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# *VAXmate*<sup>TM</sup>

*User's Guide*

*Volume 2 Change Pages*

**digital**  
software

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To the VAXmate User's Guide reader,

These pages contain corrections to pages in your VAXmate User's Guide, Volume 2. To update your guide with these pages, use the following table. The table lists the old pages you should remove and the new replacement pages you should insert in your guide.

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## BACKUP

### *Purpose*

To save files from one disk to another, use the external BACKUP command.

In addition to backing up files to local drives, the BACKUP command allows you to back up files to a network drive.

### *Format*

BACKUP [filename.ext drv2:[\path2] [/A] [/S] [/M] [/D:dd-mm-yy]]

Where:

- |              |   |
|--------------|---|
| filename.ext | Is the drive, path, file name and file extension of the file you want to back up. If you do not specify a drive, the BACKUP command uses the default drive. If you do not specify a path, the BACKUP command uses the current directory.          |
| drv2:        | Is the destination drive to which you want to back up a file. The destination drive can be any drive on your workstation (Mdrive, hard disk drive, network drive, or diskette).   |
| path2        | Is the path for the destination drive. If you do not specify a path, and you are backing up to a diskette, the BACKUP command uses the root directory. If you are backing up to a hard disk or the network, the subdirectory BKSUBDIR is created. |
| /A           | Adds to the current contents of the back-up diskette. The /A qualifier does not erase existing files on the diskette. This qualifier has meaning only when you back up files to a diskette.   |
| /S           | Backs up subdirectories.  |
| /M           | Backs up only those files that were modified since the last backup.   |
| /D:dd-mm-yy  | Backs up only those files that were modified on or after the specified date. The date format only works for country code 001 (US).<br>dd is the day.<br>mm is the month.<br>yy is the year.   |

*Comments*

Using the **BACKUP** command, you can back up all files on all directories by typing one command.

If the destination disk for the back-up procedure is a hard disk, the **BACKUP** command adds more backup files to the existing backup files. Any files on a diskette are erased unless you specify the **/A** qualifier.

You can also use the **BACKUP** command to back up files to a subdirectory.

If you back up files to diskettes, you must have sufficient formatted diskettes for the number of files being backed up. If you use more than one diskette, be sure to label them in the order in which you will restore them.

You must run the **RESTORE** command before you can use the files you backed up.

Table 32-4 lists valid file specifications for the **BACKUP** command.

**Table 32-4 BACKUP File Specifications**

<b>Specification</b>	<b>Meaning</b>
*.DOC	Backs up all .DOC files in the current directory.
*.*	Backs up all files in the current directory.
TEST?.MEM	Backs up all .MEM files that start with the name TEST, such as, TEST.MEM, TEST1.MEM, TEST2.MEM, and TEST.MEM.
.	Backs up all files in the current directory.
..	Backs up all files in the directory above the current directory.
\*.*	Backs up all files in the root directory of the current drive.
A:\*.*	Backs up all files in the root directory of drive A.
A:\TEST\WHO\*.*	Backs up all files in the subdirectory WHO of the directory TEST on drive A.



### *Example 1*

To display the BACKUP help message, type:

```
A:\>BACKUP 
```

### *Example 2*

To back up all files in the current directory to drive A, type:

```
C:\>BACKUP *.* A:\ 
```

```
Insert back-up diskette 1 in drive A:  
WARNING: Files in DRIVE A: will be ERASED
```

```
Press any key when ready  
Backing up files to drive A  
Disk Number: 1
```

To see the files you saved using the BACKUP command, use the DIR command at the MS-DOS operating system prompt.

### *Example 3*

To back up all files in all directories on drive C to drive A, type:

```
C:\>BACKUP C:\*.* A: /S 
```

```
Insert back-up diskette 1 in drive A:  
WARNING: Files in DRIVE A: will be ERASED
```

```
Press any key when ready  
Backing up files to drive A  
Disk Number: 1
```

||||| *BACKUP*

*Example 4*

To back up to diskettes all root directory files that were modified since the last backup, type:

```
C:\>BACKUP C:\*.* A: /M<Return>
```

```
Insert back-up diskette 1 in drive A:  
WARNING: Files in DRIVE A: will be ERASED
```

```
Press any key when ready  
Backing up files to drive A  
Disk Number: 1
```

*Example 5*

To back up the files in the root directory on drive A to network drive I, type:

```
A:\>BACKUP A:\*.* I:<Return>
```

```
Backing up files to drive I  
Disk Number: 1
```

```
.  
.  
.
```



## **BREAK**

### *Purpose*

To set or clear the Ctrl/C check, use the BREAK command. The BREAK command is an internal command.

### *Format*

BREAK [ON | OFF]

### *Comments*

If you run an application program that uses Ctrl/C, you can turn off the MS-DOS Ctrl/C function. When you do specify BREAK ON, pressing Ctrl/C affects the application program and not the MS-DOS operating system.

Specify the BREAK OFF command before you run an application program.

Specify the BREAK ON command after you run an application program and are using the MS-DOS operating system.

### *Example*

To display the current setting of BREAK, type:

```
A:\>BREAK   
BREAK is off
```

```
A:\>
```



## **CHDIR**

### *Purpose*

To display a directory or change to another directory, use the CHDIR command. The CHDIR command is an internal command.

### *Format*

CHDIR | CD [path]

Where:

path Is the path you want to change to.

### *Comments*

You can display the path name to your current directory by typing the CHDIR command without parameters.

### *Example 1*

To change from the root directory to the subdirectory \BIN, type:

```
A:\>CHDIR BIN 
```

```
A:\BIN>
```

### *Example 2*

To change to the subdirectory \BIN\USER\JOE\FORMS, type:

```
A:\>CHDIR \BIN\USER\JOE\FORMS 
```

```
A:\BIN\USER\JOE\FORMS>
```

### *Example 3*

To change to the directory above your current directory, type:

```
A:\>CHDIR .. 
```

```
A:\BIN\USER\JOE>
```

## CHKDSK

### *Purpose*

To scan a disk and check it for errors, use the CHKDSK command. The CHKDSK command is an external command.

