address? 02608C0392084 ◄─┘
Are you sure [Y/N]? y ◄─┘
Deleting mail on Corporate:HQ:3com outbound
to network 0040400:Server address 02608C392084...
```

3M DEL1O

Deletes the oldest outgoing mail message waiting to be relayed to another server.

► **NOTE:** The "O" in this command refers to the letter O, not the number zero.

Format
3M DEL1O *network:server* [/NP]

Required Capability
Administrator

Parameters

network	The number assigned to the network on which the specified server resides.
server	The network address of the server for which you want to delete the oldest outgoing mail message.

► **NOTE:** Server addresses and associated server names are registered in the Name service.

NP	Suppresses the request for verification.

Remarks

The 3M DEL1O command deletes the oldest message waiting to
be delivered to the specified server.

▶ **NOTE:** Only the oldest message being sent to the
specified server is deleted. The DEL1O command does
not affect mail that the server has received and is
waiting to deliver or other outgoing mail waiting to be
delivered to the specified server.

To display a list of servers to which outgoing mail is addressed
and waiting to be sent, use the 3M DIRO command. Details on
using this command are shown later in this chapter.

Examples

Example 1: Deleting the oldest outgoing mail message for a
specific server.

```
3M DEL1O 0040400:02608C392084 ◄─┘
Are you sure [Y/N]? y ◄─┘
Deleting oldest mail on Corporate:HQ:3Com
outbound to network 0040400:server address
02608C392084 ...
Done
```

Example 2: Deleting the oldest outgoing mail message for a specific server, using a prompted mode.

```
3M DEL10 ? ◄─┘
Network Address? 0040400 ◄─┘
Server Address? 02608C0392084 ◄─┘
Are you sure [Y/N]? y ◄─┘
DELETING OLDEST MAIL ON CORPORATE:HQ:3Com
outbound to network 0040400:server address
02608C392084 ...
Done
```

Example 3: Deleting the oldest outgoing mail message for a specific server, without verification.

```
3M DEL10 0040400:02608C392084 /NP ◄─┘
Deleting oldest mail on Corporate:HQ:3Com outbound
to network 0040400:server address 02608C392084 ...
Done
```

3M DIRM
Lists users who have mail to retrieve and the number of their respective messages waiting.

Format
3M DIRM [/NP]

Required Capability
Administrator

Parameters

NP   Suppresses the request for verification.

Remarks
Undelivered mail is mail that has not been retrieved by users. When an employee changes location within the company or leaves the company, you can use the 3M DIRM command to see whether his mailbox contains undelivered mail.

If you find mail that you want to delete, use the 3M DELM command.

Example
Listing users who have mail waiting to be retrieved.

```
3M DIRM  ◄─┘
Checking for user mailboxes on
Corporate:HQ:3Com...

User name                 # Messages
Richard Bowman:HQ:3Com    15
Barbara Cole:HQ:3Com      3
Susan Anthony:HQ:3Com     10
```

NOTE: If the list is longer than one screen display,
use **[Ctrl]+[S]** to stop scrolling. Type **[Ctrl]+[S]** again to
continue scrolling.

3M DIRO

Lists the addresses of servers to which outgoing mail is
addressed and the number of their respective messages.

▶ **NOTE:** The "O" in this command refers to the letter O,
not the number 0.

Format
3M DIRO [/NP]

Required Capability
Administrator

Parameters

NP   Suppresses the request for verification.

Remarks
Outgoing mail is mail waiting to be relayed to another server.
If a server is going to be out of service for a prolonged time,
you can use 3M DIRO command to see whether there is outgoing
mail for that server. To delete the outgoing mail, use the 3M
DELO command.

Example

Listing the address of servers to which outgoing mail is
addressed.

3M DIRO ◄⌐

Checking outbound mail on Corporate:HQ:3Com...

Network:Server address		Messages
00040400	02608C328640	20
00040400	02608C391084	3
00040401	02608C830192	10

▶ **NOTE:** If the list is longer than one screen display,
use **[Ctrl]+[S]** to stop scrolling. Type **[Ctrl]+[S]** again to
continue scrolling.

3M HELP
Lists the 3+Mail management commands and their functions.

Format
3M HELP | ? [command]

Required Capability
Administrator

Parameters

command   The specific command for which information is
                    desired.

Remarks
The 3M HELP or 3M ? command displays a list of the commands
you can use to manage 3+Mail. For information about a
particular command, enter the command name.

Examples
Example 1: Displaying a list of commands available for
managing 3+Mail.

```
3M ?  ◄─┘
Enter one of the following commands:
Help
Diro
Dirm
Delo
Dello
DelM
DellM
Status
Shutdown
Server=
```

Example 2: Displaying detailed information about 3M commands.

```
3M HELP ←⌐
Command Summary:
DirO:      Directory of Outbound messages.
           Show messages to be relayed to other mail servers
DirM:      Directory of users' Mailboxes.
           Show messages in users' mailboxes
DelO:      Delete Outbound messages.
           Delete messages to be relayed to other mail servers
DelM:      Delete Messages
           Delete all messages from a user's mailbox
Del1M:     Delete One Message
           Delete one message from a user's mailbox
Status:    Show status of mail server
Shutdown:  Shut down mail server in an orderly way
ServerO:   Connect to a different mail server
```

Example 3: Displaying information about a specific 3+Mail
command.

3M HELP shutdown ◄─⌐
Shuts down the mail service on a server.

3M SERVER=

Specifies the mail server with which you want to work.

Format

3M SERVER= [server] [/NP]

Required Capability

Administrator

Parameters

server   The name of the server you want to work with.
                 If you omit this parameter, 3+Mail assumes you
                 want to work with your default server.

NP   Suppresses the request for verification.

Remarks

If you do not want to work on your default server, you need to
specify the server before you enter any operational commands.
The server you specify stays in effect until you exit the 3+Mail
service or specify a different server.

► **NOTE:** A space is required between the equal sign and
the server name.

Example

Specifying the server on which you want to work.

```
3M SERVER= corporate:hq:3Com  ◄─┘
```

3M SHUTDOWN
Shuts down the 3+Mail service on a server.

Format
3M SHUTDOWN [/NP]

Required Capability
Administrator

Parameters

NP   Suppresses the request for verification.

Remarks
The 3M SHUTDOWN command causes the 3+Mail software to halt
service on the default server or the server you specified in the
3M SERVER= command. No other services are affected by the
3M SHUTDOWN command. This command assures an orderly
shutdown of the 3+Mail service. All files are closed properly
and the service is halted.

Examples
Example 1: Shutting down 3+Mail service on a server.

```
3M SHUTDOWN ◄─┘
Preparing to shut down mail service on
Corporate:HQ:3Com.
Are you sure [Y/N]? y ◄─┘
Mail service shut down.
```

Example 2: Shutting down 3+Mail service on a server, without verification.

3M SHUTDOWN /NP ◄─┘
Preparing to shut down mail service on
CORPORATE:HQ:3Com.
Mail service shut down.

3M STATUS

Displays configuration and current status information for the 3+Mail service.

Format

3M STATUS [/NP]

Required Capability

Administrator

Parameters

NP   Suppresses the request for verification.

Remarks

The 3M STATUS command displays information about the default server or the server you specified in the SERVER= command.

The first six entries displayed contain configuration information entered during installation of 3+Mail on the server.

The remaining two entries describe the current status of 3+Mail on the server:

▶   The **current number of mailboxes** is the number in use at the time you requested the status display.

▶   The **number of remote users** is the number logged in at the time you requested the status display.

Example

Displaying configuration and current status information of a server.

```
3M STATUS  ←┘
Retrieving status for Corporate:HQ:3Com...

Mail S&F process sleeps:          30 seconds after each loop
Messages considered dead after:   24 hours
Maximum number of remote users:   1
Current number of remote users:   0
Number of server processes:       2
Maximum number of mailboxes:      64
Current number of mailboxes:      45
```

7

Command
Reference

3N ADD ALIAS

Creates an alias for an entry in the 3+Name service.

Format

3N ADD ALIAS [\\]*name1*[:*domain*[:*organization*]]

Name? [\\]*name2*[:*domain*[:*organization*]]

Required Capability

Administrator

Parameters

name1:domain:organization

> The three-part name of the alias you are creating. The three-part name must be unique within the Name service. If you omit this parameter from the command line, the service prompts you for it.

name2:domain:organization

> The three-part name of the entry that the alias represents.

Remarks

Use aliases to create nicknames for users and to provide a
shorthand notation for server names.

The 3N ADD ALIAS command creates an alias for an entry in
the 3+Name service. The entry that the alias represents must
already exist in the 3+Name service. The domain and
organization of an alias need not be the same as the entry that
the alias represents.

Examples

Example 1: Creating an alias for a user.

```
3N ADD ALIAS Freddy ◄─┘
Name? fred jones ◄─┘
Adding Alias Freddy:HQ:3Com for
Fred Jones:HQ:3Com ...
Alias Freddy:HQ:3Com added.
```

Example 2: Creating an alias for a user on another network.

```
3N ADD ALIAS Fred Afar ◄─┘
Name? fred afar:nyny:othercorp ◄─┘
Adding Alias Fred Afar:HQ:3Com for
Fred Afar:NYNY:Othercorp ...
Alias Fred Afar:HQ:3Com added.
```

3N ADD DOMAIN
Adds a domain to the 3+Name service.

Format
3N ADD DOMAIN *domain* [*:organization*]

Net Number? *netnum*

Required Capability
Administrator

Parameters

domain:organization

> The name of the domain you are adding to the 3+Name service. The domain's name must be unique within its organization. If you specify a new organization as well as a new domain, the new organization is also added to the 3+Name service. If you omit this parameter, the service prompts you for it.

netnum

> The number of the network on which the new domain resides. If the domain is on your network, press [Return] to accept the displayed default, which is the number of your network. If the domain is on another network, enter the number of that network. You will need to get the network number from the other network's administrator. A network number is an eight-character sequence of digits (0 through 9) and the letters A through F.

Remarks

The 3N ADD DOMAIN command adds a domain to the 3+Name
service. Each domain name must be unique within its
organization. The 3N ADD DOMAIN command also adds an
organization to the 3+Name service if you specify a new
organization as well as a new domain.

The most common use of 3N ADD DOMAIN is to add remote
domains to the 3+Name service to support communication with
other networks using 3+Route. You will need to get the
network numbers of the other networks from their network
administrators. You will also need to give other network
administrators your network number. To see your network
number, use the 3N STATUS command. For complete
information on the use of the 3N STATUS command, see the
3+Share User Guide. For information on communicating with
other 3+ networks, see Chapter 4 of this guide.

Examples

Example 1: Adding a domain on the same network.

```
3N ADD DOMAIN Warehouse ◄─┘
Net Number (00040004)? ◄─┘
Adding Domain Warehouse:3Com ...
Domain Warehouse:3Com added.
```

Example 2: Adding a domain on a different network.

```
3N ADD DOMAIN NorthEast ◄─┘
Net Number (00040004)? 00040009 ◄─┘
Adding Domain NorthEast:3Com ...
Domain NorthEast:3Com added.
```

Example 3: Adding a domain and organization.

```
3N ADD DOMAIN HQ:OtherCorp ◄─┘
Net Number (00040004)? 000459A0 ◄─┘
Adding Domain HQ:OtherCorp ...
Domain HQ:OtherCorp added.
```

3N ADD GROUP

Adds a group to the 3+Name service.

Format

3N ADD GROUP [\\]name[:domain[:organization]]

Comment? text

Required Capability

Administrator

Parameters

name:domain:organization

The three-part name of the group you are adding to the 3+Name service. The name must be unique in the 3+Name service. If you omit this parameter, the service prompts you for it.

text

Enter any string of characters not longer than 100 characters. To skip this prompt, press **[Return]**.

Remarks

The 3N ADD GROUP command adds a group to the 3+Name
service. Typically, groups are used to create and maintain
distribution lists for use with 3Com's 3+Mail electronic mail
product. Each group is a list of users who often receive the
same mail. You can create a separate group for each
distribution list.

Initially, a group has no members. You must add each member
to the group using the 3N ADD MEMBER command. Groups, as
well as users, can be members of a group. A single user or
group can be the member of any number of groups. To delete
members from a group, use the 3N DEL MEMBER command.
These commands are discussed later in this chapter.

Example

Creating a group.

```
3N ADD GROUP sales ◄─┘
Adding Group sales:HQ:3Com ...
Comment? List of salesforce located at HQ ◄─┘
Group sales:HQ:3Com added.
```

3N ADD MEMBER

Adds a member to a group in the 3+Name service.

Format

3N ADD MEMBER [\\]name1[:domain[:organization]]

Group Name? [\\]name2[:domain[:organization]]

Required Capability

Administrator

Parameters

name1:domain:organization

> The three-part name of the member you are
> adding. If you omit this parameter, the service
> prompts you for it.

name2:domain:organization

> The three-part name of the group to which you
> are adding the member. To accept the
> displayed default, if any, which is the last
> referenced group, press **[Return].** If no default
> is displayed, you must enter the name of the
> group.

Remarks

The 3N ADD MEMBER command adds a member to a group. The
member can be a user or another group. Both the group and
the member being added must already exist in the 3+Name
service. For information on adding a group to the 3+Name
service, see the 3N ADD GROUP command. For information on
adding a user to the 3+Name service, see the 3N ADD USER
command. For information on deleting a member from a group,
see the 3N DEL MEMBER command.

Examples

Example 1: Adding a user to a group.

```
3N ADD MEMBER Fred Jones ◄─┘
Group Name? sales ◄─┘
Adding Member Fred Jones:HQ:3Com to
sales:HQ:3Com ...
Member Fred Jones:HQ:3Com added.
```

Example 2: Adding a group to a group.

```
3N ADD MEMBER sales ◄─┘
Group Name? worldsales ◄─┘
Adding Member sales:HQ:3Com to all
3Com worldsales:HQ:3Com ...
Member sales:HQ:3Com added.
```

3N ADD PROP

Adds a new property, or field, to the record definition for a
class of entry, such as user or server, in the 3+Name service.

Format

3N ADD PROP *propnum*

PropertyType (S)? *type*
PropertyName? *propname*
PropertyDescription? *text*
PropertyLength? *proplen*
PropertyFormat (String)? *propformat*
Primary Property to add to? *entrytype*

Required Capability

Administrator

Parameters

propnum	A number that uniquely identifies the property. To avoid duplication with previously defined properties, the number should be in the range of 5000 through 9999. Duplicate property numbers are not allowed.
type	The type of property; primary or secondary. Primary properties should not be added. The default is secondary. Press **[Return]** in response to this prompt.

propname	The name of the property you are adding. The name is used as the prompt for the property in the appropriate 3N ADD command(s). The property's name can be 20 characters or fewer.
text	Any string of text not more than 132 characters.
proplen	The length of the property you are adding. The maximum length of a property is 256.
propformat	The format of the property. The default is string. Other formats will not function from the user interface. Press **[Return]** in response to this prompt.
entrytype	The class of entry to which you are adding the property. The supported values are **USER** and **SERVER**. This prompt is repeated until you press **[Return]**.

Remarks

The 3N ADD PROP command adds a new property or field to a class of entry in the 3+Name service. Properties are primarily intended for use by network applications. Properties should not be used to store data that change frequently; use properties for data that do not change or change slowly.

Example

Adding a new property to user records.

```
3N ADD PROP 5003 ◄┘
Property Type (S)? ◄┘
Property Name? Birthday ◄┘
Property Description? User's birthday in
MM/DD/YY format ◄┘
Property Length? 8 ◄┘
Property Format (String)? ◄┘
Adding Property 503 ...
Property 503 added.
Primary Property to add to? user ◄┘
Primary Property to add to? ◄┘
```

3N ADD SERVER
Adds a server to the 3+Name service.

Format
3N ADD SERVER [\\]name [:domain[:organization]]

Comment? *text*
Net Number? *netnum*
Ethernet Address? *netaddr*
3ShareInstalled? *share*
3MailInstalled? *mail*
3RouteInstalled? route
3BackupInstalled? *backup*
3RemoteInstalled? *remote*
3NetConnectInstalled? *connect*
3StartInstalled? *start*

Required Capability
Administrator

Parameters

name:domain:organization

> The three-part name of the server you are
> adding to the 3+Name service. The name must
> be unique in the Name service. If you omit
> this parameter, the service prompts you for it.

text

> Any string of characters not longer than 100
> characters. To skip this prompt, press **[Return]**.

netnum   The number of the network on which the server
                  is located. If the server is on your network,
                  press **[Return]** to accept the displayed default,
                  which is the number of your network. If the
                  server is on another network, enter the number
                  of that network.

                  To see your network number, use the 3N
                  STATUS command. The number itself is
                  assigned by 3Com to 3+Share server packages
                  and is entered in the file 3NAME.NSP during
                  installation. A network number is an
                  eight-character sequence of digits (0 through 9)
                  and the letters A through F.

netaddr   The network address of the new server. Each
                  3Com EtherLink board or 3Server has a unique
                  address encoded in read-only memory. Use the
                  3N DIR command to see the address of an
                  installed server. The network address is also
                  on the server's EtherLink board. A network
                  address is a 12-character sequence of digits (0
                  through 9) and the letters A through F.

share   Enter **Y** if the 3+Share File and Print services
                  are installed on this server. Enter **[ESC]**
                  otherwise.

mail   Enter **Y** if 3+Mail is installed on this server.
                  Enter **[ESC]** otherwise.

route   Enter **Y** if 3+Route is installed on the server.
                  Enter **[ESC]** otherwise.

backup   Enter **Y** if 3+Backup is installed on the server.
                  Enter **[ESC]** otherwise.

remote	Enter **Y** if 3+Remote is installed on the server. Enter **[ESC]** otherwise.
connect	Enter **Y** if 3+NetConnect is installed on the server. Enter **[ESC]** otherwise.
start	Enter **Y** if 3+Start is installed on the server. Enter **[ESC]** otherwise

Remarks

The 3N ADD SERVER command adds a server to the 3+Name service. Normally, you do not need to add the names of servers that are on your network. When a server is started, it automatically adds an entry for itself to the Name service unless an entry already exists. To list entries in the Name service, see the 3N DIR command in the *3+Share User Guide*.

If you use 3+Route or 3+Netconnect to communicate with other networks, you can add servers on the other networks to your 3+Name service. This allows users on your network to link to the shared directories and printers on the other networks' servers. You will need to exchange network numbers, names, and network addresses with other network administrators. You can use the 3N STATUS and 3N DIR commands to determine your network number and servers' network addresses, respectively.

Example

Adding a remote server to the 3+Name service.

```
3N ADD SERVER Sales:NorthWest ◄─┘
Adding Server Sales:NorthWest:3Com ...
Comment? A server in the field with
dial-up access ◄─┘
Net Number (00040004)? 00040009 ◄─┘
Ethernet Address? 02608C00809E ◄─┘
3ShareInstalled? [ESC] ◄─┘
3MailInstalled? Y ◄─┘
3RouteInstalled? Y ◄─┘
3BackupInstalled? [ESC] ◄─┘
3RemoteInstalled? [ESC] ◄─┘
3NetConnectInstalled? [ESC] ◄─┘
3StartInstalled? [ESC] ◄─┘
Server Sales:NorthWest:3Com added.
```

3N ADD USER
Adds a new user to the 3+Name service.

Format
3N ADD USER name[:*domain*[:*organization*]]

Comment? *text*
CapabilityClass(U)? *capclass*
3ShareServer? *fileserver*
HomeDir? *homedir*
File server Drive? *drive*
3MailServer? *mailserver*

Required Capability
Administrator

Parameters

name:domain:organization

> The three-part name of the user you are adding
> to the 3+Name service. The name must be
> unique in the Name service. If you omit this
> parameter, the service prompts you for it.

text
> Any string of characters not longer than 100
> characters. To skip this prompt, press
> **[Return]**.

capclass
> The new user's capability class. To give the
> user administrator capability, enter **A.** For user
> (or normal) capability, enter **U** or press
> **[Return]**.

fileserver

The three-part name of the file server that will
serve this user. The user's home directory is
created on this file server. This file server is
also the user's default print server.

You can omit this parameter by pressing
[Return], or [Esc] and [Return] if a default file
server is displayed. If you omit this parameter,
the user has no default file and print server,
no home directory, and cannot use the 3+Share
File and Print services. The next two prompts
do not appear.

homedir

The name of the home directory that will be
created for the user on the above-named server.
The home directory name must be a valid DOS
directory name of eight characters or fewer.

drive

The drive identifier of the server's drive on
which you want the user's home directory
created. The drive identifier must designate an
existing shared disk drive on the user's file
server. To find the available drives and the
free space on each drive, use the 3F STAT
command. For information on 3F STAT, see the
3+Share User Guide.

mailserver

The name of the new user's mail server. If you
do not assign the user a mail server, he is
unable to use the 3+Mail service. To assign no
mail server, press [Esc] and then [Return] if a
default mail server's name is displayed. If no
default is displayed, press [Return].

Remarks

The 3N ADD USER command adds a user to the 3+Name service. You must add a user to the Name service before that user can log in and use the network.

In addition to entering the user in the 3+Name service, this command also creates a home directory for the user on the assigned file server, if any. The assigned file server is also the user's default server for 3+Share File and Print service operations. If the user is not assigned a file server, no home directory is created and the user cannot use the File and Print services.

Each user who is assigned a file server owns a unique home directory and all the files and directories below it. A user can always link to his own home directory. No user other than the owner can link to a home directory unless the owner shares it by using 3F SHARE command. Initially, the user's home directory is empty. After linking to it, the user can create files and directories using DOS commands and application programs.

You must name each user's home directory. You should establish a convention for naming users' home directories. One such convention is to name each home directory by the initials of the user's first and middle names and the first six characters of the user's last name. For example, user Fred T. Jones's home directory would be named FTJONES, and Mary B. Harrison's would be MBHARRIS.

If your network supports 3+Remote PC users who dial in to the network, you must add each of these users to the 3+Name service. If these users are already in the Name service because they also use the network locally, you do not need to add them again.

If you add a user to the Name service and specify a file or mail
server that is not operational, the user cannot be added to the
inoperative server. If this happens, an onscreen message asks if
you want to add the user to the Name service even though the
user cannot be added to the specified file or mail server. You
can answer **N** (no) and try to add the user again later. You can
answer **Y** (yes) and let the user be added to the Name service
without adding the user to the specified file or mail server. If
you answer **Y** (yes), you must modify the user entry with the 3N
MOD command and delete the name of the inoperative file or
mail server. You should never allow a user entry to specify a
file or mail server to which the user is not yet successfully
added.

Example

Adding a new user to the 3+Name service.

```
3N ADD USER Fred Jones ◄─┘
Adding User Fred Jones:HQ:3Com ...
Comment? Factory sales support engineer ◄─┘
CapabilityClass(U)? ◄─┘
3ShareServer? finance ◄─┘
HomeDir? fjones ◄─┘
File server Drive? c: ◄─┘
3MailServer? corporate ◄─┘
User Fred Jones:HQ:3Com added.
Adding Fred Jones:HQ:3Com to Share Server
Finance:HQ:3Com ...
Adding Fred Jones:HQ:3Com to Mail server
Corporate:HQ:3Com ...
```

3N DEL
Deletes a user, group, or server from the 3+Name service.

Format
3N DEL[ETE] [\\]name[:domain[:organization]] [/NP]

Required Capability
Administrator

Parameters

name:domain:organization

> The three-part name of the user, group, or
> server you want to delete from the 3+Name
> service. If you omit this parameter, the service
> prompts you for it.

NP   Suppresses the request for verification.

Remarks
The 3N DEL command deletes users, groups, and servers from
the 3+Name service. The service prompts you to verify the
deletion before it is performed unless you include the NP
parameter.

▶ **NOTE:** Whenever you delete an entry from the 3+Name
service, you should also delete any aliases for that
entry, using the 3N DEL ALIAS command.

The following restrictions and considerations apply to the
various types of entries you can delete with this command.

Deleting Users

Before you can delete a user from the 3+Name service, the
user's home directory must be empty and the user must have no
undelivered mail. If the user's home directory is not empty or
the user has undelivered mail, you must first log in as that user
and delete the contents of the home directory and any
undelivered mail. If you do not know the user's password, first
use the 3N MOD command to delete the user's password. You
can then log in as that user without supplying a password.

Use the DOS DEL and RMDIR commands to delete files and
directories, respectively, from the user's home directory; see the
DOS manual for more information. For information on deleting
a user's undelivered mail, see the 3M DELM command earlier in
this chapter.

Deleting Groups

There are no restrictions on deleting groups. You do not need
to delete the members from a group before you delete the
group.

Deleting Servers

You need to delete a server from the 3+Name service only if the
server is removed from the network. If an entry exists in the
Name service for a remote server, you need to delete the entry
if that remote server is removed from its network.

Before you remove a server from the network and delete it from
the Name service, copy any files you want to save to diskettes,
tape, or another server. If any users have home directories on
that server, you need to assign those users to another file
server and likewise move the contents of their home directories.
For more information on changing a user's default file server,
see the 3N MOD command later in this chapter. If the server
provided 3+Mail service to any users, you will need to reassign
those users to another mail server. For information on such
reassignments, see the 3N MOD command later in this chapter.

Always perform a proper shutdown of all services on a server
before turning off power to the server. For instructions on
shutting down services, see the 3F, 3P, and 3N SHUTDOWN
commands in this chapter.

Examples
Example 1: Deleting a user from the 3+Name service.

```
3N DEL fred jones ◄─┘
Delete User Fred Jones:HQ:3Com [Y/N]? y ◄─┘
User Fred Jones:HQ:3Com deleted.
```

Example 2: Deleting a group from the 3+Name service.

```
3N DELETE sales ◄─┘
Delete Group sales:HQ:3Com [Y/N]? y ◄─┘
Group sales:HQ:3Com deleted.
```

Example 3: Deleting a remote server from the 3+Name service.

```
3N DEL sales:northwest ◄──┘
Delete Server Sales:NorthWest:3Com [Y/N]? y
Server Sales:NorthWest:3Com deleted.
```

Example 4: Changing your mind while deleting a user.

```
3N DELETE fred jones ◄──┘
Delete User Fred Jones:HQ:3Com [Y/N]? n ◄──┘
*** Cancelled.
```

Example 5: Deleting a user without the request for verification.

```
3N DEL fred jones /NP ◄──┘
User Fred Jones:HQ:3Com deleted.
```

3N DEL ALIAS
Deletes an alias from the 3+Name service.

Format
3N DEL[ETE] ALIAS [\\]name[:domain[:organization]] [/NP]

Required Capability
Administrator

Parameters

name:domain:organization

> The three-part name of the alias you want to delete from the 3+Name service. If you omit this parameter, the service prompts you for it.

NP   Suppresses the request for verification.

Remarks
The 3N DEL ALIAS command deletes an alias from the 3+Name service. Unless you include the NP parameter on the command line, you must verify the deletion before it takes place.

You cannot make changes to an existing alias. To change an alias, you must first delete the alias, then add a new one using 3N ADD ALIAS. Deleting an alias from the Name service does not delete the user entry for which the alias stands.

When you delete a user, you must also delete any alias associated with the user's name.

Examples

Example 1: Deleting an alias from the 3+Name service.

3N DEL ALIAS freddy ◄┘
Delete Alias freddy:HQ:3Com [Y/N]? **y** ◄┘
Alias freddy:HQ:3Com deleted.

Example 2: Deleting an alias without verification.

3N DEL ALIAS freddy /NP ◄┘
Alias freddy:HQ:3COM deleted.

3N DEL DOMAIN

Deletes a domain and all associated entries from the 3+Name service.

Format

3N DEL[ETE] DOMAIN *domain[:organization]* [/NP]

Required Capability

Administrator

Parameters

domain:organization

> The name of the domain you want to delete from the 3+Name service. If you omit this parameter, the service prompts you for it.

NP   Suppresses the request for verification.

Remarks

The 3N DEL DOMAIN command deletes a domain and all entries within the domain from the 3+Name service. If the domain you are deleting is the last domain in an organization, the organization is also deleted.

CAUTION: Deleting a domain also deletes all entries in the 3+Name service that belong to the domain. Use this command carefully as you can accidentally delete a great many entries, such as users. Moreover, adding the domain again does not retrieve the lost entries. Before you delete a domain, use the 3N DIR command to see if it contains any entries. For information on the 3N DIR command, see the *3+Share User Guide*.

If an alias exists for the domain, delete it using the 3N DEL ALIAS command.

Example

Deleting a domain from the 3+Name service.

```
3N DEL DOMAIN old-domain ◄⎯
Delete Domain old-domain:3Com [Y/N]? y ◄⎯
Domain old-domain:3Com deleted.
```

3N DEL MEMBER

Deletes a member from a group in the 3+Name service.

Format

3N DEL[ETE] MEMBER [\\]name1[:domain[:organization]] [/NP]

Group Name? [\\]name2[:domain[:organization]]

Required Capability

Administrator

Parameters

name1:domain:organization

> The three-part name of the member you want to delete from the specified group. If you omit this parameter, the service prompts you for it.

name2:domain:organization

> The three-part name of the group from which you want to delete the member.

NP   Suppresses the request for verification.

Remarks

The 3N DEL MEMBER command deletes a member from a group. Use this command to remove members from distribution lists.

Example

Deleting a member from a group.

```
3N DEL MEMBER fred jones ◄──┘
Group Name? sales ◄──┘
Delete Member Fred Jones:HQ:3Com from
sales:HQ:3Com [Y/N]? y ◄──┘
Member Fred Jones:HQ:3Com deleted.
```

3N DEL PROP

Deletes an existing property, or field, from an entry's record in the 3+Name service.

Format

3N DEL PROP *propname*|*propnum* [/NP]

Required Capability

Administrator

Parameters

propname	The name of the property you want to delete. You can also specify the property by its property number.
propnum	The number of the property you want to delete. This is the number that was assigned to the property when it was added to the 3+Name service.
NP	Suppresses the request for verification before deleting the specified property.

Remarks

You should only delete user-defined properties.

CAUTION: Deleting predefined properties causes network applications to fail.

Example
Deleting a property by number without verification.

3N DEL PROP 5003 /NP ◄┘
Property 5003 deleted.

3N DIR PROP

Displays the properties that have been added to the 3+Name service.

Format

3N DIR PROP [*propnum* | *propname*]

Required Capability

Administrator

Parameters

propnum   The number of the property you are
                       displaying. This parameter is optional; if
                       you do not specify a particular property
                       number or name, all properties in the
                       3+Name service are displayed.

propname   The name of the property you are
                       displaying. This parameter is optional; if
                       you do not specify a particular property
                       name or number, all properties in the Name
                       service are displayed.

Remarks

The 3N DIR PROP command allows you to list a specific property by number or name, or to list all the properties in the 3+Name service.

If you list a particular property, all fields for that property are listed. If you do not specify a particular property, the property number, type, and name are listed for all properties in the 3+Name service. Although only users with administrator capability can add, modify, or delete a property from the Name service, regular users can display a property or properties.

Examples

Example 1: Displaying a particular property.

```
3N DIR PROP 5008 ◄──┘
Property Number:        5008
Property Type:          Password
Property Name:          Password
Property Length:        2
Property Description:   Hashed password
Property Format:        CARDINAL
```

Example 2: Displaying all properties in the 3+Name service.

```
3N DIR PROP ◄──┘
Finding Properties . . .
Number: 204    Type: Secondary    Name: Address
Number: 4      Type: Secondary    Name: addresslist
Number: 3      Type: Group        Name: members
Number: 100    Type: Primary      Name: User