### *Format*

CHKDSK [filename.ext][/F][/V]

Where:

**filename.ext** Is the drive, path, file name and file extension of the file you want to execute the CHKDSK command on. If you do not specify a drive, the CHKDSK command uses the default drive. If you do not specify a path, CHKDSK uses the current directory. If a file name is specified, CHKDSK indicates if the file is stored contiguously.

**/F** Corrects errors found using CHKDSK. File(s) named FILE???.CHK that contain the lost links are then created in the specified disk's root directory.

**/V** Lists all files in all the directories on the disk.

### *Comments*

Do not use the CHKDSK command under MS-Windows.

Use CHKDSK periodically on each disk to check for errors in the directory. If errors are found, CHKDSK displays a message and a status report.

If you type a file name after CHKDSK, a status report is displayed for the disk and for the individual file.

You can redirect the output from CHKDSK to a file to save the status report. If you redirect CHKDSK output, do not use the /F qualifier.

### **NOTE**

You cannot use the CHKDSK command with any network, ASSIGNed, or SUBSTed drives.

||||| *CHKDSK*

*Example 1*

To list all the files in all the directories on the default drive, type:

A:\>CHKDSK /V

Information similar to the following information is displayed:

```
Volume VAXMATE      created Jan 1, 1986 9:00a
Directory A:\
    A:\IO.SYS
    A:\MSDOS.SYS
    A:\COMMAND.COM
Directory A:\SYS
Directory A:\SYS\DOS
    A:\SYS\DOS\ANSI.SYS
    .
    .
Directory A:\SYS\NET
    A:\SYS\NET\SHARE.EXE
    .
    .
```

*Example 2*

To display a CHKDSK status report, type:

C:\>CHKDSK

```
21274624 bytes total disk space
    36864 bytes in 2 hidden files
    47104 bytes in 17 directories
    8097792 bytes in 595 user files
13092864 bytes available on disk

655360 bytes total memory
594480 bytes free
```

*Example 3*

To store a CHKDSK status report in a file, type:

A:\>CHKDSK > STATUS.TXT

*Example 1*

To set a new date, type:

A:\>DATE

Current date is Wed 1-01-1986

Enter new date (mm-dd-yy):

You can type a new date, or press the Return key if you desire no changes.

*Example 2*

To set the new date to March 1, 1986, type:

A:\>DATE 3-1-86

A:\>



## **DEL**

### *Purpose*

To delete files from a directory, use the DEL command. The DEL command is an internal command. You can also use the ERASE command to erase files.

### *Format*

DEL filename.ext

Where:

filename.ext Is the drive, path, file name and file extension of the file you want to delete. If you do not specify a drive, the DEL command uses the default drive. If you do not specify a path, the DEL command uses the current directory. If you specify a directory path but no file name, all files in that directory are deleted.

### *Comments*

If you want to delete all files in the directory or in a subdirectory, the DEL command prompts you for a 'Y' or 'N' response.

### *Example*

To delete the file MEMO.TXT on drive A, type:

```
A:\>DEL MEMO.TXT 
```

```
A:\>
```



### *Example 1*

To display all the lines containing "VAXmate" in BOOK1.TXT and BOOK2.TXT (in that order), type:

```
A:\>FIND "VAXmate" BOOK1.TXT BOOK2.TXT 
```

```
----- book1.txt
```

```
read into memory when you turn on your VAXmate workstation.  
is discussed in the VAXmate System Handbook.  
Local directories on your VAXmate workstation
```

```
----- book2.txt
```

```
A VAXmate workstation MS-DOS diskette may have either 40-tracks  
Rainbow-compatible diskettes cannot be formatted on the VAXmate  
The program remains resident until you turn off the VAXmate
```

```
A:\>
```

### *Example 2*

To display the lines and relative line numbers that contain the word "computer" in TEST1.TXT and TEST2.TXT, type:

```
A:\>FIND /N "computer" TEST1.TXT TEST2.TXT 
```

```
----- test1.txt
```

```
[1]Turn on your computer.  
[3]A printer is supplied with your computer.  
[5]Plug the cable into the port marked "printer."
```

```
----- test2.txt
```

```
[2]The computer screen displays the operating system prompt.  
[4]Connect your printer to the computer using the cable provided.  
[6]You have successfully connected the printer to your computer.
```

```
A:\>
```

||||| *FIND*

*Example 3*

To display all the lines that do not contain the word "computer" in TEST1.TXT and TEST2.TXT, type:

```
A:\>FIND /V "computer" TEST1.TXT TEST2.TXT 
```

```
----- test1.txt
```

```
These  
lines  
do  
not
```

```
----- test2.txt
```

```
contain  
the  
word
```

```
A:\>
```

*Example 4*

To display the number of lines that contain the word "computer" in TEST1.TXT and TEST2.TXT, type:

```
A:\>FIND /C "computer" TEST1.TXT TEST2.TXT 
```

```
----- test1.txt: 3
```

```
----- test2.txt: 3
```

```
A:\>
```



## FONT

### *Purpose*

To load a text font file into memory, use the FONT command. The FONT command, an external command, loads text font files that correspond to a specific character set. These font files only affect your screen display.

### *Format*

FONT [[filename[.ext]] [/D] [/S]]

Where:

**filename.ext** Is the drive, path, file name and file extension of the font file. If you do not specify a drive, the FONT command uses the default drive. If you do not specify a path, the FONT command searches the current directory, any appended directories, the root directory, or the current search path. If you do not specify a file extension, .FNT is used.

**/D** Loads the default character set.

**/S** Displays the current font file.

### *Comments*

The FONT command affects only the character set displayed in text mode. For more information on graphics mode, see the GRAFTABL command in this chapter. For more information on text and graphics modes, see the MODE command in this chapter.

If the MS-DOS operating system finds the .FNT file in a valid font file format, the font is loaded. Unless you are in a window, the entire screen and video memory immediately reflect the font change because this command affects text fonts. MS-Windows operates in graphics mode, so nothing happens to the screen if you are in a window.

If the .FNT file does not exist or is not in the proper format, a message is displayed.

The FONT command does not check that the font, keyboard, and country-specific information match. If they do not match, the results are unpredictable.

||||| FONT

The FONT command determines whether the correct hardware and software exist to support the loading of font files. If the hardware and software are not correct, a message is displayed. This message describes the minimal hardware requirement to run the program.

*Example 1*

To display the FONT help message, type:

A:\>FONT

*Example 2*

To load MCS.FNT, type:

A:\>FONT MCS

FONT Utility Program Version 1.00  
(C) Copyright 1985, 1986 by Digital Equipment Corporation

MCS.FNT

Has been successfully loaded

A:\>

*Example 3*

To load the default character set (STD.FNT), type:

A:\>FONT /D

FONT Utility Program Version 1.00  
(C) Copyright 1985, 1986 by Digital Equipment Corporation

The default font "STD.FNT" has been successfully loaded

A:\>

*Example 4*

To display the current font file, type:

A:\>FONT /S

FONT Utility Program Version 1.00

(C) Copyright 1985, 1986 by Digital Equipment Corporation

Font file = STD.FNT

A:\>



## **FOR**

### *Purpose*

To repeatedly execute an MS-DOS command in a batch file or at the MS-DOS prompt, use the FOR command. The FOR command is an internal command.

### *Format*

#### **For batch processing (in a .BAT file):**

```
FOR %%variable1 IN set DO command [variable2]
```

#### **For interactive processing (at the MS-DOS prompt):**

```
FOR %variable1 IN set DO command [variable2]
```

Where:

variable1	Is any number or letter.
set	Is a series of file names, a file specification containing wild-cards, or a count pattern.
command	Is any MS-DOS operating system command.
variable2	Is the same character as variable1. Specify variable2 if the command requires a parameter.

### *Comments*

The %%variable1 is set sequentially to each member of set, and then command is evaluated.

If a member of set is an expression involving \* or ?, the variable is set to each matching pattern from the disk. In this case, only one item can be in the set, and any item other than the first is ignored.

*Example 1*

To execute from a batch file the MASM command on all your .ASM files, add this line to your .BAT file:

```
FOR %%f IN (*.ASM) DO MASM %%f
```

*Example 2*

To execute from the MS-DOS prompt the MASM command on all your .ASM files, type:

```
FOR %f IN (*.ASM) DO MASM %f
```

*Example 3*

To execute from a batch file the TYPE command on all your .TXT files, add this line to your .BAT file:

```
FOR %%f IN (*.TXT) DO TYPE %%f
```

*Example 4*

To execute from the MS-DOS prompt the TYPE command on all your .TXT files, type:

```
A:\>FOR %f IN (*.TXT) DO TYPE %f
```



## **FORMAT**

### *Purpose*

To format diskettes and hard disks, use the **FORMAT** command. The **FORMAT** command is an external command.

### *Format*

**FORMAT** [drv:] [/S][/V][/1][/4][/8]

Where:

- drv:** Is the drive you want to format.
- /S** Writes **IO.SYS**, **MSDOS.SYS**, and **COMMAND.COM** to the newly formatted disk.
- /V** Prompts you for a volume label at the conclusion of the format process.
- /1** Formats a diskette to be single-sided (this is disregarded on a single-sided drive).
- /4** Formats an 8- or 9-sector, double-sided diskette in a high-capacity drive.

We recommend that you do not format 8- and 9-sector diskettes on your VAXmate workstation if you plan to use these diskettes in a low-capacity drive.

- /8** Formats the diskette with 8 sectors per track. The default is 9 sectors for low-capacity diskettes and 15 sectors for high-capacity diskettes.



### *Comments*

The VAXmate workstation has a 5<sup>1</sup>/<sub>4</sub> inch, high-capacity diskette drive. The recommended diskette type is a 1.2 megabyte high-density, double-sided diskette.

Each sector is 512 bytes long, and you can format 8, 9, or 15 sectors per track on a diskette, depending on the density (tracks per inch) of the diskette.

You cannot format Rainbow-compatible diskettes on the workstation. Format them on a Rainbow computer.

Because the diskette drive cannot tell what type of diskette is being formatted, you must use the proper FORMAT command qualifiers. Do not format:

- High-capacity diskettes to be low-capacity format
- Low-capacity diskettes to be high-capacity format

You can enter qualifiers in any order.

Qualifiers that you do not enter are set to the default values. The default values are:

- 15 sectors per track
- Double-sided

### ***NOTE***

You cannot use the FORMAT command to format any network, ASSIGNed, or SUBSTed drives.

||||| *FORMAT*

*Example 1*

To display the FORMAT help message, type:

A:\>FORMAT

*Example 2*

To format a diskette in drive A, type:

A:\>FORMAT A:

Format Utility Program Version 1.00

(C) Copyright 1985, 1986 by Digital Equipment Corporation

WARNING! THIS PROGRAM WILL DESTROY ANY DATA CURRENTLY ON YOUR DISK!

Type <Ctrl/C> to quit

Insert new diskette for drive A:  
and press <Return> when ready

Formatting 80 tracks, 2 side(s), 15 sectors per track.

Formatting and verifying track

Volume label (11 characters, <Return> for none)?

1213952 bytes total disk space

1213952 bytes available on disk

Format another (Y/N)?

A:\>

## GOTO

### *Purpose*

To jump to a specified label in a batch file, use the GOTO command. The GOTO command is an internal command.