Number: 205    Type: Secondary    Name: Server
```

3N MOD

Modifies a user, group, or server entry in the 3+Name service.

Format

3N MOD[IFY] [\\]name[:domain[:organization]]

Required Capability

Administrator

Parameters

name:domain:organization

> The three-part name of the user, group, or server entry you want to modify. If you omit this parameter, the service prompts you for it.

> The 3+Name service determines the type of entry you want to modify by looking up its name. Each type of entry has its own set of additional parameters. The service prompts you for these additional parameters after the Name service has determined the type of entry you want to modify. Each set of additional parameters is described separately after the following general remarks.

General Remarks

The 3N MOD command modifies existing entries in the 3+Name service. You can modify users, groups, and servers with the 3N MOD command.

You are prompted for each parameter you can modify. Included in each prompt is the current value of the parameter, if any. To keep the current value, press [Return] in response to the prompt. To change the current value, enter a new value and press [Return]. To clear the current value without entering a new value, press [Esc] and then [Return].

You can cancel the 3N MOD command by pressing [Esc] in response to a prompt for a parameter with no current or default value, or by pressing [Esc] twice in response to a prompt for a parameter with a current or default value. (The first time clears the current value and the second time cancels the 3N MOD command.)

Modifying Users

Parameters

Comment?   To keep the current comment, press [Return]. To change the comment, enter a new comment and press [Return]. To erase the comment without entering a new comment, press [Esc] and then [Return]. A comment can be any string of 100 characters or fewer.

Password?   To keep the current password, press [Return]. The current password is not displayed. Only the user can modify his own password. With administrator capability, however, you can delete the user's password by pressing [Esc] and then [Return].

CapabilityClass?   To keep the displayed capability class, press
                      [**Return**]. To change the user's capability
                      class, enter the new capability class and
                      press [**Return**]. Enter **U** for normal
                      capability. Enter **A** for administrator
                      capability.

3MailServer?   The three-part name of the user's mail server.
                      If the 3+Mail service is not installed on the
                      network, this prompt is not displayed.

                      If your network uses 3+Mail, you can respond
                      to this prompt in one of the following ways.
                      Press [**Return**] to keep the current mail server
                      (or none if none is currently assigned). Press
                      [**Esc**] and then [**Return**] to delete the current
                      Mail Server assignment, provided the user has
                      no undelivered mail. If there is no mail server
                      currently assigned, specify a mail server by
                      entering the server's three-part name and
                      pressing [**Return**]. You cannot change from one
                      mail server to another in a single operation.
                      Instead, you must delete the current mail server
                      assignment, and then use 3N MOD again to
                      specify the new mail server.

3ShareServer?   The three-part name of the user's file server, if any. Press **[Return]** to accept the current file server assignment (or none if none is currently assigned). Press **[Esc]** and then **[Return]** to delete the current file server assignment. The user's home directory must be empty before you can delete the file server assignment. If there is no currently assigned file server, you can specify a new server by entering its name and pressing **[Return]**. If you specify a new server, the service will prompt you for the following two parameters.

HomeDir?   The name of the user's home directory. This prompt appears only if you specified a new file server in response to the *3ShareServer?* prompt. The user's home directory is created with the name you supply here. The name you supply must be a valid DOS directory name of eight characters or fewer.

File server Drive   The disk drive on which the user's home directory is to be created. You are prompted for this parameter only if you specified a new file server in response to the *3ShareServer?* prompt. You must supply a drive identifier for a shared hard disk on the assigned file server.

Remarks

You cannot modify a user's password with the 3N MOD
command, but you can delete the password altogether. This is
useful whenever you need to log on as a particular user and you
do not know that user's password. You can use the 3N MOD
command to delete the user's password, and then you can log in
as that user without supplying a password. Only a user can
modify or assign his own password. For more information, see
the *3+Share User Guide*.

You cannot change a user's file server in a single operation. To
change a user's file server, you must use the 3N MOD command
twice: once to delete the old file server, and the second time to
add the new file server. For complete instructions, see the
section "Moving Users" in Chapter 5.

You cannot change a user's mail server in a single operation. If
you want to change a user's mail server, you must use the 3N
MOD command twice: once to delete the old mail server, and
the second time to add the new mail server. You must clear
any undelivered mail before removing a 3+Mail server.

Modifying Groups

Parameters

Comment?   To keep the current comment, press **[Return]**.
To change the comment, enter the new comment
and press **[Return]**. To clear the current
comment without entering a new comment, press
[Esc] and then **[Return]**. A comment can be
any string of 100 characters or fewer.

Remarks

Using the 3N MOD command, you can only modify a group's
comments. To change the members of a group, you must use
the 3N ADD MEMBER and 3N DEL MEMBER commands.

Modifying Servers

Parameters

Comment?   To keep the current comment, press **[Return]**.
To change the comment, enter the new comment
and press **[Return]**. To clear the current
comment without entering a new comment, press
[Esc] and then **[Return]**. A comment can be
any string of 100 characters or fewer.

Net Number?   The number of the network to which the server
is connected. To accept the current value,
press **[Return]**. To change the network number,
enter the new network number and press
[Return].

Use the 3N STATUS command to see your
network number. The number itself is assigned
by 3Com to 3+Share server packages and is
entered in the file 3NAME.NSP during
installation. A network number is an
eight-character sequence of digits (0 through 9)
and the letters A through F.

Ethernet Address?   The network address of the server. To
keep the current value, press **[Return]**. To
change the address, enter the new address
and press **[Return]**.

Each 3Com EtherLink board or 3Server has a
unique network address encoded in read-only
memory. Use the 3N DIR command to see the
address of a server installed on your network.
See the EtherLink board for the network
address on an uninstalled server. A network
address is a 12-character sequence of digits (0
through 9) and the letters A through F.

3ShareInstalled?   Press **[Return]** to keep the current answer.
Enter **Y** or **[ESC]** to cancel the default.

3MailInstalled?   Press **[Return]** to keep the current answer.
Enter **Y** or **[ESC]** to cancel the default.

3RouteInstalled?   Press **[Return]** to keep the current answer.
Enter **Y** or **[ESC]** to cancel the default.

3BackupInstalled?	Press **[Return]** to keep the current answer. Enter **Y** or **[ESC]** to cancel the default.
3RemoteInstalled?	Press **[Return]** to keep the current answer. Enter **Y** or **[ESC]** to cancel the default.
3StartInstalled?	Press **[Return]** to keep the current answer. Enter **Y** or **[ESC]** to change the answer.
3NetConnect Installed?	Press **[Return]** to keep the current answer. Enter **Y** or **[ESC]** to change the answer.

Remarks

Use this 3N MOD command to correct errors made when adding a remote server to the 3+Name service with the 3N ADD SERVER command. For example, if you entered a remote server's network address incorrectly, you can use this command to enter the correct address.

Entries for servers on your own network need to be modified if a service is added or removed.

Examples

Example 1: Deleting a user's password.

```
3N MOD fred jones ◄⏎
Looking for fred jones:HQ:3Com ...
Comment (Factory sales support engineer)? ◄⏎
Password (*****)? [Esc] ◄⏎
CapabilityClass (U)? ◄⏎
3ShareServer (Finance:HQ:3Com)? ◄⏎
3MailServer (Corporate:HQ:3Com)? ◄⏎
User Fred Jones:HQ:3Com modified.
```

Example 2: Modifying a group.

```
3N MOD sales ◄⏎
Looking for sales:HQ:3Com ...
Comment (List of salesmen)? List of sales
people at HQ ◄⏎
Group sales:HQ:3Com modified.
```

Example 3: Modifying a remote server.

```
3N MOD sales:northwest ◄⏎
Looking for sales:northwest:3Com ...
Comment (A server in the field with dial-up
access)? ◄⏎
Password?◄⏎
Net Number (00040009)? ◄⏎
Ethernet Address (02608C479800)? 02608C478900 ◄─
3ShareInstalled (Y)? [ESC] ◄⏎
3MailInstalled (Y)? ◄⏎
3RouteInstalled (Y)? ◄⏎
3BackupInstalled (Y)? [ESC] ◄⏎
3RemoteInstalled (Y)? [ESC] ◄⏎
3StartInstalled (Y)? [ESC] ◄⏎
3NetConnectInstalled (Y)? [ESC] ◄⏎
Server Sales:NorthWest:3Com modified.
```

Example 4: Modifying a server on your network to add 3+Mail service.

```
3N MOD corporate ◄─┘
Looking for Corporate:HQ:3Com
Comment (3Server next to Joe's desk.)? ◄─┘
Password? ◄─┘
Net Number (00040010)? ◄─┘
Ethernet Address (02608C483200)? ◄─┘
3ShareInstalled (Yes)? [ESC] ◄─┘
3MailInstalled (Yes)? ◄─┘
3RouteInstalled (Yes)? ◄─┘
3BackupInstalled (Yes)? [ESC] ◄─┘
3RemoteInstalled (Yes)? [ESC] ◄─┘
3StartInstalled (Yes)? [ESC] ◄─┘
3NetConnectInstalled (Yes)? [ESC] ◄─┘
Server CORPORATE:HQ:3COM Modified
```

3N MOD DOMAIN

Modifies a domain in the 3+Name service.

Format

3N MOD[IFY] DOMAIN *domain*[*:organization*]

Net Number? *netnum*

Required Capability

Administrator

Parameters

domain:organization

> The name of the domain you want to modify. If you omit this parameter, the service prompts you for it.

netnum

> The number of the network on which the domain is located. To accept the current value, press **[Return]**. To change the network number, enter the new number and press **[Return]**. A network number is an eight-character sequence of digits (0 through 9) and the letters A through F.

Remarks

When you modify a domain, you cannot change its name. You can change its network number only. You will want to do this if a domain moves from one network to another, or to correct a network number that you entered incorrectly.

If you are using the 3+Route or 3+Netconnect service to communicate with other networks, you need to update the configuration information when you modify a remote domain. For more information on changing the 3+ Route configuration if you have a 3Server386, see the *3+ Installation and Setup Guide.* Otherwise, refer to the *3+ Installation and Configuration Guide.*

Example
Modifying a domain.

```
3N MOD DOMAIN ◄─┘
Domain Name? northwest ◄─┘
Net Number (00040009)? 400 ◄─┘
Domain Northwest:3Com modified.
```

3N MOD PROP

Modifies a property in the 3+Name service.

Format

3N MOD[IFY] PROP *propnum* | *propname*

PropertyName? *propname*
PropertyDescription? *text*
PropertyLength? *proplen*
PropertyFormat (String)? *propformat*

Required Capability

Administrator

Parameters

propnum   The number of the property you want to
                     modify. A property with the specified
                     number must exist. You can also specify
                     the property by name.

propname   When specified on the command line, this is
                     the name of the property you want to
                     modify. In response to the **PropertyName?**
                     prompt, you can specify a new property
                     name. When using the 3N ADD command to
                     add an entry with this property to the
                     3+Name service, the property name is used
                     as the prompt for this property or field. A
                     property name is at most 20 characters
                     long.

text	Any string of text 132 characters or fewer.
proplen	The length of the property or field you are adding. The maximum length of a property is 256.
propformat	The format of the property. The default is string. Other formats will not function from the user interface. Press **[Return]** in response to this prompt.

Remarks

The 3N MOD PROP command allows you to modify a property's name, description, and length.

CAUTION: Modifying predefined properties causes network applications to fail. You should only modify a user-defined property.

Example

Modifying a property.

```
3N MOD PROP 5003 ◄─┘
PropertyName (Birthday)? ◄─┘
PropertyDescription? Date of birth in
mm/dd/yy format ◄─┘
PropertyLength (8)? ◄─┘
PropertyFormat (S)? ◄─┘
Property 5003 modified.
```

3N SET
Sets the 3+Name service's time and date.

Format
3N SET [/TIME=hh:mm[:ss]] [/DATE=mm-dd-yy]

Required Capability
Administrator

Parameters

hh:mm:ss   The current local time specified in a 24-hour
                  notation in which hh is the hour, mm the
                  minutes, and ss the seconds. The seconds are
                  optional. Thus, 1:00 A.M. becomes 1 and 1:00
                  P.M. becomes 13. Leading zeros are not
                  required.

mm-dd-yy   The current date in month, day, and year
                  format. Thus, mm is the month (1 for January
                  through 12 for December), dd the day of the
                  month, yy the last two digits of the year (1986
                  is 86, for example). Leading zeros are not
                  required.

Remarks
Although the 3N SET command is both a user command and an
administrator command, the discussion here is limited to
capabilities reserved for administrators. For a discussion of the
3N SET command capabilities available to all users, see the
3+Share User Guide.

The 3N SET command sets the 3+Name service's time and date. It has the same effect as using the DOS TIME and DATE commands at the Name service server. The 3N SET command's main function is to set the Name service's time and date, either from a netstation or when the Name service server is a 3Server.

The time and date may be changed for any server on the network by using 3N SET and answering the prompts.

Examples

Example 1: Setting the time and date.

```
3N SET /TIME=12:08 /DATE=1-18-86  ◄─┘
```

Example 2: Setting the time and date, using prompted mode.

```
3N SET ?  ◄─┘
Server Name? Finance  ◄─┘
Domain Name? hq  ◄─┘
Organization Name? 3com  ◄─┘
Time? 08:47  ◄─┘
Date? 06-11-86  ◄─┘
Set complete
```

3N SHUTDOWN
Shuts down the 3+Name service.

Format
3N SHUTDOWN [/NP]

Required Capability
Administrator

Parameters

NP   Suppresses the request for verification.

Remarks
The 3N SHUTDOWN command stops the 3+Name service. Using
this command is the only correct way to stop the Name service.
As the last step before turning off power to the network, use
the 3N SHUTDOWN command. All other services on all servers
must be shut down before you use the 3N SHUTDOWN command.

When stopping network operations, shut down the network one
server at a time, ending with the Name service server. To
restart network operations, always start the Name service server
first. You can start any remaining servers in any order.

For information on shutting down the 3+Share File and Print
services, see the 3F SHUTDOWN and 3P SHUTDOWN commands
in this chapter.

Example
Shutting down the 3+Name service.

3N SHUTDOWN ◄—┘
Shutdown the Name service [Y/N]? **y** ◄—┘
The Name service is shutdown.

7 Command
Reference

3P DEL

Deletes a spool file from a print queue.

Format

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

Required Capability

Administrator

Parameters

prnid
One of the following four printer identifiers: PRN:, LPT1:, LPT2:, or LPT3:. PRN: is the same as LPT1:. One of these four identifiers will correspond to the printer whose queue contains the spool file you want to delete. You must have previously linked a printer to the specified printer identifier using the 3P LINK command. If you omit this parameter, the default is the printer identifier PRN:.

spoolid
A number that identifies the spool file you want to delete. The spoolid is assigned by the 3+Print service when a spool file is added to a print queue. Use the 3P QSTAT command to determine a spool file's spoolid. For information on the 3P QSTAT command, see the 3+Share User Guide.

*
Specifies all spool files in the printer's queue that belong to you. Using this in place of spoolid deletes all your spool files from the queue, including the currently printing spool file if it is yours also.

ALL   Specifies all spool files. Using this in place of spoolid deletes all spool files from the queue. This option deletes the whole queue including the file currently printing.

NP   Suppresses the request for verification.

Remarks

The 3P DEL command deletes the specified spool file, or all spool files, from the print queue. This command is also available to users. Users can delete their own spool files only; administrators can delete any and all spool files from the print queue. For information on using this command as a user, see the *3+Share User Guide*.

You can use the 3P DEL command to delete the currently printing spool file. The printing of the spool file stops and the message "CANCELLED BY OPERATOR" is printed. The spool file is then deleted and printing continues with the next spool file in the queue.

Before you can use the 3P DEL command, you must link to the printer whose queue contains the file(s) you want to delete. Use the 3P LINK command to link a printer identifier to the printer. For information on using the 3P LINK command, see the *3+Share User Guide*.

Examples

Example 1: Deleting a single file from a print queue.

```
3P DEL lpt2: /SPOOL=23 ◄─┘
Are you sure [Y/N]? y ◄─┘
/SPOOL=23 deleted from
\\FINANCE:HQ:3COM\LASERJET.
```

Example 2: Deleting an entire print queue.

```
3P DEL prn: /SPOOL=ALL ◄─┘
Are you sure [Y/N]? y ◄─┘
/SPOOL=ALL deleted from
\\FINANCE:HQ:3COM\EPSON.
```

Example 3: Deleting a single file from print queue using a prompted mode.

```
3P DEL ? ◄─┘
Printer Id (PRN:)? ◄─┘
Spool ID? 6 ◄─┘
Are you sure [Y/N]? y ◄─┘
/Spool=6 deleted from
\\FINANCE:HQ:3COM\LASERJET.
```

3P MOD

Modifies a printer's password.

Format

3P MOD[IFY] *printername* /PASS=*pass*

Required Capability

Server-user

Parameters

printername   The name of the printer whose password you
                   want to modify. This is the name assigned to
                   the printer via the 3P SHARE command.

pass   The new password you want to assign to this
                   printer. If a password is assigned to the
                   printer, a user must supply the password when
                   linking to the printer. If the pass parameter is
                   left blank, then no password is assigned and
                   none is required for linking.

Remarks

The 3P MOD command modifies a printer's password. You can
use the command to add a password, change a password, or
delete a password. This command does not affect any existing
links to the printer.

You can use the 3P MOD command to modify passwords for only
those printers attached to the server for which you are logged
in as the server-user. To modify passwords on printers attached
to another server, you must log in as the server-user for that
server.

Examples

Example 1: Changing or assigning a password.

```
3P MOD laserjet /PASS=newpass ◄──┘
\\FINANCE:HQ:3COM\LASERJET modified.
```

Example 2: Deleting a password.

```
3P MOD laserjet /PASS= ◄──┘
\\FINANCE:HQ:3COM\LASERJET modified.
```

Example 3: Changing or assigning a password in prompted mode.

```
3P MOD ? ◄──┘
Printer Sharename? laserjet ◄──┘
New Password (*****)? newpass ◄──┘
\\FINANCE:HQ:3COM\LASERJET modified.
```

Example 4: Deleting a password in prompted mode.

```
3P MOD ? ◄──┘
Printer Sharename? laserjet ◄──┘
New Password (*****)? [Esc] ◄──┘
\\FINANCE:HQ:3COM\LASERJET modified.
```

3P MOVQ

Moves one printer's queue to the end of another printer's queue.

Format

3P MOVQ *prnid1* [*prnid2*]

Required Capability

Administrator

Parameters

prnid1
One of the following four printer identifiers: PRN:, LPT1:, LPT2:, or LPT3:. PRN: is the same as LPT1:. This parameter specifies the printer whose queue you want to move. You must have linked a printer to the specified printer identifier.

prnid2
One of the following four printer identifiers: PRN:, LPT1:, LPT2:, or LPT3:. PRN: is the same as LPT1:. This parameter specifies the printer to receive the queue. You must have linked a printer to the specified printer identifier, and the linked printer must be attached to the same server as the printer specified in the *prnid1* parameter. That is, both printers must be on the same server. If you omit this parameter, the default is PRN:.

Remarks

The 3P MOVQ command moves the queue of spool files waiting to be printed on the printer specified in the *prnid1* parameter to the queue of the printer specified in the *prnid2* parameter.
You can move queues only between two printers attached to the same server.

If a spool file is printing on the first printer, that spool file continues printing and is not moved with the rest of the queue.

Before you can use the 3P MOVQ command, you must have linked both printer identifiers, *prnid1* and *prnid2*, to printers (on the same server). For more information on linking to printers, see the description of the 3P LINK command in the *3+Share User Guide.*

Examples

Example 1: Moving a print queue.