### *Format*

GOTO label

Where:

label Is the label in a batch file to jump to.

### *Comments*

The GOTO command cannot be used at the MS-DOS operating system prompt.

If you do not specify a label, the batch file stops executing.

### *Example*

In the following example, program execution jumps from GOTO TWO to REM SECOND PROGRAM:

```
:ONE
REM FIRST PROGRAM
GOTO TWO
.
.
.
:TWO
REM SECOND PROGRAM
```

## **GRAFTABL**

### *Purpose*

To load a graphic font file into memory, use the GRAFTABL command. The GRAFTABL command, an external command, loads a graphic font file that corresponds to a graphic character set.

### *Format*

GRAFTABL [filename[.ext]]

Where:

**filename.ext** Is the drive, path, file name and file extension of the graphic font file. If you do not specify a drive, the GRAFTABL command uses the default drive. If you do not specify a path, the GRAFTABL command searches the current directory, any appended directories, the root directory, or the current search path. If you do not specify a file name or file extension, the GRAFTABL command uses the current text font file name with a .GRF file extension.

### *Comments*

Exit from MS-Windows before using the GRAFTABL command.

The GRAFTABL command affects only the character set displayed in graphics mode. For more information on text mode, see the FONT command in this chapter. For more information on text and graphics modes, see the MODE command in this chapter.

If the .GRF file does not exist or is not in the proper format, a message is displayed.

GRAFTABL uses approximately 2K bytes of memory.



### *Example 1*

To load the graphic character set that corresponds to the current text font file (STD.FNT in this example), type:

```
A:\>GRAFTABL STD.FNT
```

```
Graphic Character Loader Version 1.00  
(C) Copyright 1985, 1986 by Digital Equipment Corporation  
Replacing the graphic character set with STD.GRF  
A:\>
```

### *Example 2*

To load the graphic character set that corresponds to the ISO Latin-1 text font file, type:

```
A:\>GRAFTABL ISO.FNT
```

```
Graphic Character Loader Version 1.00  
(C) Copyright 1985, 1986 by Digital Equipment Corporation  
Replacing the graphic character set with ISO.GRF  
A:\>
```

### *Example 3*

To load the graphic character set that corresponds to the French text font file, type:

```
A:\>GRAFTABL FR7.GRF
```

```
Graphic Character Loader Version 1.00  
(C) Copyright 1985, 1986 by Digital Equipment Corporation  
Replacing the graphic character set with FR7.GRF  
A:\>
```

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## GRAPHICS

### *Purpose*

To print graphic video images on a graphics printer, use the GRAPHICS command. For example, to print MS-Windows screens or any application that has graphic video images, use the external GRAPHICS command.

### *Format*

GRAPHICS [printer type][/R]

Where:

printer type    Is STD, LA50, LA75 or LA75STD, LA75DEC, LN03, LN03DEC, LN03STD.

/R                Prints exact graphics video images. If the screen has black video images with a white background, the printer produces black images with a white background. If the screen has white video images with a black background, the printer produces white images with a black background.

### *Comments*

Exit from MS-Windows before loading the GRAPHICS command.

Once you load GRAPHICS, you can print the current graphic video screen from MS-Windows by pressing the Shift/Prt Sc keys.

Each time you change printers or set the reverse qualifier, you must load the GRAPHICS command again.

LN03STD and LN03DEC are reserved for an LN03 Plus printer with the LN03 Plus ISO/PC cartridge.

GRAPHICS uses approximately 2K bytes of memory.

To obtain high-quality prints, the GRAPHICS command causes printers in high-resolution video mode to print the upper-right corner of the screen on the upper-left corner of the paper (landscape mode).

||||| GRAPHICS

There are two ways to set the printer type:

- If you used the MODE command to set the printer type, type the GRAPHICS command without the parameter or the qualifier. The GRAPHICS command reads the printer setting in memory.
- If you have not used the MODE command to set the printer type, type the GRAPHICS command with the appropriate printer type.

The GRAPHICS program stops if there is:

- No paper in the printer
- An input/output (I/O) error during the print operation
- A timeout

If a timeout occurs while the printer is in graphics mode, the printer remains in graphics mode. To reset an LN03, LN03DEC, LA50, or LA75DEC printer, turn the printer off or complete the graphic printout.

*Example 1*

To display the GRAPHICS help message, if you have not set the printer type using the MODE command, type:

```
A:\>GRAPHICS 
```

*Example 2*

To set the printer type using the MODE command, then load GRAPHICS, type the following sequence of commands:

```
A:\>MODE PRN:LA75 
```

```
A:\>GRAPHICS 
```

```
GRAPHICS Utility Program Version 1.00  
(C) Copyright 1985, 1986 by Digital Equipment Corporation
```

```
Printer type LA75  
Reverse print is OFF.  
Loading GRAPHICS.
```

```
A:\>
```



*Example 3*

To change the printer from an LA75 printer to an LN03 Plus printer, type:

```
A:\>GRAPHICS LN03 
GRAPHICS Utility Program Version 1.00
(C) Copyright 1985, 1986 by Digital Equipment Corporation
```

```
Printer type LN03
Reverse print is OFF.
Loading GRAPHICS.
```

```
A:\>
```

*Example 4*

To change the printer to an LN03 Plus printer and set the reverse qualifier, type:

```
A:\>GRAPHICS LN03 /R 
GRAPHICS Utility Program Version 1.00
(C) Copyright 1985, 1986 by Digital Equipment Corporation
```

```
Printer type LN03
Reverse print is ON.
Loading GRAPHICS.
```

```
A:\>
```



## **IF**

### *Purpose*

To conditionally execute commands in a batch file, use the IF command. The IF command is an internal command.