```
3P MOVQ lpt3: lpt1: ◄─┘
Queue moved from \\FINANCE:HQ:3COM\EPSON to
\\FINANCE:HQ:3COM\LASERJET.
```

Example 2: Moving a print queue using a prompted mode:

```
3P MOVQ ? ◄─┘
Printer Id (PRN:)? ◄─┘
Printer Id (PRN:)? lpt2: ◄─┘
Queue moved from \\Finance:HQ:3Com\LASERJET to
\\Finance:HQ:3com\EPSON.
```

3P RESUME

Resumes printing on the specified printer.

Format

3P RESUME [*prnid*|*printername*] [/NEW] [/FORM=*formnum*]
[/FF[=OFF]]
[/BANNER[=OFF]]

Required Capability

Administrator or server-user

Parameters

prnid

One of the following four printer identifiers:
PRN:, LPT1:, LPT2:, or LPT3:. PRN: is the
same as LPT1:. This parameter specifies the
printer on which you want to resume printing
(or linking). The specified printer identifier
must have been linked to a printer with the 3P
LINK command. If you omit this parameter, the
default is PRN:.

printername

The name of the printer as assigned with the
3P SHARE command. If you are unable to link
to the printer, you can use the server-user
form of this command; specify the printer by
name, and allow printing and linking to resume.
To use this form of the 3P RESUME command,
you must be logged in as the server-user for
the server to which the printer is attached.

NEW   Enables others to establish new links to the
                   specified printer. NEW is required only if new
                   links were disabled with the 3P STOP NEW
                   command. Always include this keyword when
                   you use the server-user form of the 3P
                   RESUME command.

formnum   Specifies the type of form in the printer. A
                   form number is any number from 1 through 99.
                   If you omit this, the printer's form number
                   remains unchanged.

FF   Causes a page eject after each spool file is
                   printed. If you use this keyword with the
                   =OFF keyword, no page eject is performed
                   between the printing of spool files. If you omit
                   this keyword, page eject remains as last set.

BANNER   Causes a banner page to be printed at the
                   beginning of each spool file if the owner is
                   different from the owner of the spool file
                   printed before. If you use this keyword with
                   the =OFF keyword, no banner pages are printed.
                   If you omit this keyword, the printing of
                   banner pages remains unchanged.

Remarks

The 3P RESUME command performs the following:

► Starts a printer that was stopped with the 3P STOP command

► Permits new links to a printer whose links were disabled with the 3P STOP NEW command

► Allows or disallows page ejects between print jobs, via the FF option

► Allows or disallows the printing of a banner page at the beginning of each print job, via the BANNER option

► Specifies the type of form in the printer, via the FORM=*formnum* option.

If printing was stopped, it restarts with the file that was interrupted. The entire file will be printed regardless of where printing stopped.

If new links were prevented with the 3P STOP NEW command, you must remain linked to the printer until you enable new links, using the 3P RESUME NEW command. Should you unlink from the printer, you must use the server-user form of the 3P RESUME command to enable links to the printer again.

The 3P SET and 3P RESUME commands with the FORM=*formnum*
option control the type of form on which a spool file is printed.
Every spool file is also assigned a form number, either explicitly
with the 3P SET command or implicitly by default. The default
form number for spool files is one (1). A spool file will not
print unless the printer is assigned the same form number as the
spool file.

A printer's initial form number is set during installation. After
installation, use the 3P RESUME command to set a printer's
form number. Once set, a printer's form number stays set until
another 3P RESUME command changes it or the server is
restarted. Restarting a server reinstates all the form numbers
assigned to the attached printers during installation.

By using the 3P SET, 3P STOP (to stop printing while you
change forms), and 3P RESUME commands, you can ensure that
each file is printed on the correct form. This requires that
your organization establish a correspondence between form
numbers (the numbers 1 through 99) and actual forms. You can
assign the numbers to forms any way you prefer with one
restriction: The default form number for spool files is one.
You should make one (1) the form number of the most common
form, typically plain paper.

By using the FF and the BANNER options, you can control how
individual spool files are separated when printed. The FF option
turns page ejects between spool files on (**FF**) and off (**FF=OFF**).
The BANNER option is specified in the same manner as the FF
option and controls the printing of a banner page at the
beginning of each spool file. Even with BANNER on, a banner
page is printed at the beginning of a spool only if the owner of
that spool file is different from the owner of the previously
printed spool file and the printer has not paused between
printing jobs for the same owner.

The initial setting (**on** or **off**) of both the FF and BANNER options is established during installation. Once changed by the 3P RESUME command, the new setting remains until the server is restarted. When a server is restarted, the settings are reset to the values specified during installation.

You can use the 3P STAT command to see a printer's current form number, FF setting, and BANNER setting. For complete information on the 3P STAT command, see the *3+Share User Guide.*

You must have linked a printer to the specified printer identifier (or the default PRN:) before you can use the 3P RESUME command. Use the 3P LINK command to link to a printer; see the *3+Share User Guide* for information on the 3P LINK command. With the server-user form of the 3P RESUME command (in which you specify the printer by name), you do not need to be linked to the printer.

Examples

Example 1: Restarting the default printer.

```
3P RESUME ◄─┘
PRN: resumed.
```

Example 2: Permitting new links to a printer.

```
3P RESUME lpt1: /NEW ◄─┘
\\FINANCE:HQ:3COM\LASERJET resumed.
```

Example 3: Permitting new links to a printer, using a prompted mode.

```
3P RESUME ? ◄─┘
Printer Id (PRN:)? lpt2:◄─┘
Allow New Links [Y/N]? y ◄─┘
Form Number? ◄─┘
Form Feeds [ON/OFF]? ◄─┘
Banners [ON/OFF]? ◄─┘
\\FINANCE:HQ:3COM\EPSON resumed.
```

Example 4: Restarting a printer with invoices, form number 9, and disabling the printing of banner pages.

```
3P RESUME lpt2: /FORM=9 /BANNER=OFF ◄─┘
\\FINANCE:HQ:3COM\EPSON resumed.
```

Example 5: Permitting new links to a printer to which links were disabled with the 3PSTOP command.

```
3P RESUME Printer1 /NEW ◄─┘
\\FINANCE:HQ:3COM\LASERJET resumed.
```

Example 6: Permitting new links to a printer to which you
cannot link.

▶ **NOTE:** You must be logged in as the server-user to
perfrom this from of the 3P RESUME command.

```
3P RESUME ? ◄─┘
Printer Sharename? epson ◄─┘
Printer Id (PRN:)? lpt2:◄─┘
Allow New Links [Y/N]? y ◄─┘
Form Number? ◄─┘
Form Feeds [ON/OFF]? ◄─┘
Banners [ON/OFF]? ◄─┘
\\FINANCE:HQ:3COM\EPSON resumed.
```

3P SET
Sets spool file options.

Format
3P SET [*prnid*] /SPOOL=*spoolid*|*|ALL [/HOLD=[OFF]]
                                              [/COPIES=*copies*]
                                              [/PRI=*priority*
                                              [/DEFER[=OFF]]
                                              [/RELEASE]
                                              [/FORM=*formnum*]

Required Capability
Administrator

Parameters

prnid	One of the following four printer identifiers: PRN:, LPT1:, LPT2:, or LPT3:. PRN: is the same as LPT1:. This parameter specifies the printer whose queue contains the spool file(s) you want to set. The specified printer identifier must have been linked to a printer via the 3P LINK command. If you omit this parameter, the default is PRN:.
hold	Holds the printing of all jobs sent to the printer until you issue either the 3P UNLINK command or the 3P SET HOLD=OFF command.
copies	The number of copies to print of the specified spool file. The range is 1 through 99. The default is 1.

priority	The priority of the specified spool file in the queue. The spool file with the highest priority prints next. Spool files with the same priority print on first-come-first-served basis. The range is 1 through 99; 99 is the highest priority and prints first. The default is 50.
DEFER	Defers printing of the specified spool file until you release the spool file, using the 3P SET command and either the RELEASE or DEFER=OFF option.
RELEASE	Releases the specified spool file for printing. RELEASE is the same as DEFER=OFF.
formnum	Specifies the form required when printing the spool file. The spool file will not print until you use the 3P RESUME command to assign the printer the same formnum. The range of formnum is 1 through 99. The default is 1.
spoolid	Specifies an individual spool file. To determine the spoolid of a spool file, use the 3P QSTAT command. *Spoolid* is a number that the 3+Share Print service assigns to a spool file when that file is added to the queue.
*	Specifies all of your spool files in the queue for the specified printer.
ALL	Specifies all spool files, yours and everyone else's, in the queue for the specified printer.

Remarks
The 3P SET command sets various options for spool files. The
command is a user command with additional capabilities for the
administrator. These remarks describe the differences only.
For a complete description of the capabilities the 3P SET
command provides to any user, see the *3+Share User Guide.*

A user can use the 3P SET command on his own spool files
only. An administrator can use the 3P SET command on any
spool files regardless of who owns those file(s). An
administrator can also use the 3P SET command on all spool
files in a given queue at once by specifying ALL in the
/SPOOL= parameter. Otherwise, the 3P SET command is the
same for administrators and users.

Examples

Example 1: Deferring an entire queue from printing.

3P SET lpt2: /SPOOL=ALL /DEFER ◄⏎
/SPOOL=ALL for \\FINANCE:HQ:3COM\EPSON set.

Example 2: Releasing an entire queue for printing.

3P SET lpt2: /SPOOL=ALL /RELEASE ◄⏎
/SPOOL=ALL for \\FINANCE:HQ:3COM\EPSON set.

Example 3: Assigning a form number to a spool file.

3P SET prn: /SPOOL=23 /FORM=5 ◄⏎
/SPOOL=23 for \\FINANCE:HQ:3COM\LASERJET set.

Example 4: Changing the priority of a print job in prompted
mode.

3P SET ? ◄⏎
Printer ID (PRN:)? ◄⏎
Hold [ON/OFF]? ◄⏎
Copies? ◄⏎
Priority? **99** ◄⏎
Defer [ON/OFF]? ◄⏎
Form Number? ◄⏎
Spool ID? **32** ◄⏎
/SPOOL=32 for \\FINANCE:HQ:3COM\LASERJET set.

3P SHARE
Assigns a name to a printer and shares it on the network.

Format
3P SHARE *printername=portid* [/PASS=*pass*]

Required Capability
Server-user

Parameters

printername   The name you assign to the printer. This is
                 the name users will specify when they want to
                 link to this printer. A printer name is eight
                 characters or fewer. The name can be
                 composed of letters (A through Z and a through
                 z), digits (0 through 9), the special characters
                 $&#@!%"()-{}_, and the international characters
                 supported by the IBM PC.

portid   The printer you are sharing, identified here by
                 the port to which it is attached on the server.
                 The printer port, and thus the printer identifier
                 you should specify above, is determined when
                 the printer is installed. For serial printers, the
                 range of portid is COM1: through COMn:, where
                 n is the number of serial ports on the server.
                 For parallel printers, portid is LPT1: or LPT2:.

pass   The password you assign to this printer, if any.
                             Users must supply any such password before
                             they can link to the printer. If you do not
                             assign a password, any user can link to the
                             printer. A printer password can be eight
                             characters or fewer. The allowed characters
                             are: letters (A through Z and a through z),
                             digits (0 through 9), the characters
                             $&#@!%"()-{}_, and the international characters
                             supported by the IBM PC.

Remarks

The 3P SHARE command assigns a name to a printer and shares
it on the network. You can only share printers that are
connected to the server for which you are logged in as the
server-user. If you want to share a printer on another server,
you must first log in as the server-user for that server.

It is important to note that *portid* in this command refers to a
particular physical printer port on the server and is not a
logical device identifier to which you must link an actual device
(as is the *prnid* parameter). The actual port to which a printer
is connected, and thus the port identifier you specify in the 3P
SHARE command, is determined at the time the printer is
installed.

Examples

Example 1: Sharing a printer with no password.

```
3P SHARE laserjet=lpt2: ◄┘
\\FINANCE:HQ:3COM\LASERJET shared.
```

Example 2: Sharing a printer with a password.

```
3P SHARE epson=com1: /PASS=qtuv ◄┘
\\FINANCE:HQ:3COM\EPSON shared.
```

Example 3: Sharing a printer with no password using a prompted mode.

```
3P SHARE ? ◄┘
Printer Sharename? laserjet ◄┘
Printer ID? prn: ◄┘
Password? ◄┘
\\FINANCE:HQ:3COM\LASERJET shared.
```

3P SHUTDOWN

Shuts down the 3+Share File and Print services on the specified server.

Format

3P SHUTDOWN [\\server] [/NEW] [/NP]

Required Capability

Administrator

Parameters

server
The three-part name of the server whose 3+Share File and Print services you want to shut down. If you omit this parameter, the default is your file server.

NEW
Prevents new links to the shared directories and printers on the specified (or default) server. Users with existing links to the shared directories and printers on the specified server can continue to establish new links. This option does not shut down the services or break existing links.

NP
Suppresses the request for verification.

Remarks

The 3P SHUTDOWN command stops the 3+Share File and Print services on a server. It is the same as the 3F SHUTDOWN command described earlier in this chapter. Using either of these commands is the only correct way to stop the File and Print services on a server. Use the 3P SHUTDOWN command whenever you need to stop network operations.

The 3+Name service should always be the last service you shut
down. Shut down the network one server at a time, ending
with the Name service server. To restart network operations,
you must restart each server. Always restart the Name service
server first, then restart any remaining servers in any order.

Using the 3P SHUTDOWN command with the NEW option does
not shut down the File and Print services; the command just
prevents new users from establishing new links. Typically, this
form of the 3P SHUTDOWN command is used before a full
network shutdown, preventing new links while giving users time
to finish work in progress before you shut down the network
altogether.

Examples

Example 1: Shutting down the 3+Share File and Print services on
a server.

```
3P SHUTDOWN \\server1 ◄─┘
Shutdown File and Print Server on
\\FINANCE:HQ:3COM [Y/N]? y ◄─┘
\\FINANCE:HQ:3COM shutdown.
```

Example 2: Preventing new links to a server.

```
3P SHUTDOWN \\finance /NEW /NP ◄─┘
New links to \\FINANCE:HQ:3COM disabled.
```

3P STOP

Stops any printing on the specified printer.

Format

3P STOP [prnid] [/LINK] [/NEW]

Required Capability

Administrator

Parameters

prnid
One of the following four printer identifiers:
PRN:, LPT1:, LPT2:, or LPT3:. PRN: is the
same as LPT1:. This parameter specifies the
printer you want to stop. The specified printer
identifier must have been linked to a printer
with the 3P LINK command. If you omit this
parameter, the default is PRN:.

LINK
Breaks any existing links to the printer. Users
can still establish new links to the printer.
Printing of the spool files continues.

NEW
Prevents new links to the specified printer. It
does not break any existing links to the
printer. Printing of the spool files continues.

To enable new links to the printer again, use
the 3P RESUME command with the NEW option.

Remarks

The 3P STOP command allows you to stop printing on the
specified printer. The file that was printing is returned to the
beginning of the queue, as though it had not started printing.
When printing is resumed with the 3P RESUME command, that
file will print first from the beginning, regardless of where
printing stopped. Users can link to a printer that has been
stopped with the 3P STOP command, but no files will print until
printing is started with the 3P RESUME command.

A typical use of the 3P STOP command is to stop printing while
you change the paper or ribbon. Printing restarts when you
issue the 3P RESUME command.

The LINK option breaks all existing links to the printer,
including your link. Using the 3P STOP command with the
LINK option does not stop the printing of spool files on the
printer, and users can still establish new links to the printer.
The user software is not informed of the broken links, and
therefore errors, such as **NET804** and **NET805**, will occur if the
user software attempts to use the broken links. To correct the
errors, restart the user's netstation.

The NEW option prevents new links to the printer. Existing
links to the printer are not affected. Use this form of the
command before taking a printer out of network service; you
can prevent users from establishing new links to the printer
while allowing users with existing links to finish up in an
orderly fashion before you remove the printer from network use
altogether.

To enable new links to the printer again, use the 3P RESUME
command with the NEW option.

You can use the NEW and LINK options together. This form of the 3P STOP command breaks all links to the printer, including your link, and prevents users from linking to the printer. If you stop a printer and are unable to link to it, you must use the server-user form of the 3P RESUME command to restart the printer. For more information, see the 3P RESUME command earlier in this chapter.

Before you can use the 3P STOP command in any form, you must have linked the specified (or default) printer identifier to a printer by using the 3P LINK command. For information on the 3P LINK command, see the *3+Share User Guide*.

Examples

Example 1: Stopping a printer from printing.

```
3P STOP lpt1: ◄┘
\\FINANCE:HQ:3COM\LASERJET stopped.
```

Example 2: Breaking all existing links to the default printer.

```
3P STOP /LINK ◄┘
\\FINANCE:HQ:3COM\LASERJET stopped.
```

Example 3: Preventing new links to a printer, using a prompted mode.

```
3P STOP ? ◄┘
Printer Id (PRN:)? ◄┘
Disallow New Links [Y/N]?y ◄┘
Unlink Links [Y/N]?n ◄┘
\\FINANCE:HQ:3COM\LASERJET stopped.
```

3P UNLINK

Unlinks a user from the shared directories and printers on the specified server.

Format

3P UNLINK \\user [\\server]

Required Capability

Administrator

Parameters

user   The three-part name of the user you want to unlink.

server   The three-part name of the server from which the user is to be unlinked. If you do not specify a server, the user is unlinked from your default file server.

Remarks

Although the 3P UNLINK command is both a user and an administrator command, these remarks concern the capabilities reserved for administrators. For a complete discussion of capabilities available to all users, see the *3+Share User Guide.*

The 3P UNLINK command breaks any links the specified user has with the shared directories and printers on the specified server. If you do not specify the server, the user is unlinked from your default file server. The user software is not informed of the broken links, and this command therefore causes problems with that user software. To correct the situation, restart the user's netstation.

Example
Unlinking a user from your default file server.

```
3P UNLINK \\fred jones ◄─┘
```

CAUTION: This breaks the user's links with both
3+Share File and Print services.