### *Format*

IF <condition> <command>

Where:

<condition>    ERRORLEVEL <number>

True if, and only if, the previous program executed by the command processor (COMMAND.COM) had an exit code of <number> or higher. An exit code is set by a specific program. It is returned by the operating system after the program finishes. Later program tasks may be performed based on the value of this number.

<string1> == <string2>

True if, and only if, <string1> and <string2> are identical after parameter substitution. Strings cannot have embedded separators.

EXIST <filename>

True if, and only if, <filename> exists.

NOT <condition>

True if, and only if, <condition> is false.

<command>    Is the command executed if the condition is true.

*Comments*

The IF command cannot be used at the MS-DOS operating system prompt.

The IF command enables you to conditionally execute commands from a batch file. When <condition> is true, <command> is executed. Otherwise, <command> is ignored.

*Example*

To display the message "Can't find datafile" if DATA1 does not exist, type:

```
IF NOT EXIST DATA1 ECHO Can't find datafile
```



## **JOIN**

### *Purpose*

To create a single directory structure from two separate disk drives, use the JOIN command. The external JOIN command lets the disk contents be accessed as though that disk contents were in the subdirectory of another disk. In effect the drive that gets JOINed becomes a subdirectory of the drive to which it is JOINed. You must specify a name for this subdirectory.

### *Format*

JOIN [drv1: drv2:\path2]

JOIN drv1: /D

Where:

drv1: Is the drive you want to join to another drive. Drv1: is a physical drive.

drv2: Is the drive to which the first drive is joined.

path2 Is the path of the drive to which the first drive is joined. Path2 must be a subdirectory that is nonexistent or empty.

/D Deassigns a JOINed drive.

### *Comments*

You can only join drv:1 at its root directory.

### **NOTE**

You cannot use the JOIN command with any network, ASSIGNed, or SUBSTed drives.

After you issue the JOIN command, the first drive name becomes invalid. If you try to use it, the MS-DOS operating system displays a message.

If you use the JOIN command with the /D qualifier, the JOINed drives are deassigned, but any created subdirectory is not deleted.

*Example 1*

To join drive A to the path C:\MEMOS, type:

```
C:\MEMOS> JOIN A: C:\MEMOS (Return)
```

```
C:\MEMOS>
```

*Example 2*

To display a directory listing of drive A that was joined to drive C:\MEMOS, type:

```
C:\MEMOS> DIR C:\MEMOS (Return)
```

*Example 3*

To display joined drives, type:

```
C:\MEMOS> JOIN (Return)
```

```
A: => C:\MEMOS
```

```
C:\MEMOS>
```

*Example 4*

To deassign the effects of a previous JOIN command, type:

```
C:\MEMOS> JOIN A: /D (Return)
```

```
C:\MEMOS>
```



## **KEYB**

### *Purpose*

To load a keyboard map file into memory, use the KEYB command. The external KEYB command maps the character set, STD, to a keyboard layout.

### *Format*

KEYB [filename[.ext]] [/D] [/S]

Where:

filename.ext Is the drive, path, file name and file extension of the keyboard map file. If you do not specify a drive, the KEYB command uses the default drive. If you do not specify a path, the KEYB command searches the current directory, any appended directories, the root directory, or the current search path. If you do not specify a file extension, .KEY is used.

/D Loads the default keyboard map file.

/S Displays the name of the current keyboard map file.

### *Comments*

If the MS-DOS operating system finds the file and it is a valid keyboard map file, the KEYB program loads the file into memory. The changes are implemented immediately.

The KEYB command does not check that the font, keyboard, and country-specific information match. If they do not match, the results are unpredictable.

If the .KEY file does not exist or is not in the proper format, a message is displayed.

If you do not specify a file name, the KEYB command displays an informational help screen.

Pressing the Ctrl/Alt/F2 keys changes the currently loaded keyboard file to the standard keyboard file STDUS.

Pressing the Ctrl/Alt/F3 keys changes the current keyboard file to the last keyboard file loaded into memory. To activate this feature, a nonstandard keyboard, such as STDFR.KEY, should have been loaded.

### *Example 1*

To display the KEYB help message, type:

```
A:\>KEYB 
```

### *Example 2*

To load the default keyboard map file (STDUS.KEY), type:

```
A:\>KEYB /D 
```

```
Keyboard Map Loader Version 1.00  
(C) Copyright 1985, 1986 by Digital Equipment Corporation
```

The default keyboard map "STDUS.KEY" has been successfully loaded

```
A:\>
```

### *Example 3*

To load the French multinational keyboard map file (MCSFR.KEY):

1. Ensure that the text font file and the keyboard map file match by using the FONT command to load MCS.FNT.
2. Type:

```
A:\>KEYB MCSFR 
```

```
Keyboard Map Loader Version 1.00  
(C) Copyright 1985, 1986 by Digital Equipment Corporation
```

```
MCSFR.KEY
```

Has been successfully loaded

```
A:\>
```



## *LABEL*

### **LABEL**

#### *Purpose*

To create, change, or delete a diskette or hard disk volume label, use the LABEL command. The LABEL command is an external command.

#### *Format*

LABEL [drv:][name]

Where:

**drv:** Is the drive where you want to create, change, or delete a label. If you do not specify a drive, the LABEL command uses the default drive.

**name** Is the new volume name (11 characters or less).

#### *Comments*

You cannot use wildcards or tabs in labels.

#### **NOTE**

You cannot use the LABEL command with remote network resources.

*Example 1*

To name the volume on drive A MEMOS, type:

C:\>LABEL A:MEMOS

C:\>

*Example 2*

To enter a new label on drive A, type:

C:\>LABEL A:

Volume in drive A has no label

Volume label (11 character, ENTER for none)?\_

Delete current volume label (Y/N)?\_

C:\>

## **LCOUNTRY**

### *Purpose*

To install country-specific information into memory, use the LCOUNTRY command. The LCOUNTRY command is an external command.