```
Unlink \\Fred Jones:HQ:3Com from
\\Finance:HQ:3Com [Y/N]? Y ◄─┘
\\Fred Jones:HQ:3Com unlinked from
\\Finance:HQ:3Com.
```

3P UNSHARE

Deletes a printer's name from the network and makes the printer unavailable for shared use.

Format

3P UNSHARE *printername*

Required Capability

Server-user

Parameters

printername   The name of the printer you want to remove
                      from network use. This is the name you
                      assigned to the printer via the 3P SHARE
                      command. Using this command requires the
                      specified printer not be linked to by any users
                      and that the printer not be printing.

Remarks

The 3P UNSHARE command makes a printer unavailable for
shared use on the network and deletes the printer's name from
the 3+Share Print service.

Use the 3P UNSHARE command whenever you need to remove a
printer from the network. For example, if a printer breaks,
remove the printer from the network logically with the 3P
UNSHARE command before you physically disconnect the printer
from its server. Once it is repaired, you can connect the
printer to its server again by using the 3P SHARE command to
assign it a sharename and make it available for network use.

The printer you specify in a 3P UNSHARE command cannot be in use. No user can be linked to the printer, and the printer cannot be printing. Use the 3P STOP command to ensure both these conditions. Additionally, the printer's print queue should be empty. You can use the 3P MOVQ command to move any spool files to another print queue, or you can use the 3P DEL command to delete any spool files.

Before you can use the 3P UNSHARE command, you must be logged in as the server-user for the server to which the printer is connected.

Example
Removing a printer from the network logically.

```
3P UNSHARE laserjet ◄─┘
FINANCE:HQ:3COM\LASERJET unshared.
```

Chapter 8: Glossary
This glossary defines terms used in this guide.

access rights   Attributes you assign to a sharename to
                      control how users access the directory
                      through that sharename.

administrator   A network user who has been assigned
                      administrator capability (capability class A).

alias   Another name for an item entered in the
                      Name service. Aliases are typically
                      nicknames for users. Aliases must
                      be specified as three-part names when
                      three-part names are required.

concurrent server A personal computer equipped with both
                      3+Share server software and 3+Share
                      user software. A concurrent server can
                      function simultaneously as a network server
                      and a user workstation.

concurrent user   A user who is working at a server
                        equipped with both user and server
                        software.

directory   A named, logical grouping of entries for
                        other directories and files. Network users
                        can share directories.

domain   A category within an organization;
                        generally a geographical location.
                        Domains are the middle part of the
                        three-part name that uniquely identifies
                        an item on the network.

drive identifier   A single letter followed by a colon (A:
                        through Z:) to which you link a directory.
                        The 3+Share default values are A: through
                        G:. This default range can be increased or
                        decreased using the DOS LASTDRIVE=
                        statement in the CONFIG.SYS file.

▶ **NOTE:** The limit you set must be reflected in the
MSREDIR command line in the AUTOEXEC.BAT or
3PLUS_ON.BAT file with the L parameter as well as
in the CONFIG.SYS file.

file service   The software that manages the sharing of
                        directories, files, and disk space on the
                        network.

first-level   A directory that is immediately under a
directory   server's hard-disk root directory.
                        First-level directories can be shared only
                        by the server-user.

group	A collection of named entries. Groups are typically collections of users on 3+Mail distribution lists.
hexadecimal	A base-16 number system that uses the digits 0 through 9 and the letters A through F. Letters A through F represent numbers 10 through 15 (base 10), respectively.
home directory	A directory created for each network user by 3+Share when that user is added to the Name service. The home directory stores user-created files. General users and administrators have home directories; server-users do not.
initial user	A user who is created by 3+Share at installation so that 3+Share services can be set up and users can be added to the Name service. The initial user is called Admin.
linking	Creating a logical connection between a shared directory or printer on a file server and a drive identifier or printer identifier on your personal computer.
member	An entry within a group.
modem	A device that connects a server or personal computer to a telephone line.
Name service	The software that stores the names of, and information about, users and servers.

network   Two or more personal computers that are physically connected to allow communication and the sharing of resources.

network address   A 12-digit hexadecimal number that uniquely identifies a workstation or server on a network.

network number   A hexadecimal number assigned to each 3+Share package that uniquely identifies each network. A network can have many 3+Share servers, but only use one network number, usually the one assigned to the first 3+Share package installed.

organization   The general category to which a named item on the network belongs. An organization is usually the name of the company where the network resides. You specify an organization as the third part of a three-part name.

output device   A device such as a printer that is attached to a workstation or server and to which the workstation or server sends information.

password   A string of characters that you can assign to your user name or a sharename to control who can access your files. Passwords for user names can be twelve characters or fewer. Passwords for sharenames can be eight characters or fewer.

path   The directory parameter that you
                         specify to get from your current
                         directory or a drive's root directory to
                         another directory or file in the DOS
                         directory structure .

port identifier   A name you use in the 3P SHARE
                         command to tell the Print service the
                         physical port to which a printer is
                         attached. Port identifiers are specified
                         as LPT1:, LPT2:, or LPT3: for parallel
                         printers, or COM1: through COM5: for
                         serial printers.

printer identifier   One of the following names, to which you
                         link a shared printer: PRN: or LPT1:, LPT2:,
                         or LPT3:.

print queue   An ordered list of files waiting to be
                         printed.

print service   The software that manages the network's
                         printers and print queues.

printer sharename   The name a server-user gives a printer
                         when he shares the printer by using the 3P
                         SHARE command. Users specify a printer
                         sharename when they link to a printer.

server   A personal computer or 3Server equipped
                         with 3+ server software. A server manages
                         shared resources on the network.

server-user	A network user who logs in to the network using the name of a server to perform certain functions, such as making printers available to the network.
share list	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 data base SHRLIST is kept in the \3PLUS subdirectory and contains this information.
shared directory	A directory that can be used by other users. Directories are made shareable with the 3F SHARE command.
shared printer	A printer that can be accessed by the network users. A printer is shared by the server-user using the 3P SHARE command.
sharename	The name you give a directory when you share the directory. You also specify a sharename to link to someone else's directory.
spool file	A temporary file on the shared printer's server that stores a file sent for printing.
spool ID	The identification number of a file while it is in the print queue.
subdirectory	Any directory that is below another directory in the DOS hierarchical file structure.

three-part name   The name by which the Name service identifies a named part of the network, such as a user or server. Three-part names are divided by colons (:), have the form Name:Domain:Organization, and are limited to 40:20:20 characters, respectively.

3+Share   Server and user software for the 3+ network that consists of the File and Print services.

unlinking   Breaking a logical connection between a shared directory and a drive identifier, or between a shared printer and a printer identifier.

users (general)   Users who use network resources but do not manage the network. Users are assigned the capability class U.

workstation   A personal computer connected to the network and equipped with user software.

Appendix A:
The PROFILE.SYS File

The PROFILE.SYS file is an optional file you may want to
create for yourself or other users to have various parameters
automatically defined for a user. A default PROFILE.SYS file is
supplied on your server.

The PROFILE.SYS file can contain 3+Menus parameters as well
as other parameters which are useful for everyday operations.
The following discussion is divided into two parts: 3+Menus
Parameters and General Parameters.

3+Menus Parameters

3+Menus allows you to set a wide variety of parameters to control how menus are displayed on the screen, who can use which selections, and how users access the command bar, among others. There are three categories of parameters:

► User environment. These control which main menu the user can access, how the display is set, and other features.

► Main menu capability. These parameters control user access to network-level features.

► Banner screen. The banner screen is displayed when anyone starts 3+Menus. You can define parameters to alter the product name, company identification, and other components.

User Environment Parameters

ATTRIBUTES

Allows the user to set display attributes that override the
DISPLAYTYPE parameter selections. The user can then
customize the colors on a color monitor, or change various parts
of the screen on a non-standard, non-color monitor.

Format:
ATTRIBUTES=a,b,c,d,e,f,g,h,i,j,k

Example
ATTRIBUTES=0,7,57,0,0,28,40,0,0,25,46

Description
For each attribute, substitute a number that relates to the
actual setting you want. The letters represent attributes as
described in Table A-3 at the end of this appendix.

DISPLAYTYPE

Sets display attributes for different types of video monitors.
3+Menus uses display attributes to emphasize features, currently
selected items, and active windows. For contrast between these
attributes, this parameter provides preset selections suited to
particular monitors. Table A-1 shows the variables to use for
each type of monitor.

Format
DISPLAYTYPE=x

Example
DISPLAYTYPE=B

Description
For the value of x, substitute A, B, C, or D, as shown in Table
A-1.

Table A-1. DISPLAYTYPE Variables

Variable	Monitor Type
A	IBM Monochrome Adapter
B	IBM Color Graphics Adapter
C	Compaq (color graphics adapter with monochrome monitor)
D	Alternate attribute set

EDIT

Path and name of the editor to use for the EDIT command on
the command bar.

Format

EDIT=[*] filename [editor parameters] [::] [editor parameters]

Variables

*	3+Menus unloads part of itself from memory and loads the text editor. If this is not specified, 3+Menus loads the text editor and does not unload part of itself unless there is not enough memory; then it will unload part of itself.
filename	Specifies the text editor you want to load. Can include a path, but need not. 3+Menus searches the PATH variable to locate the program file.
::	Tells 3+Menus to fill in the complete path and name of the file you want to edit.
	For editors that do not accept a file name on the command line or require a simple file name with no path, do not use ::. The editor will be loaded without a file name specified and the user will have to specify the name from within the editor.
editor parameters	Parameters required by the chosen editor which 3+Menus will pass to the editor.

# Example
EDIT=*WP ::

Remarks
Because DOS cannot pass command line parameters that include embedded blanks, include the EDIT command in a PROFILE.SYS file and do not type it on the command line.

MAINMENU
Path and name of the Main menu file.

Format
MAINMENU=*driveid:\path\menufile.ext*

Example
MAINMENU=D:\NETADMIN.MNI

Remarks
When a user is logged into the network, 3+Menus displays the
standard menu selections: Directories and Files, Printer
Connections, Shared Directories, and Log In/Log Out on the
Main menu. (See also the Main Menu Capability Parameters
section for parameters to control user access to these
selections.) If the user is not logged in, only the Directories
and Files and Log In selections are displayed. If 3+Menus finds
no MAINMENU file, the program creates a Main menu containing
only the standard selections. (Refer to the section on Main
Menu Capability Parameters for further information on
customizing the main menu.)

You can use any menu file created by 3+Menus as a main menu.
3Com provides several sample .MNI files customized to be main
menus. They are:

NETMAIN.MNI	for network administrators
USERMAIN.MNI	for standard users
MAINMENU.MNI	is a copy of NETMAIN.MNI for ease in installing servers

NAME
User's name used as a default for the LOGIN selection

# Format
NAME=username

# Example
NAME=Fred Jones
or
NAME=Fred Jones:Mktg:3Com

SERVERFILE

Path and name of the file containing the names of the network servers that 3+Menus can access.

Format

SERVERFILE=*driveid:\path\filename*

Example

SERVERFILE=e:\myserver

Remarks

If the network has only one server, there is no need to specify the SERVERFILE parameter.

To restrict a user to a single server, do not specify the SERVERFILE parameter. The default will then be the user's home server.

On a network that has only a few servers, make the file containing the server names available to all users. When the user opens the Shared Resources window, 3+Menus reads this file to display all the servers available.

For networks with many users, you can establish a separate, unique file containing the server names for each server, or a file containing only the servers you want particular users to access. Then have each user's PROFILE.SYS file or command line parameters point to the appropriate file.

SLASHKEY
Character to substitute for the slash key to access the command bar.

Format
SLASHKEY=*key*

Example
SLASHKEY=+

ZOOM
Set windows to gradually zoom open or pop open.

Format
ZOOM=ON|OFF

Variables
ON   The windows gradually zoom open and close.

OFF   The windows pop open and close.

Remarks
This parameter does not in any way affect the function of 3+Menus. However, using ZOOM=OFF is somewhat faster than ZOOM=ON. The default is ZOOM=ON.

Main Menu Capability Parameters

These parameters all interact with the setting of the
COMMANDS parameter. In all cases, if any of the parameters
are specified, their meaning overrides the setting of
COMMANDS. If an individual parameter is not set, its default
behavior is determined by the COMMANDS setting, whose
default is SLASH. The COMMANDS parameter is described next.

COMMANDS

Controls when the command bar is present at the top of the
screen.

Format
COMMANDS=ON|SLASH|OFF

Variables

ON   The command bar is present at all times, [F5] and
         [Shift]+[F5] are enabled, and all standard menu items
         appear.

SLASH   The command bar is displayed when the user presses the
         slash [/] key, [F5] and [Shift]+[F5] are enabled, and all
         standard menu items appear.

OFF   The user cannot use the command bar, cannot use [F5]
         to exit to DOS, cannot use the standard menu items,
         and cannot quit 3+Menus.

Remarks
The default is COMMANDS=SLASH.

MENUDEMO

Enables/disables a demonstration mode for 3+Menus.

Format
MENUDEMO=ON|OFF

Variables

ON   Enables a demonstration mode for 3+Menus, allows all of 3+Menus capabilities to be demonstrated using the *.DIR files on the distribution diskette, rather than live lists generated by the network. You can get the flavor of 3+ without having a network. Further, even if you have a network, shared resources will still be the frozen dummy values. Only existing links to sharenames will yield real network values, in the Directories and Files window.

OFF   3+Menus is in "live" mode.

Remarks
The default is OFF.

MENUDOS
Allows/disallows access to COMMAND.COM through 3+Menus.

Format
MENUDOS=ON|OFF

Variables
ON   Enables [F5] and [Shift]+[F5] allowing the user to access DOS through the menus.

OFF   Prevents the user from accessing DOS from 3+Menus.

Remarks
The default value is implied by the value of the COMMANDS parameter. This parameter overrides the action of the COMMANDS parameter.

MENUFILE
Allows/disallows access to the Directory and Files Main menu selection.

Format
MENUFILE=ON|OFF|text

Example
MENUFILE=Your Directories

Variables
ON   Allows the user to access the Directories and Files
          standard menu selection.

OFF   Prevents the user from accessing the Directories and
          Files standard menu selection.

text   Allows the user to access the Directories and Files
          standard menu selection with the text appearing on the
          Main Menu in place of the Directories and Files menu
          selection.

Remarks
The default value is implied by the value of the COMMANDS parameter. This parameter overrides the action of the COMMANDS parameter.

MENULOGINTEXT
String to replace the Log In string.

Format
MENULOGINTEXT=*text*

Example
MENULOGINTEXT=On the Network

Variable
text   Replaces the Login Main menu selection when the user
has logged out of 3+Menus and has run 3+Menus locally.

Remarks
If MENULOGOUT has been specified, its value determines if Log
In/Log Out appears on the Main menu. If MENULOGOUT has
not been specified, but MENULOGINTEXT has, it is equivalent
to setting MENULOGOUT=ON.

The default value is implied by the value of the COMMANDS
parameter. This parameter overrides the action of the
COMMANDS parameter.

MENULOGOUT
Allows/disallows access to the Log Out Main menu selection.

Format
MENULOGOUT=ON | OFF | *text*

Example
MENULOGOUT=Off the Network

Variables
ON   The user can access the Log Out standard Main menu
selection.

OFF   The Log Out standard Main menu item is not displayed.

text   Allows the user to access the Log Out standard Main
menu selection, with the text appearing on the Main
menu in place of the Log Out Main menu selection.

Remarks
The default value is implied by the value of the COMMANDS
parameter. This parameter overrides the action of the
COMMANDS parameter.

MENULPTS

Allows/disallows access to the Printer Connections Main menu selection.

Format

MENULPTS=ON|OFF|*text*

Example

MENULPTS=Printing

Variables

ON   The user can access the Printer Connections standard Main menu selection.

OFF   The Printer Connections standard Main menu item is not displayed.

text   Allows the user to access the Printer Connections standard Main menu selection, with the text appearing on the Main menu in place of the Printer Connections Main menu selection.

Remarks

The default value is implied by the value of the COMMANDS parameter. This parameter overrides the action of the COMMANDS parameter.

MENUMAINTEXT

String to display as the Main menu window label.

Format

MAINMENUTEXT=*text*

Example

MAINMENUTEXT=Your Menu

Variable

text   The text appears on the Main menu as the window
              label.

MENUSRVS
Allows/disallows access to the Shared Resources Main menu selection.

Format
MENUSRVS=ON | OFF | *text*

Example
MENUSRVS=Sharenames

Variables
ON   The user can access the Shared Resources standard Main menu selection.

OFF   The Shared Resources standard Main menu item is not displayed.

text   Allows the user to access the Shared Resources standard Main menu selection, with the text appearing on the Main menu in place of the Shared Resources Main menu selection.

Remarks
The default value is implied by the value of the COMMANDS parameter. This parameter overrides the action of the COMMANDS parameter.

Banner Screen Parameters

The banner screen appears when you start 3+Menus.

```
              3+Menus  ◄──────────────── ── Product
            Version 1.3
         3Com Corporation  ◄──────────── ── Company
   The Workgroup Computing Company  ◄──── ── Comment

   Copyright (c) 1986, 1987, 3Com Corp.
          All rights reserved
       Press any key to continue
```
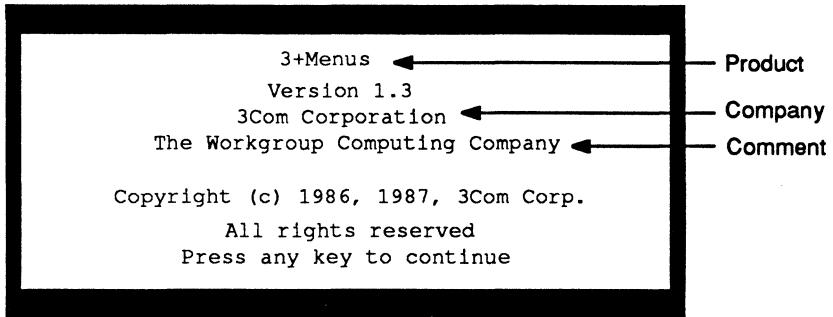
COMMENT

A string that replaces the comment in the banner page when
3+Menus initializes.

Format
COMMENT=*text*

Example
COMMENT=Supplies Unlimited

Remarks
The default value is 3S/400 for the 3Server386. Otherwise, it is
The Workgroup Computing Company. If COMPANY has been
specified but COMMENT has not, then the default becomes a
string of blanks.

COMPANY

A string that replaces the company name in the banner page
when 3+Menus initializes.

Format
COMPANY=*companyname*

Example
COMPANY=Wilkins Supply Company

Remarks
The default value is 3Com Corporation.

MENUBANNER
Allows/disallows the display of the banner page.

Format
MENUBANNER=ON | OFF

Variables
ON   Displays the banner screen.

OFF   Does not display the banner screen.

Remarks
The default is ON.

PRODUCT
String to replace the product name on the banner page.

Format
PRODUCT=*productname*

Example
PRODUCT=New Menus

Remarks
The default value is 3+Menus.

General Parameters

The following parameters are for general use, and are not
specific to one application. The time zone parameters are
particularly useful for 3+Remote. You will want to add these
parameters if the network you are dialing is in a different time
zone from yours, and you want your mail messages to reflect
the correct time in the message header. You may also want to
use the Name parameter, described in the 3+Menus section, so
that you will not have to type your name when you log in.

DSTEND

Specifies the month daylight savings time ends, and the last day in the month when daylight savings can end.

Format
DSTEND=*mm-dd*

Example
DSTEND=10-25

Variables

mm   A number between 1 and 12 that specifies the month (from 1 for January to 12 for December) when daylight savings time ends in your area. (In the United States, *mm* is always 10. If your area does not observe daylight savings time, you can leave *mm* blank.)

dd   A number between 1 and the number of days in the month specified in *mm*. This number specifies the last day in the month when daylight savings time can end. In the United States, this number is always 31. If your area does not observe daylight savings time, you can leave *dd* blank.

Remarks
This parameter is useful for 3+Remote. If it is omitted, the information is supplied by the Name service.

DSTNAME
Specifies whether or not your area observes daylight savings time.

Format
DSTNAME=*dstime*

Variable
dstime   The abbreviation for daylight savings time in your time zone, or is left blank. If it is blank, your area does not observe daylight savings time and the parameters that follow, relating to the beginning and end of daylight savings time, are ignored. See Table A-2 for the abbreviation for daylight savings time in your time zone.

Remarks
This parameter is useful for 3+Remote. If daylight savings time is observed, the parameter specifies the abbreviation for daylight savings time in your time zone. This parameter is optional. If it is omitted, the information is supplied by the Name service.

Table A-2. Time Zone Abbreviations and Offsets

Use table E-1 from the Remote PC User Guide, page E-4.

DSTSTART

Specifies the month daylight savings time begins, and the last day in that month when daylight savings time can begin.

Format

DSTSTART=*mm-dd*

Example

DSTART=4-23

Variables

mm   A number between 1 and 12 that specifies the month (from 1 for January to 12 for December) when daylight savings time begins in your area. (In the United States, *mm* is always 4. If your area does not observe daylight savings time, you can leave *mm* blank.)

dd   A number between 1 and the number of days in the month specified in *mm*. This number specifies the last day in the month when daylight savings time can begin. In the United States, this number is always 30. If your area does not observe daylight savings time, you can leave *dd* blank.

Remarks

This parameter is useful for 3+Remote. If it is omitted, the information is supplied by the Name service.

PASSWORD
Specifies your password.

Format
PASSWORD=*password*

Example
PASSWORD=balloon

Variable
password   Your personal password.

Remarks
This parameter is optional. If it is omitted, you are prompted
for a password, if any.

STNAME
Identifies your time zone.

Format
STNAME=*standardtime*

Variable
standardtime   Identifies your time zone. The value you enter is the abbreviation for standard time in your time zone. See Table A-2 for time zone abbreviations.

Remarks
This parameter is useful for 3+Remote. If it is omitted, the information is supplied by the Name service.

TAPESERVER
Defines the name of the server containing the tape backup unit.

Format
TAPESERVER=*servername*

Example
TAPESERVER=aries

Remarks
This parameter is specific to 3+Backup, and places the server name on all menus with the field "Tape backup unit is on server:."

TIME

Determines whether your personal computer's time is to be set
locally or by the Name service.

Format

TIME=ON|OFF

Variables

ON   Your personal computer's time is set by the Name service.

OFF You can set your personal computer's time with the DOS
     TIME command or with a program from a real-time clock.
     If you want the correct local time to be set for your
     personal computer, use the DOS TIME command, or include
     it in your AUTOEXEC.BAT file.

Remarks

This parameter is useful for 3+Remote. If it is omitted, the
time is set by the Name service.

ZONE

Specifies the number of minutes your time zone is removed from Greenwich Mean Time.

Format

ZONE=*minutes*

Variable

minutes   The number of minutes that your time zone is offset from Greenwich Mean Time. The value is negative for time zones west of Greenwich Mean Time, and positive for time zones to the east. See Table A-2 for time zones and their offsets.

Remarks

This parameter is useful for 3+Remote. If it is omitted, the information is supplied by the Name service.

The following table lists the decimal values of display attributes
for the IBM Color Graphics Adapter. Users with other display
configurations may find that other integers work to do different
things. Adding 128 to any of the integer values adds a blinking
feature to the video attributes.

Table A-3. Color/Screen Attributes

ATTRIBUTE VALUE	COLOR BACKGROUND	FOREGROUND	MONOCHROME DISPLAY ADAPTER
1	Black	Blue	Underline
2	Black	Green	Normal
3	Black	Light Blue	Normal
4	Black	Red	Normal
5	Black	Magenta	Normal
6	Black	Orange	Normal
7	Black	White	Normal
8	DON'T USE		Normal
9	Black	Blue	Highlighted Underline
10	Black	Green	Highlighted
11	Black	Light Blue	Highlighted
12	Black	Red	Highlighted
13	Black	Magenta	Highlighted
14	Black	Orange	Highlighted
15	Black	White	Highlighted
16	Blue	Black	Normal
17	DON'T USE		Underline
18	Blue	Green	Normal
19	Blue	Light Green	Normal
20	Blue	Red	Normal
21	Blue	Magenta	Normal
22	Blue	Orange	Normal
23	Blue	White	Normal
24	Blue	Black	Highlighted
25	DON'T USE		

ATTRIBUTE VALUE	COLOR BACKGROUND	FOREGROUND	MONOCHROME DISPLAY	ADAPTER
26	Blue	Green	Highlighted	
27	Blue	Light Blue	Highlighted	
28	Blue	Red	Highlighted	
29	Blue	Magenta	Highlighted	
30	Blue	Orange/Yellow	Highlighted	
31	Blue	White	Highlighted	
32	Green	Black	Normal	
33	Green	Blue	Underline	
34 DON'T USE		Normal		
35	Green	Light Blue	Normal	
36	Green	Red	Normal	
37	Green	Magenta	Normal	
38	Green	Orange	Normal	
39	Green	White	Normal	
40	Green	Black	Highlighted	
41	Green	Blue	Highlighted Underline	
42 DON'T USE				
43	Green	Light Blue	Highlighted	
44	Green	Red	Highlighted	
45	Green	Magenta	Highlighted	
46	Green	Orange/Yellow	Highlighted	
47	Green	White	Highlighted	
48	Light Blue	Black	Normal	
49	Light Blue	Blue	Underline	
50	Light Blue	Green	Normal	
51 DON'T USE			Normal	
52	Light Blue	Red	Normal	
53	Light Blue	Magenta	Normal	
54	Light Blue	Orange	Normal	
55	Light Blue	White	Normal	
56	Light Blue	Black	Highlighted	
57	Light Blue	Blue	Highlighted Underline	
58	Light Blue	Green	Highlighted	
59 DON'T USE				
60	Light Blue	Red	Highlighted	
61	Light Blue	Magenta	Highlighted	
62	Light Blue	Orange/Yellow	Highlighted	

ATTRIBUTE VALUE	COLOR BACKGROUND	FOREGROUND	MONOCHROME DISPLAY	ADAPTER
63	Light Blue	White	Highlighted	
64	Red	Black	Normal	
65	Red	Blue	Underline	
66	Red	Green	Normal	
67	Red	Light Blue	Normal	
68 DON'T USE			Normal	
69	Red	Magenta	Normal	
70	Red	Orange	Normal	
71	Red	White	Normal	
72	Red	Black	Highlighted	
73	Red	Blue	Highlighted Underline	
74	Red	Green	Highlighted	
75	Red	Light Blue	Highlighted	
76 DON'T USE				
77	Red	Magenta	Highlighted	
78	Red	Orange/Yellow	Highlighted	
79	Red	White	Highlighted	
80	Magenta	Black	Normal	
81	Magenta	Blue	Underline	
82	Magenta	Green	Normal	
83	Magenta	Light Blue	Normal	
84	Magenta	Red	Normal	
85 DON'T USE			Normal	
86	Magenta	Orange	Normal	
87	Magenta	White	Normal	
88	Magenta	Black	Highlighted	
89	Magenta	Blue	Highlighted Underline	
90	Magenta	Green	Highlighted	
91	Magenta	Light Blue	Highlighted	
92	Magenta	Red	Highlighted	
93 DON'T USE				
94	Magenta	Orange/Yellow	Highlighted	
95	Magenta	White	Highlighted	
96	Orange	Black	Normal	
97	Orange	Blue	Underline	
98	Orange	Green	Normal	
99	Orange	Light Blue	Normal	

ATTRIBUTE VALUE	COLOR BACKGROUND	FOREGROUND	MONOCHROME DISPLAY ADAPTER
100	Orange	Red	Normal
101	Orange	Magenta	Normal
102 DON'T USE			
103	Orange	White	Normal
104	Orange	Black	Highlighted
105	Orange	Blue	Highlighted Underline
106	Orange	Green	Highlighted
107	Orange	Light Blue	Highlighted
108	Orange	Red	Highlighted
109	Orange	Magenta	Highlighted
110 DON'T USE			
111	Orange	White	Highlighted
112	White	Black	Reverse Video
113	White	Blue	Underline
114	White	Green	Normal
115	White	Light Blue	Normal
116	White	Red	Normal
117	White	Magenta	Normal
118	White	Orange	Normal
119 DON'T USE			
120	White	Black	Reverse Video
121	White	Blue	Highlighted Underline
122	White	Green	Highlighted
123	White	Light Blue	Highlighted
124	White	Red	Highlighted
125	White	Magenta	Highlighted
126	White	Orange/Yellow	Highlighted
127 DON'T USE			

Appendix B: NetStation Configuration Files

This appendix discusses netstation configuration files. These files are used to automatically configure a netstation's environment.

The information in this appendix applies to 3+Share version 1.3 only. For version 1.2.1, refer to Appendix D in the *3+ Installation and Configuration Guide*.

General Information

When a user turns on or resets a netstation, a special sequence of commands must be performed before the user can access the network resources. The commands, consisting of both DOS and 3+Share commands, are used to establish communications between the netstation and the network and to customize the netstation environment for the individual needs of the user.

The execution of the commands is referred to as configuring a netstation's environment. Some 3+Share commands are used only in this procedure. An example is RUNMINDS, which binds the netstation's network drivers together. Other configuration commands are used more frequently, such as 3F LINK and 3P LINK commands.

The netstation configuration commands are stored in special files, referred to as configuration files. Each user has a set of configuration files. If the files are created properly, a user will not have to issue any additional commands when the netstation is turned on. The files will establish communications between the netstation and the network and link the necessary sharenames and printers. All the user has to do is start to work.

A user typically has five configuration files:

- ▶ PROFILE.SYS
- ▶ CONFIG.SYS
- ▶ AUTOEXEC.BAT
- ▶ START.BAT
- ▶ AUTOUSER.BAT

Table B-1 lists the file locations and functions.

Table B-1. Configuration File Location and Functions

File	Location	Functions
PROFILE.SYS	Home directory	► Customizes the netstation for 3+Menus
CONFIG.SYS	Startup disk or start volume	► Loads the device driver for the network adaptor in the netstation ► Allocates the processor time between user and background processes ► Loads the Internet Datagram and Sequenced Packet Protocol drivers ► Loads the Buffer and Login Library managers ► Defines the number of disk buffers ► Defines the maximum number of file handles ► Sets the number of drive identifiers ► Sets the netstation's time and date format ► Loads the Epath driver for EtherSeries servers
AUTOEXEC.BAT	Startup disk or start volume	► Loads NETBIOS ► Binds the MINDS drivers ► Loads the interrupt interface ► Loads the redirector ► Sets the machine name ► Loads a program to close spool files ► Sets the RAM disk size

Table B-1. Configuration File Location and Functions
(Continued)

File	Location	Functions
		▶ Specifies international keyboards ▶ Executes the START.BAT batch file
START.BAT	Startup disk or start volume	▶ Executes the LOGIN command ▶ Links the /APPS sharename to drive D: ▶ Links the home directory to drive E: ▶ Executes the AUTOUSER.BAT batch file
AUTOUSER.BAT	Home Directory	▶ Defines type of monitor ▶ Sets location of PROFILE.SYS file ▶ Links to shared directories ▶ Links to shared printers ▶ Sets DOS prompt ▶ Executes the RECVMSG command ▶ Sets paths ▶ Sets the RAM disk environment ▶ Executes the MENUS program

▶ **NOTE:** The PROFILE.SYS file is not explained in this appendix. For information on the PROFILE.SYS file, refer to Appendix A.

A server also has configuration files. The files are:

▸ CONFIG.SYS
▸ 3PLUS_ON.BAT
▸ AUTOEXEC.BAT

For information on server configuration files, refer to the
3+ Network Tuning Guide.

How Configuration Files are Made

You, the network administrator, are responsible for creating a user's configuration files. A generic version of each file comes with 3+Share that you can modify for each user, as necessary.

You can modify a configuration file with almost any word processor or text editor, as long as the processor does not insert special codes into the file. Each processor and editor handles this a little differently. For example, WordStar refers to a file without codes as a non-document file, while Word Perfect uses the term DOS text file. For instructions on how to modify such a file with your word processor or text editor, refer to your documentation.

The remainder of this appendix contains examples of the configuration files. Suggestions on how to modify the files to improve the server or netstation performance is also provided.

The CONFIG.SYS File

When you create a startup diskette for a netstation, the
installation program creates a CONFIG.SYS file. An example of
one is shown below.