### *Format*

LCOUNTRY [filename[.ext]] [ddd]

Where:

**filename.ext** Is the drive, path, file name and file extension of the table of country-specific information applicable to the current font file. If you do not specify a drive, the LCOUNTRY command uses the default drive. If you do not specify the path, the LCOUNTRY command searches the current directory, any appended directories, the root directory, or the current search path. If you do not specify a file extension, .COU is used.

**ddd** Is a three-digit country code. If you specify a file name and a three-digit country code, the country-specific information for that character set is selected. However, if you specify only a three-digit country code, the current country information changes to the country just specified.

If you have no COUNTRY command in your CONFIG.SYS file, the default country is the United States.

### *Comments*

The LCOUNTRY command installs the following country-specific information into memory:

- Date format
- Time format
- Currency symbols
- Decimal separators
- Case conversion information



The LCOUNTRY command does not check that the font, keyboard, and country-specific information match. If they do not match, the results are unpredictable.

If the .COU file does not exist or is not in the proper format, a message is displayed.

*Example 1*

To load the default country-specific information (STD.COU), type:

```
A:\>LCOUNTRY 
```

```
Load Country Dependent Information Utility Version 1.0  
(C) 1985 by Digital Equipment Corporation
```

```
LCOUNTRY loaded STD.COU  
Country Code = 001
```

```
A:\>
```

*Example 2*

To load the French country-specific information, type:

```
A:\>LCOUNTRY FR7.COU 
```

```
Load Country Dependent Information Utility Version 1.0  
(C) 1985 by Digital Equipment Corporation
```

```
LCOUNTRY loaded FR7.COU  
Country Code = 033
```

```
A:\>
```

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*Example 3*

To change the country information to US (using the same character set), type:

A:\>LCOUNTRY 001

*Example 4*

To load the ISO Latin-1 character set country data and specify the country as France, type:

A:\>LCOUNTRY ISO 033



## MDRIVE

### *Purpose*

To reserve a portion of RAM to function as a memory drive, use the MDRIVE command. MDRIVE is a device driver.

### *Format*

The following command line must be included in your CONFIG.SYS file to install a memory drive:

```
DEVICE=[drv:][\path\]MDRIVE.SYS [n] or [[n][/E]] or [/E*]
```

Where:

- drv:** Is the drive containing the MDRIVE.SYS file. If you do not specify a drive, the DEVICE command uses the drive from which the MS-DOS operating system is started.
- path** Is the path to the directory containing the MDRIVE.SYS file. If you do not specify a path, the DEVICE command uses the directory from which the MS-DOS operating system is started.
- n** Is the memory drive disk size in 64K byte pages. The default value is 64K bytes. The range is 1 (64K bytes) to the amount of available memory on your workstation minus 128K bytes of non-extended memory.
- /E** Use extended memory. The memory drive buffer is in extended memory and the device driver is in lower memory.
- /E\*** Use all available extended memory as one memory drive.

### **CAUTION**

We recommend you do not change your CONFIG.SYS file if you are using your workstation in a network environment.



### *Comments*

A memory drive works like a disk drive, but is much faster.

To save data stored on a memory drive, use the BACKUP command.

Before you turn off the power or restart the MS-DOS operating system, copy all data that is currently on a memory drive to a non-memory drive. Otherwise, the data is lost.

The name of the memory drive depends on the number of drives you already have. For example, if you have one diskette drive (A:) and no hard disk, the first memory drive is C, the second is D, and so on.

Each memory drive increases the resident size of the MS-DOS operating system. The resident size is increased by about 1K bytes plus the size of the memory drive buffer you specify (if the drive is installed in low memory).

### *Example 1*

To install one 64K byte memory drive, add this line to your CONFIG.SYS file:

```
DEVICE=MDRIVE.SYS
```

### *Example 2*

To install one 256K byte memory drive in extended memory, add this line to your CONFIG.SYS file:

```
DEVICE=MDRIVE.SYS 4 /E
```

### *Example 3*

To install one memory drive using all your extended memory, add this line to your CONFIG.SYS file:

```
DEVICE=MDRIVE.SYS /E*
```



## **MKDIR**

### *Purpose*

To create a subdirectory in the MS-DOS operating system directory structure, use the MKDIR command. The MKDIR command is an internal command.

### *Format*

MKDIR | MD [drv:\]path

Where:

**drv:** Is the drive on which you want to make a subdirectory. If you do not specify a drive, the MKDIR command uses the current drive.

**path** Is the path you want to make to the new subdirectory. If you do not specify a path, the MKDIR command uses the current directory.

### *Example 1*

To create the subdirectory USER in your root directory, type:

```
A:\>MKDIR \USER 
```

```
A:\>
```

### *Example 2*

To create the subdirectory JOE under the subdirectory USER, type:

```
A:\>MKDIR \USER\JOE 
```

```
A:\>
```



## MODE

### *Purpose*

To set printer, video mode, communications, printer redirection, and keyboard mode, use the MODE command. The MODE command is an external command.

### **Printer Setup**

Printer setup lets you configure any of the supported printers:

- IBM Pro Printer (STD)
- DEC LA50
- DEC LA75 Companion
- DEC LN03 Plus
- DEC LN03 Plus with the ISO/PC cartridge

### *Format*

MODE [LPT#[:]] [type,width,lpi,retry,qual,bold]

Where:

# Is a parallel port number (1, 2, or 3).

type Is a printer type (STD, LA50, LA75DEC, LA75STD, LN03, LN03DEC, or LN03STD).

If you use this parameter, the MODE command sets the printer type for the specified port. If this parameter is not used, the MODE command determines the printer type from the current setting.

If the type is not set but needed, the MODE command prompts you for the printer type.

If you specify a printer type, the MODE command sends the appropriate escape sequence to the printer. The LA75DEC, LN03DEC, and LN03 printers are treated as LA50-type printers. The LA75STD and LN03STD are treated as STD-type printers.



## MODE

- width** Is the number of characters on each line (80, 96, or 132).  
If the printer type is an STD, LA75, LA75STD, or LN03STD, only 80 or 132 characters on each line are valid.
- lpi** Is the number of lines in an inch (6 or 8).
- retry** Is a parameter to enable or disable continuous retries.  
p enables continuous retry on timeouts.  
- disables continuous retry on timeouts.  
If you do not use this parameter, the current setting remains unchanged. If the printer has been redirected to a communications port, retry is enabled on the communications port to which it was redirected.
- qual** Is the print quality available.  
d = draft  
e = enhanced  
h = high
- bold** Is the number of passes for each printed line.  
b = bold  
n = normal

### *Comments*

You can use PRN instead of LPT1 and LA75 instead of LA75STD. You can enter parameters, separated by commas, in any order. You cannot use LN03 instead of LN03STD.

### *Example 1*

To display the MODE help message, type:

A: \>MODE



### *Example 2*

To set up the LA75 printer for use, type:

```
A:\>MODE LPT1:LA75 
```

```
Mode Setup Utility Version 1.00  
(C) Copyright 1985, 1986 by Digital Equipment Corporation  
Printer type set successfully.  
Printer programmed successfully.
```

```
A:\>
```

### *Example 3*

To set up the LN03 Plus printer for use, type:

```
A:\>MODE LPT1:LN03 
```

```
Mode Setup Utility Version 1.00  
(C) Copyright 1985, 1986 by Digital Equipment Corporation  
Printer type set successfully.  
Printer programmed successfully.
```

```
A:\>
```

### *Example 4*

To set up the LA75 printer for 80 columns, 8 lines per inch, continuous  
retry, draft quality, and normal, type:

```
A:\>MODE LPT1:LA75,80,8,p,d,n 
```

```
Mode Setup Utility Version 1.00  
(C) Copyright 1985, 1986 by Digital Equipment Corporation  
Printer type set successfully.  
Line width set to 80 columns.  
Vertical spacing set to 8 lines per inch.  
Print quality set to DRAFT.  
Bold print set off.  
"Retry forever" set on.  
Printer programmed successfully.
```

```
A:\>
```



## Video Mode

Video mode enables you to select the video mode.

### *Format*

MODE [vidmode]

MODE [[vidmode],shift,[t]]

Where:

vidmode Is one of the following:

40 Set to 40 columns, shades of gray unchanged.

80 Set to 80 columns, shades of gray unchanged.

Selecting 40 or 80 affects characters per line. These selections are valid only in text modes. There is no effect with the monochrome adapter except to clear the screen.

BW40 Set to text mode, 40 columns, 2 shades of gray.

CO40 Set to text mode, 40 columns, 4 shades of gray.

BW80 Set to text mode, 80 columns, 2 shades of gray.

CO80 Set to text mode, 80 columns, 4 shades of gray.

BW320 Set to 320 × 200 pixels, 2 shades of gray.

CO320 Set to 320 × 200 pixels, 4 shades of gray.

BW640 Set to 640 × 200 pixels, 2 shades of gray.

DEC2 Set to 640 × 400 pixels, 2 shades of gray.

DEC4 Set to 640 × 400 pixels, 4 shades of gray.

DEC2 and DEC4 are valid only on the workstation hardware.

MONO Setup for monochrome screen.

*Example 3*

To set the keyboard to use DIGITAL extended keys and specify a buffer of 80 characters, type:

A:\>MODE U,80

Mode Setup Program Version 1.0  
(C) 1985 by Digital Equipment Corporation  
Keyboard mode set successfully.  
Keyboard buffer installed successfully.

A:\>



## **MORE**

### *Purpose*

To view a file one screen at a time, use the MORE command. The MORE command is an external command.

### *Format*

command [filename.ext] | MORE

Where:

- |              |   |
|--------------|---|
| command      | Is an MS-DOS operating system command.  |
| filename.ext | Is the drive, path, file name and file extension of the file you want to display. |
|              | Is the pipe separator.  |
| MORE         | Is the MORE filter.   |

### *Comments*

After displaying one screen of information, the MORE command pauses and displays the message:

--MORE--

To proceed, press the Return key. Continue pressing the Return key until all the information has been displayed.

### *Example 1*

To display MYFILES.TXT one screen at a time, type:

A:\>TYPE MYFILES.TXT | MORE

### *Example 2*

To stop the display in the middle of a file, press:

### *Example 3*

To display a directory listing of drive A, type:

A:\>DIR | MORE



## MOUSE

### *Purpose*

To make the DIGITAL mouse emulate the Microsoft mouse while using your workstation, use the MOUSE command. The MOUSE command, an external command, allows many applications that assume a Microsoft mouse is present to run with a DIGITAL mouse.

### *Format*

MOUSE

### *Comments*

There are two drivers supplied with the MOUSE command:

- MOUSE.COM, which is run before you run an application outside of MS-Windows
- MOUSE.SYS, which should be placed in your CONFIG.SYS file if you frequently use a mouse outside of MS-Windows

If you unplug your mouse after running the MOUSE command, and then plug the mouse back in, it will not work. To activate the mouse again, you must restart the workstation by pressing the Ctrl/Alt/Del keys.

### *Example 1*

To load MOUSE.COM as you need it, type:

```
A\>MOUSE 
```

### *Example 2*

To place MOUSE.SYS in your CONFIG.SYS file, type:

```
DEVICE=MOUSE.SYS
```



## NET

### *Purpose*

To connect to the network and its resources, use the NET command.

### *Format*

NET option

Table 32-7 lists the NET command options.