```
device=\3drivers\eth.sys
device=\3drivers\pro.sys 12 2 2
device=\3drivers\buf.sys
device=\3drivers\idp.sys
device=\3drivers\spp.sys
device=\3drivers\lgl.sys
device=\3drivers\epath.sys
buffers=6
files=20
lastdrive=g
country=x
```

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=\3DRIVERS\ETH.SYS
Loads the device driver for the network adapter installed in the
netstation. The exact wording of the line depends on the type
of network adapter or medium being used.

Format
DEVICE=\3DRIVERS*driver parameters*

Parameters
driver   is the driver for the network medium taken
                            from Table B-2.

                            Table B-2. Netstation Device Drivers

Network Adapter/Medium	Device Driver
EtherLink	eth.sys
EtherLink II	eth503.sys
EtherLink Plus	eth505.sys
EtherLink/MC	eth523.sys
3Station	eth1100.sys
IBM Token Ring	tokibm.sys
TokenLink	tok603.sys
TokenLink Plus	tok605.sys

parameters   specifies the DMA channel, interrupt request
                            line, and I/O base address. For a detailed
                            description of the parameters and how they are
                            entered on this command line, refer to the
                            hardware installation manual that came with the
                            network adapter.

DEVICE=\3DRIVERS\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 by a space.

CAUTION: If incorrect parameter values are specified, the system will not function properly.

Format

DEVICE=\3DRIVERS\PRO.SYS *processes user services*

Parameters

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 12 on a netstation, 40 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 netstation, 0 should never be specified; setting this parameter to 0 impairs keyboard input. The default is 2 on a netstation and 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 netstation, 0 should never be specified; setting this parameter to 0 impairs keyboard input. The default is 2 on both netstation and server.

DEVICE=\3DRIVERS\BUF.SYS
Load the Buffer manager used internally by 3+.

Format
DEVICE=\3DRIVER\BUF.SYS

Remarks
There are no parameters associated with this driver.

DEVICE=\DRIVERS\IDP.SYS
The Internet Datagram Protocol driver used internally by 3+.

Format
DEVICE=\DRIVERS\IDP.SYS

Remarks
There are no parameters for this driver.

DEVICE=\3DRIVERS\SPP.SYS
The Sequenced Packet Protocol driver used internally by 3+.

Format
DEVICE=\3DRIVERS\SPP.SYS

Remarks
There are no parameters for this driver.

DEVICE=\3DRIVERS\LGL.SYS
The Login Library manager used internally by 3+.

Format
DEVICE=\3DRIVERS\LGL.SYS -m*n*

Parameters
-m*n*   Specifies the maximum number of servers addressed
             during one session. The range is 4 to 50. If no
             parameter is assigned, the default is 8.

Remarks
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 the *n*
parameter, the error message **Internal error** is displayed.
Rebooting the netstation clears all entries in the current login
Library name map. Each map entry requires 88 bytes of
netstation memory.

DEVICE=\3DRIVERS\EPATH

Loads the driver for a netstation connected to an EtherSeries network. Not included in a CONFIG.SYS file for netstations on a 3+ network.

Format

DEVICE=\3DRIVERS\EPATH

Remarks

There are no parameters associated with this driver.

BUFFERS

Specifies the number of disk buffers used by DOS to temporarily hold data being written to, or read from a local disk drive.

Format

BUFFERS=*n*

Parameters

n   specifies the number of disk buffers. The default setting depends on the type of netstation or server used.

Remarks

Each additional buffer requires 512 bytes of memory or whatever is your maximum sector size. Refer to your DOS manual for more information.

FILES

Specifies the maximum number of file handles that DOS will allow to be open at the same time.

Format
FILES=n

Parameters

n   specifies the maximum number of file handles. The default setting depends on the type of netstation or server used.

Remarks
Each file requires 48 bytes of memory. Refer to your DOS manual for more information.

LASTDRIVE

Specifies the number of drive identifiers available to the user at the netstation. This parameter applies only to netstations.

Format
LASTDRIVE=letter

Parameters

Letter   The last drive identifier that can be used at the netstation. The default for the AUTOEXEC.BAT file is G:, meaning the user can access the drive identifiers A: through G:, but not H: or higher. The range is A: through Z:. If this command is omitted from the file, the default is E:.

Remarks

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. For further information on the LASTDRIVE
command, refer to your DOS reference guide.

COUNTRY

Sets the netstation's currency, time, and date formats to the
country conventions. This line is added to the batch file by the
MAKEINTL installation program, but not by the MAKEDISK
program.

Format

COUNTRY=x

Parameters

x   is the country code. For a list of country codes and
             other parameters associated with this command, refer
             to your DOS reference guide.

Remarks

The country command is intended to work with DOS 3.3. If the
startup disk has a different version of DOS, replace this
command with a version consistent with the disk's version of
DOS.

The AUTOEXEC.BAT File

When you run the MAKEDISK or MAKEINTL program to create
a netstation startup disk, the program creates an
AUTOEXEC.BAT file on the startup disk. This file is similar to
the following:

```
echo off
echo 3+ Workstation Startup batch file - Ver 1.3
\3drivers\runminds mindspro mindsbuf mindseth mindsidp mindsspp mindslgl
NetBIOS or nb
minses12 or minses
msredir /z:4096
setname $$3com$$
prtsc
keyb nn or If exist START.BAT start
```

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 netstation configuration.

ECHO OFF

Prevents commands from printing on the screen while the batch
file is being executed.

Format

ECHO OFF

Parameters

There are no parameters associated with this command.

ECHO 3+ Netstation ...

Prints the title of the batch file on the screen.

Format

ECHO 3+ Netstation . . .

Parameters

There are no parameters associated with this command.

\3DRIVERS\RUNMINDS

RUNMINDS binds MINDS (MS-DOS Internal Network Driver
Scheme) drivers together so they can call one another.

Format

\3drivers\runminds mindspro mindsbuf mindseth mindsidp mindsspp mindslgl

Remarks

The names of the individual MINDS drivers are listed after the
RUNMINDS command and must be on the same line.

NETBIOS

Loads the full implementation of the NetBIOS option.

Format

NETBIOS *parameters*

Parameters

For complete details on NetBIOS parameters, refer to the *3+
NetBIOS Supplement*.

Remarks

When you create a startup disk, you are given the option of
installing either the full implementation of NetBIOS, or the
stardard configuration, referred to as **nb**. If you choose the full
implementation, this line is added to the batch file.

NB

Loads the short configuration (also referred to as the standard
configuration) of NETBIOS.

Format

NB *sessions transbuf recbuf retdisp lcltime rmttime*

Parameters

sessions   The number of sessions that can be initiated at one
time. A session is a communications path between
the netstation and a server. When a user links to a
shared directory or printer, a session is established
with the server.

Once established, a single session can support
multiple shared directory and printer links. The
value should agree with the /S (session) value in the
MSREDIR command. Each session requires 1688
bytes of memory. The range is 1 to 32. The default
is 2.

transbuf   The number of transmit buffers. Each buffer
requires 320 bytes of memory. The range is 1 to the
number of links (/L) in the MSREDIR command times
2. The default is 4.

recbuf   The number of receive buffers. Each buffer requires
1688 bytes of memory. The range is 1 to the
number of links (/L) in the MSREDIR command times
2. The default is 4.

retdisp   The retry display mode. When set to 1, the
netstation will "beep" instead of displaying a retry
message at the bottom of the screen should a
network timeout occur. If no setting is specified, a
message is displayed at the bottom of the screen.
The default is no specified setting.

lcltime   The local timeout value. It specifies the time, in
seconds, that the network will retry an operation
without operator intervention for a local netstation
(one connected to the server via network cable).
Setting this option higher makes retrying easy on
the operator, but can give the impression the
network is slow. The default is 15 seconds.

rmttime   The remote timeout. It specifies the time, in
seconds, that the network will retry an operation
without operator intervention for a remote netstation
(one connected to the server via a modem). This
setting should be higher than lcltime to ensure
reliable communications. The default is 90 seconds.

Remarks
When you create a startup disk, you have the option of
installing either the full implementation of NetBIOS or the
stardard configuration. If you choose the standard
implementation, this line is added to the batch file.

Parameters may be set to indicate the maximum number of
sessions, packet transmit buffers, and packet receive buffers
supported on your machine. Additional parameters allow you to
specify the retry display mode, local and remote timeout values.

Normally, no parameters are specified, causing the default values
to be used. The NB parameters interact with those specified for
MSREDIR (see below).

Parameters are identified by their location. Using the letter x
in place of a parameter's value will cause the default value to
be accepted. Default values will also be accepted for parameters
omitted at the end of the line. For example, if you want to
change only the number of sessions and the retry display mode
parameters, the line will read:

```
nb 4 x x 1
```

The transmit and receive buffers, and local and remote timeout
values all remain at the default values.

MINSES12

Loads the interrupt interface for the redirector if you specified
the entire version of NETBIOS when you created the startup
disk.

Format
MINSES12

Remarks
There are no parameters associated with this command.

MINSES

Loads the interrupt interface for the redirector if you specified
the short version of NETBIOS when you created the startup
disk.

Format
MINSES

Remarks
There are no parameters associated with this line.

MSREDIR
Loads the Microsoft Redirector.

Format
MSREDIR [/*parameter:value*] [... /*parameter:value*]

Parameters

parameter   A letter that identifies the parameter. Valid
entries are: S, L, Px, B, and Z.

value   One or more integers specifying the value of
the parameter.

S   The number of sessions that can be supported
at one time. A session is a communications
path between a server and a netstation. When a
user links to a shared directory or printer, a
session is established with the server. Once
established, a single session can support
multiple shared directory and printer links. The
value should agree with the sessions value in
the NB command. Each session requires 70
bytes of memory. The range is 1 to 32. The
default is 2.

L   The number of links that can be supported at
one time. A "link" is a logical connection
(redirection) between a shared directory or
printer on a server, and a drive or printer
identifier on a netstation. The value specified
for this parameter governs the number of
shared directory and printer links the user can
establish at one time. Each link requires 90
bytes of memory. The range is 1 to 32. The
default is 5.

Px   The local printer buffer size, in bytes, and
printer number. The x specifies the printer for
which you are setting buffers. This determines
the maximum amount of information that will be
buffered at the netstation before the job is
sent to the server to be placed in the print
queue. The value of x can be: 1 for a printer
linked to LPT1: (or PRN:), 2 for LPT2:, or 3 for
LPT3:. For example, /P1:256 sets a buffer size
of 256 bytes for the printer linked to LPT1:.
The range is 80 to 10240 bytes. The default is
128 bytes.

B   The number of redirector buffers allocated to
the netstation. The setting of this parameter
should be based on the typical type of
transaction to be performed on the netstation.
If the average transaction consists of large file
transfers, setting this parameter to a larger
value may improve performance. The range is 1
to 15. The default is 3.

Z   The size of redirector buffers. This value
should be the same as the 3+Share server's
message buffer size less 48 bytes. For example,
if the 3+Share server has a message buffer size
of 5680 bytes, this parameter should be set at
5632 (5680 - 48). The value can be 1024, 2560,
4096, 5632, 7168, or 8192 bytes. The default is
4096 bytes.

Remarks

The expression /parameter:value can be repeated as often as
required. Each group, /parameter:value, must be separated from
the next group by one space and cannot include any blanks.
Parameters omitted from the MSREDIR command assume their
default values.

SETNAME
Loads the IBM machine name.

Format
SETNAME $$3com$$

Remarks
3+ does not require you to set the name on the SETNAME line
to a value other than the default $$3com$$. However, this "IBM
Machine Name" is used by certain multiuser applications, such as
dBASE III Plus, for licensing or logged-in user reporting. 3Com
recommends that you set this name to the first name, last initial
alias (spaces cannot be used) for each user.

PRTSC
Loads the program that allows the combination of
[Ctrl]+[Alt]+[Prtsc] to close spool files.

Format
PRTSC

Remarks
Some applications do not send a DOS CLOSE call when a job
has finished spooling. For the Print service to recognize that
the job is ready to print, you must use [Ctrl]+[Alt]+[Prtsc] to
close the spool file.

On newer IBM AT 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].

KEYB

Designates the keyboard format of the netstation.

Format
KEYB*xx*

Parameters
xx   is a two-letter country code from Table B-3.

Table B-3. Country Code

Code	Country	Code	Country
us	United States*	sf	Swiss-French
fr	France	df	Denmark
gr	Germany	be	Belgium
it	Italy	nl	Netherlands
sp	Spain	no	Norway
uk	United Kingdom	la	Latin America
po	Portugal	sv	Sweden
sg	Swiss-German	su	Finland

(* default)

Remarks
The MAKEINTL program adds this line for support of
international keyboards. This line is not added to the batch file
if you use MAKEDISK.

The KEYB command is intended to work with DOS 3.3. If the
startup disk has a different version of DOS, replace this
command and its associated files with versions consistent with
the disk's version of DOS.

IF EXIST START.BAT START
Loads the START.BAT batch file.

Format
IF EXIST START.BAT START

Remarks
This command calls up the next batch file of the configuration
process. The file, called START.BAT, logs the user into the
network.

If the disk is an international startup disk created with the
MAKEINTL program, the batch file will not contain this
command. This is because MAKEINTL assumes that the disk
does not have enough space for the START.BAT file.

What we recommend is after you create an international startup
disk, determine the amount of empty space on it with the DIR
command. If there are 2500 bytes of space remaining, copy the
master copy of the START.BAT file from the \APPS directory
onto the startup diskette. Then add this command line to the
end of the AUTOUSER.BAT file.

If the startup disk does not have enough room, delete a file
from the disk or add the START.BAT commands directly to the
end of the AUTOEXEC.BAT file.

The START.BAT File

When you run MAKEDISK, you have the option to copy the
START.BAT file onto the startup disk. The commands in this
file log the user onto the network and link the netstation to
the /APPS sharename and the user's home directory. In most
situations, you will want to copy the file onto the startup disk
to eliminate the need of having to create the file yourself.

The batch file is divided into sections. Each section contains
one or more commands that perform a specific part of the
configuration process. The function of each section is explained
below, along with any parameters that can be changed to
support your particular netstation configuration. Comment lines
and error messages are not included in the following discussions.

▶ **NOTE:** We do not recommend that you change any lines
in this file.

Clearing Paths

Clears previously set paths.

Format

SET PATH=
SET PROFILE=

Remarks

The first command clears previously set path assignments. The
second clears the location of the PROFILE.SYS file.

Logging In
Logs in the user.

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

Parameters
For a description of the LOGIN parameters, refer to your
3+Share User Guide.

Remarks
The default is the LOGIN command without username or
password. If the START.BAT is on a startup disk, you can add
the user's name to the command to eliminate the user needing
to enter it. The user's password can also be added to the
command, but this is not recommended. To maintain network
security, a user should enter a password as a normal part of the
login procedure.

If this batch file is in a start volume, do not add a name to the
LOGIN command. Start volumes are typically used by many
users and each should enter his or her own username.

Linking to the \APPS and Home Directories

Links the \APPS directory to drive D: and the user's home
directory to drive E:.

Format

3F LINK D: \\SYS\APPS /NP LINK E: /NP

Remarks

If the /APPS directory is not on the same server as the user's
home directory, edit the line accordingly. For example, if the
/APPS directory is on the SALES server, but the user's home
directory is not, the line should read:

```
3f link d:\\sales\apps /np; link e: /np
```

Do not add any additional links here. Instead, add them to the
user's AUTOUSER.BAT file in the user's home directory.

Starting AUTOUSER.BAT

Executes the final configuration file, AUTOUSER.BAT.

Format

e:
autouser

Remarks

The first command changes the current drive to drive E:, the
user's home directory. The second command executes the
AUTOUSER.BAT file. For details to the AUTOUSER.BAT file,
refer to the next section.

The AUTOUSER.BAT File

The AUTOUSER file is the last of the configuration batch files. Located in a user's home directory, it executes after START.BAT and performs the majority of the configuration tasks. The tasks include:

- ► Defining the monitor type
- ► Setting the PROFILE.SYS file
- ► Setting the DOS Prompt
- ► Linking to sharenames
- ► Linking to printers
- ► Starting Mail Minder
- ► Starting the Receive Message Program
- ► Checking the System Variables
- ► Setting Paths
- ► RAM disk environment

The batch file is divided into sections. Each section contains one or more commands that perform a specific part of the configuration process. The function of each section is explained below, along with any parameters that can be changed to support your particular netstation configuration. Comment lines and error messages are not included in the following discussions.

Defining the Monitor Type

Defines the type of video monitor being used by the netstation.

Format

SET TERM=*parameter*

Parameters

parameter   is one of the following:

COLOR	Enhanced Graphics Adaptor (EGA) or Color Graphics Adaptor (CGA) display.
MONO	IBM monochrome (non-graphic) display.
MONOGRPH	Monochrome, graphics display.

Remarks

This parameter is set by the UCONFIG program, but you should check to be sure it is correct. If you change the command, use all capital letters.

Setting the PROFILE.SYS File

Sets the location of the PROFILE.SYS file.

Format

SET PROFILE=*drive id*:[*path*]PROFILE.SYS

Remarks

The PROFILE.SYS file is optional. When you are using 3+Menus,
a PROFILE.SYS file lets you customize the netstation
environment to accommodate special screen types and colors, or
to utilize special 3+Menu files. For complete details on the
PROFILE.SYS file, refer to Appendix A.

The default command, shown below, assumes that the
PROFILE.SYS file is in the user's home directory on drive E:.

SET PROFILE=e:\profile.sys

The file should not be renamed, although it may be relocated if
the statement is appropriately modified.

If the user does not have a PROFILE.SYS file, insert two colons
(::) in front of the command. Otherwise an error message is
displayed when the user starts 3+Menus.

Setting the DOS Prompt
Sets the format of the DOS prompt.

Format
PROMPT parameters

Parameters
For an explanation of the PROMPT parameters, refer to your DOS reference manual.

Remarks
The default command, shown below, displays the directory path along with the drive identifier.

PROMPT PG

Linking to Directories
Links shared directories with the 3F LINK command.

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

Parameters
For an explanation of 3F LINK parameters, refer to your *3+Share User Guide*.

Remarks
Rather than have the user link to shared directories after logging in, add the appropriate 3F LINK commands here and have the links executed automatically. You can add as many link commands as necessary. If there is not enough room, simply insert additional lines.

Linking to Printers

Links shared printers with the 3P LINK command.

Format

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

Parameters

For a detailed description of the 3P LINK parameters, refer to
the *3+Share User Guide*.

Remarks

This section of the batch file is for the 3P LINK command and
links to shared printers. An example of a 3P LINK command is
included in the section and looks similar to the following:

::D:\3P link \\sys\laserjet /np

In the example, a shared printer called LASERJET at the home
server is linked to printer identifier PRN:. To link a shared
printer on your network, edit the line by removing the two
colons from the beginning of the command and entering the
necessary information. For example, to link a shared printer
called DOTMAT on the server SALES to the LPT2: printer
identifier, you would edit the line to read:

    D: \3P link lpt2: \\sales\dotmat /np

Additional 3P LINK commands can be added at this point in the
batch file to link to more than one shared printer. For
complete information on the 3P LINK commands, refer to the
3+Share User Guide.

Starting 3+Mail Minder
The commands in this section start Mail Minder.

Format
```
::CLS
    ::IF NOT EXIST D:\MMINDER.EXE GOTO NO_MM
    ::D:\MMINDER > NUL:
    ::ECHO
    .
    .
    .
    ::ECHO
```

Parameters
Refer to the *3+Mail User Guide* for details on the 3+Mail Minder
program parameters.

Remarks
With Mail Minder, a message is displayed on the netstation
screen when the user receives new mail. Naturally, if your
network does not have 3+Mail, leave this feature disabled, which
is the default.

To enable Mail Minder, remove the two colons (::) from the
fourteen command lines, starting with '::cls' and ending with
'::echo.' If you later decide to disable the program, insert the
colons (::) again.

The commands assume that Mail Minder is stored in the \APPS
directory, which is linked to drive D: on the netstation. If this
is not true for your network configuration, you must edit the
following two lines accordingly:

if not exist d:\mminder.exe goto no_mm
D:\MMINDER > NUL:

For example, if /APPS is linked to drive F:, edit the lines to
read:

if not exist f:\mminder.exe goto no_mm
F:MMINDER > NUL:

Starting the Receive Message Program
Executes the Receive Messages command (RECVMSG).

Format
D:\RECVMSG >NUL

Remarks
The Receive Message command (RECVMSG) allows the user to
receive messages sent by other users with the SENDMSG
command. The parameters associated with this command are
discussed in Chapter 5 in the section titled "Sending and
Receiving Network Messages."

Checking System Variables

Ensures that the system variables are set correctly.

Format

:PROCHECK

.
.
.

:STDSTART

Remarks

Do not change any of the commands IN this section.

Setting Paths

Sets paths and starts 3+Menus. The commands in this part of
the file are executed only if the netstation does not have a
RAM disk.

Format

PATH D:\;D:\MENUS;D:\DOS
MENUS

Remarks

The PATH command assigns the paths for the netstation. The
default command assigns paths to the \APPS directory on drive
D:, and two of its subdirectories MENUS and DOS. Additional
paths can be added to the command by entering the necessary
drive identifiers to the end of the command line. For example,
if you have application programs on drives G:, H:, and I:, edit
the line to read:

```
Path d:\;d:\menus;d:\dos;g:\;h:\;l:\
```

The MENUS command starts 3+Menus. For instructions on the
3+Menus program, refer to the 3+Menus "How to" Guide.

RAM Disk Environment

Sets paths, copies selected programs into the RAM disk, and
starts 3+Menus. This section is executed only if the netstation
has a RAM disk.

Format

COPY %BOOT%\COMMAND.COM H:
.
.
.
COPY D:\MENUS\MENUS.EXE H:

::IF EXIST D:MAIL.EXE COPY D:MAIL.EXE

PATH H:\;D:\;D:\DOS

Remarks

The COPY commands transfer the COMMAND.COM and
PROFILE.SYS files, and the 3+Menus program into the RAM disk
on drive H:. Operating the files from RAM disk makes a faster
netstation environment. Unless the RAM disk has been assigned
a drive identifier other than H:, do not change these commands.

For those netstations with RAM disks larger than 1 megabyte,
you can also copy the 3+Mail program onto drive H: by removing
the two colons from the beginning of this command:

::if exist d:mail.exe copy d:mail.exe

The final command in this section assigns the netstation paths.
The default command sets paths to the RAM disk on drive H:,
the \APPS directory on drive D:, and two of its subdirectories
MENUS and DOS. Additional paths can be added to the
command by entering the necessary drive identifiers to the end
of the command line. For example, the following line adds new
paths for drives I: and J:.

Path h:\;d:\;d:\dos;i:\;j:\

Appendix C: ASCII Character Set

ASCII		Equivalent Forms		
Character	Dec	Binary	Oct	Hex
NUL	0	00000000	000	00
SOH	1	00000001	001	01
STX	2	00000010	002	02
ETX	3	00000011	003	03
EOT	4	00000100	004	04
ENQ	5	00000101	005	05
ACK	6	00000110	006	06
BEL	7	00000111	007	07
BS	8	00001000	010	08
HT	9	00001001	011	09
LF	10	00001010	012	0A
VT	11	00001011	013	0B
FF	12	00001100	014	0C

ASCII Character	Dec	Equivalent Forms Binary	Oct	Hex
CR	13	00001101	015	0D
SO	14	00001110	016	0E
SI	15	00001111	017	0F
DLE	16	0010000	020	10
DC1	17	00010001	021	11
DC2	18	00010010	022	12
DC3	19	00010011	023	13
DC4	20	00010100	024	14
NAK	21	00010101	025	15
SYNC	22	00010110	026	16
ETB	23	00010111	027	17
CAN	24	00011000	030	18
EM	25	00011001	031	19
SUB	26	00011010	032	1A
ESC	27	00011011	033	1B
FS	28	00011100	034	1C
GS	29	00011101	035	1D
RS	30	00011110	036	1E
US	31	00011111	037	1F
space	32	00100000	040	20
!	33	00100001	041	21
"	34	00100010	042	22
#	35	00100011	043	23
$	36	00100100	044	24
%	37	00100101	045	25
&	38	00100110	046	26
'	39	00100111	047	27
(	40	00101000	050	28
)	41	00101001	051	29
*	42	00101010	052	2A
+	43	00101011	053	2B
,	44	00101100	054	2C
-	45	00101101	055	2D
.	46	00101110	056	2E

ASCII
Character
Set

C

C-3

ASCII Character	Dec	Equivalent Forms Binary	Oct	Hex
/	47	00101111	057	2F
0	48	00110000	060	30
1	49	00110001	061	31
2	50	00119919	062	32
3	51	00110011	063	33
4	52	00110100	064	34
5	53	00110101	065	35
6	54	00110110	066	36
7	55	00110111	067	37
8	56	0111000	070	38
9	57	00111001	071	39
:	58	00111010	072	3A
;	59	00111011	073	3B
<	60	00111100	074	3C
=	61	00111101	075	3D
>	62	00111110	076	3E
?	63	00111111	077	3F
@	64	01000000	100	40
A	65	01000001	101	41
B	66	01000010	102	42
C	67	01000011	103	43
D	68	01000100	104	44
E	69	01000101	105	45
F	70	0100110	106	46
G	71	01000111	107	47
H	72	01001000	110	48
I	73	01001001	111	49
J	74	01001010	112	4A
K	75	01001011	113	4B
L	76	01001100	114	4C
M	77	01001101	115	4D
N	78	01001110	116	4E
O	79	01001111	117	4F
P	80	01010000	120	50

ASCII Character	Dec	Equivalent Forms Binary	Oct	Hex
Q	81	01010001	121	51
R	82	01010010	122	52
S	83	01010011	123	53
T	84	01010100	124	54
U	85	01010101	125	55
V	86	01010110	126	56
W	87	01010111	127	57
X	88	01011000	130	58
Y	89	01011001	131	59
Z	90	01011010	132	5A
[	91	01011011	133	5B
\	92	01011100	134	5C
]	93	01011101	135	5D
^	94	01011110	136	5E
_	95	01011111	137	5F
`	96	01100000	140	60
a	97	01100001	141	61
b	98	01100010	142	62
c	99	01100011	143	63
d	100	01100100	144	64
e	101	01100101	145	65
f	102	01100110	146	66
g	103	01100111	147	67
h	104	01101000	150	68
i	105	01101001	151	69
j	106	01101010	152	6A
k	107	01101011	153	6B
l	108	01101100	154	6C
m	109	01101101	155	6D
n	110	01101110	156	6E
o	111	01101111	157	6F
p	112	01110000	160	70
q	113	01110001	161	71
r	114	01110010	162	72

ASCII Character	Dec	Equivalent Forms Binary	Oct	Hex
s	115	01110011	163	73
t	116	01110100	164	74
u	117	01110101	165	75
v	118	01110110	166	76
w	119	01110111	167	77
x	120	01111000	170	78
y	121	01111001	171	79
z	122	01111010	172	7A
{	123	01111011	173	7B
|	124	01111100	174	7C
}	125	01111101	175	7D
~	126	01111110	176	7E
DEL	127	01111111	177	7F

Appendix D: Copying Files Using 3COPY

3COPY is a general purpose file copy utility. It is similar to the DOS COPY command, but provides added flexibility. You can request date-sensitive copy, configuration prompts, and dry-runs. You can copy files from many directories in a directory tree, and you can copy entire directory trees.

3COPY runs on an IBM PC or compatible computer with 256K memory and DOS version 2.1 or higher.

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.EXE program file onto the desired location using the DOS COPY command.

3COPY Command Format

3COPY *fromspec* [*tospec*] [/s] [/c] [/n] [/d] [/h] [/f=file]

Parameters

fromspec	Source file specification of files to copy. You can include drive and path or allow them to default to the current drive and path. You can include "*" and "?" wildcards. For more information on DOS filespecs, please refer to your DOS manual.
tospec	Destination drive and path. 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.
s	Include files in subdirectories below fromspec.
c	Ask for confirmation of each file to copy.
n	No copy – 3COPY just displays what it would do in a normal case ("dry run").
d	Check dates and only copy if source file datetime is newer than the destination file datetime or if the file does not exist in the destination directory. If the source file datetime is older than the destination file datetime, the file will not be copied. (Multiple diskette output disabled with this option).

h   Display help — don't process anything.

f=file   Route output to a report file as well as
                    display onscreen. Character device
                    designators such as /prn work as
                    expected. If the report file is in the
                    source file path, it will be incorrectly
                    copied.

Remarks

The parameters /s, /c, /d, /n, /h, and /f=file can be
concatenated (linked together) or separated. The /f=file
parameter must be the last or only parameter in a group. For
example, the following are all valid and work as expected:

```
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, you create or overwrite files in
a directory structure which mirrors the "from" directory
structure. The starting point of the target 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
```

If you used the following command:

3COPY C:\money\models*.wks D:\fin /s

then 3COPY would 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

3COPY scans for the Escape character entered from the
keyboard during copy operations. If you enter **[ESC]**, 3COPY
will cancel the copy operation at the end of the current file.
You may also cancel a copy by typing **[ESC]** in response to the
prompt **Copy [filename]? (Y/N) >**.

Multiple Diskette Output

If your output volume is a diskette, you do not use the /d
option, and your output volume fills up, 3COPY will give you
the option to insert another diskette and continue copying.
When you do this, the directory structures on the multiple
output diskettes may appear to be incomplete. 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 \SUB21 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 and reestablish the original directory structure on
a large output fixed disk.

Restrictions

1. 3COPY clears the DOS "F1" and "F3" memory. After
    running 3COPY, these function keys do not recall
    commands issued prior to the 3COPY command.

2. 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
    ```

3. 3COPY creates subdirectories beneath the target
    directory, as necessary, to mirror the source directory
    tree structure. Selective copies with wildcard
    characters and multiple diskette output sequences can
    result in the creation of empty subdirectories to provide
    the appropriate directory 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.

4. Typing commands "ahead" of 3COPY while it is running
    can cause unpredictable results. You can, however,
    execute several 3COPY commands from within a .BAT
    batch file.

Appendix E: Technical Support

This section tells you how to do the following:

► Attempt to isolate and solve a network problem.

► Confirm that a problem exists before you call your network supplier.

► Contact your network supplier.

► Obtain support services from your network supplier or 3Com Corporation.

► Obtain a "Return-to-Factory" authorization for failed products.

Problem Sources

There are five common sources of network problems:

► A network user might misunderstand a network command or procedure and get an unexpected result.

► A new hardware component is installed or configured incorrectly, or is incompatible.

► Application software can cause problems if it is not used correctly, if the software itself contains bugs, or if it is incompatible with network software or other application software.

► Cable problems can occur if the cable is connected or routed incorrectly, cable specifications are violated, the cable develops a mechanical or electrical fault, or the network is inadvertently disconnected.

► Overloaded servers can slow down network response times, or a personal computer or server can develop a hardware problem.

Problem-Solving Tools

The following tools can help you diagnose and solve network problems.

► A network diagram and log. Complete records and familiarity with your network configuration are invaluable tools in resolving problems.

► Ring loopback plugs. Loopback plugs let you isolate and test portions of the network to determine where the problem lies.

► Diagnostic software supplied with your 3Com server or board.

▶ The *3Com Compatible Products Directory* and your network
supplier can help you confirm that your network components
and software are compatible.

▶ Guides and manuals. Always refer to your network
hardware and software guides and manuals to help you
determine the nature of the problem. Examples of these
resources include the *3Server386 Guide*, *3+Share User Guide*,
and *3+ Messages* guide. Also check you computer's
operating manual, the DOS manual, and your application
software manuals.

▶ Digital ohmmeter. A digital ohmmeter or multimeter,
available from your local electrical supply shop, will help
you identify cable defects, such as an open circuit or a
short circuit, by measuring the cable's DC resistance. If
you do not have a digital ohmmeter, an analog meter can
also be helpful.

For additional information and suggestions, consult the
troubleshooting sections of applicable guides.

▮▮▮Before You Contact Your Network Supplier

These steps help you verify your problem.

1. If you are having trouble installing hardware or software on
your network, see the guide supplied with the hardware or
software, and repeat the installation procedures. Run any
tests that are described to verify the current installation.

2. Check the *3Com Compatible Products Directory* to assure
that the various components of your network are compatible
and you have a supported configuration.

3. Check the cables and connectors to see that they have been
attached correctly.

4.   If the problem occurs on a single workstation, replace it with a known working unit and see if the problem persists.

5.   If the problem continues, call your network supplier for assistance.

Contacting Your Network Supplier

You should have the following information at hand before you talk to your network supplier:

►   A complete description of the problem, including the following: the nature of the problem, duration of the problem, when the problem occurs, the components with which the problem occurs, and whether the problem still occurs when the application is used off the network.

►   An accurate list of the 3Com network equipment model and serial numbers, and 3Com software product part numbers, including the software revision levels. Include the date you purchased the products.

►   An accurate list of your equipment types and model numbers for personal computers, monitors, fixed disks, printers, and so on; and a list of the third party software you are using, including DOS level and software revision level.

►   A list of any changes that have been made to your system configuration prior to your problem, including hardware changes, operating system software or application software changes, or system administration procedures.

How to Secure Support Service

Your Authorized 3Com network supplier is qualified to provide
network planning, installation, hardware maintenance,
applications training, and support services. Your network
supplier is uniquely qualified to provide on-site services for
products from multiple vendors.

Authorized Service Centers and Complete Network Centers (CNC)

Local authorized service centers (ASC) are a good source of
quality repair and spare parts. Often they are able to respond
more quickly than the factory and can provide on-site services.
If your network supplier is not a 3Com authorized service
center, contact 3Com at (800) NET-3COM to locate the ASC
nearest you.

However, should you wish to augment your reseller's services
with in-depth expertise on the 3Com components in your
network, 3Com offers a variety of support services for purchase.
These services include:

▶   Technical Bulletin Subscription Service

▶   On-line Technical Subscription Service

▶   Software Update Services

▶   Technical Assistance via telephone (annual contract or per
    incident)

▶   Annual contract covering all the above services

▶   Consulting services to assist in programmatic interface to
    3Com products

▶   Return to factory repair services

▶   Spare parts and kits for large installation or in-house
    repairs

Information about these programs and services is available from
your authorized 3Com network supplier or direct from 3Com.
Should your network supplier, ASC or CNC be unable to assist
you, please contact the 3com Customer Relations Department at
(408) 988-1919.

Returning Boards for Repair

Local authorized service centers are a good source of quality
repair and spare parts. Often they are able to respond more
quickly than the factory.

If you wish to return boards direct to 3Com you will need to
obtain a return material authorization (RMA) number *before*
shipping. To obtain this number call (408) 562-6500.

When you call, please have the following information:

▶   Name and phone number of technical contact
▶   Company name
▶   Shipping address
▶   Product name
▶   Serial number of unit and serial number of failed component
▶   Failure symptoms with diagnostic error messages

Warranty repairs must be accompanied by dated proof of
purchase.

Payment is by COD, Mastercharge, or Visa. Before shipping
completed COD repairs, 3Com will call with date of delivery and
exact amount due.

Terms are available only if special authorization has been
arranged with 3Com accounting department. A hard copy of the
PO must be enclosed with the return.

Confirm failures with diagnostics before returning boards to
3Com. Incoming products are tested carefully. When a
hardware failure cannot be duplicated, the unit is put into
extended test, cleaned, tuned and brought to the highest
revision. There is a charge for this service. Return shipping
and handling is included. This charge also applies to boards
under warranty.

Shipping information:

►   Package carefully. Use the original container if possible.
     Controller boards should be wrapped in anti-static bag. Do
     not pack directly in popcorn. Do not return cables,
     connectors, or documentation.

►   Mark the RMA number clearly on the outside of the
     shipping container.

►   Ship to:

     3Com Corporation
     3165 Kifer Road
     Santa Clara, CA 95052-8145

Factory repairs take 5 working days and are returned second
day air. With weekends and combined shipping time, expect
your unit to be gone two weeks. A 24 hour turn around option,
which included Priority 1 return freight is available for an
additional expedite charge.

Index

For your convenience, references to 3+ commands have been listed by command name.

Page references in bold type refer to sections of the manual where command information and parameters are summarized. Also, for purposes of alphabetizing the entries, the 3 or 3+ that precede entry names have been ignored.

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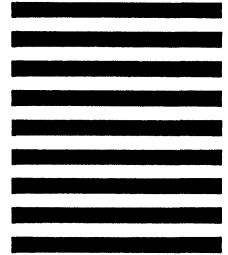All information becomes the property of 3Com Corporation

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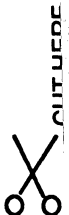### POSTAGE WILL BE PAID BY ADDRESSEE

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