**Table 32-7 NET Command Options**

<b>Command</b>	<b>Function</b>
NET CLEAR	Removes DECnet node names.
NET CONTINUE	Continues your network connection.
NET DEFINE	Assigns a DECnet node name.
NET HELP	Gets help.
NET LIST	Displays a list of remote nodes.
NET PAUSE	Temporarily stops your network connection.
NET PRINT	Prints a file on a remote printer.
NET START LAT	Starts network communications services.
NET START RDR	Connects to a network.
NET TEST	Tests the remote node.
NET TIME	Gets the date and time.
NET USE	Connects to a resource.

For more information about network commands, see Chapter 33.

## REN

### *Purpose*

To rename a file, use the REN command. The REN command is an internal command.

### *Format*

REN filename1.ext filename2.ext

Where:

filename1.ext Is the drive, path, file name and file extension of the current file. If you do not specify a drive, the REN command uses the default drive. If you do not specify a path, the REN command uses the current directory.

filename2.ext Is the new file name and file extension.

### *Comments*

You must supply a drive name if the file is not on the default drive.

You cannot rename files across drives.

Wildcards can be used in both file names and file extensions.

### *Example 1*

To change all .LST files to .PRN files, type:

```
A:\>REN *.LST *.PRN 
```

```
A:\>
```

### *Example 2*

To rename CHAP10 on drive C to PART10, type:

```
A:\>REN C:CHAP10 PART10 
```

```
A:\>
```

The file remains on drive C.

||||| *RESTORE*

## **RESTORE**

### *Purpose*

To restore and make usable back-up files from a back-up disk created using the BACKUP command, use the RESTORE command.

In addition to restoring files to local drives, the RESTORE command allows you to restore files to a network drive.

### *Format*

RESTORE [drv1: drv2:\path\][filename.ext] [/S][/P]

Where:

- drv1: Is the drive containing the BACKUP source files.
- drv2: Is the destination drive.
- path Is the path to the directory where the back-up files must be restored. It must exist, unless you use the /S qualifier. If you use the /S qualifier, a subdirectory will be created if it does not exist.
- filename.ext Is the file name and file extension of the restored file.
- /S Restores subdirectories. If the destination disk does not contain the subdirectories from which the files were backed up, they are created, and the files are restored.
- The /S qualifier can be used without specifying a path if the target directory is below the current directory.
- /P Prompts you for permission to restore read-only files.

### *Comments*

The RESTORE command only restores files to the directory area where the files originated. For example, if you backed up files to A:\TEST from C:\TEST, you can only restore the files from A:\TEST to C:\TEST.



DIGITAL stores back-up files on a hard disk in a subdirectory called \BKSUBDIR (if you back up files to a hard disk or a network drive). The industry-standard BACKUP command stores back-up files on a subdirectory called \BACKUP. When using the RESTORE command with industry-standard files, you must explicitly specify \BACKUP as the source of the restore. If you do not, the defaults used by the RESTORE command will not find the files.

#### *Example 1*

To display the RESTORE help message, type:

```
A:\>RESTORE<Return>
```

#### *Example 2*

To determine the original directory needed to restore the file TEST.TXT, type:

```
C:\>RESTORE A:\TEST.TXT<Return>
File TEST.TXT           Restore Path \TEST\TEST.TXT
C:\>
```

#### *Example 3*

To restore all .ASM files from C:\ASMBK to their original directory on drive A, type:

```
A:\>RESTORE C:\ASMBK\*.ASM /S<Return>
```

#### *Example 4*

To restore all the files from network drive I to drive C, type:

```
I:\>RESTORE I: C: /S<Return>
```

```
Files were backed up on 12-1-1986
Restoring files from drive I:
```

```
.
.
.
```

```
I:\>
```



## **RMDIR**

### *Purpose*

To remove a subdirectory from the MS-DOS operating system directory structure, use the RMDIR command. The RMDIR command is an internal command.

### *Format*

RMDIR | RD subdirectory

Where:

subdirectory    Is the subdirectory you want to remove.

### *Comments*

You must delete all files in a subdirectory before you use the RMDIR command.

### *Example*

To remove JOE from the directory structure, type:

```
A:\>RMDIR \USER\JOE 
```

```
A:\>
```



## SHARE

### *Purpose*

To install file sharing and locking, use the SHARE command. The SHARE command is an external command.

### *Format*

SHARE [/F:space] [/L:locks]

Where:

- /F:space**            Allocates file space (in bytes) for the area the MS-DOS operating system uses to record file-sharing information. Each open file needs the length of the full file name plus 11 bytes (the average path name is 20 bytes). The default value for /F is 2048 bytes.
- /L:locks**            Sets the number of opened files that are locked. Only one user can open a locked file. The default value for /L is 20 locks.

### *Comments*

Use the SHARE command only when using the network.

You can include the SHARE command in the AUTOEXEC.BAT file to install file sharing.

Once you have run the SHARE command in an MS-DOS operating system session, the MS-DOS operating system checks all read and write requests.

If you want to change the allocated file space or the number of open files that get locked, you must restart the workstation and run the command with the new values.

### *Example 1*

To load file sharing and use the default values for the /F and /L qualifiers, type:

```
A: \> SHARE 
```

**This page intentionally left blank.**

*Example 2*

To allocate 4096 bytes of file space for file-sharing information, type:

A:\>SHARE/F:4096

*Example 3*

To lock 9 opened files, type:

A:\>SHARE/L:9



## **SHIFT**

### *Purpose*

To access more than 10 replaceable parameters in a batch file, use the SHIFT command. The SHIFT command is an internal command.

### *Format*

SHIFT

### *Comments*

The SHIFT command cannot be used at the MS-DOS operating system prompt.

Usually, command files are limited to handling 10 parameters (%0 through %9). To access more than 10 parameters, use the SHIFT command to change the command line parameters.

There is no backward shift. Once the SHIFT command is executed, the 0 parameter (%0) that existed before the shift cannot be recovered.

The first parameter (%0) before any shifts is the name of the batch file.

### *Example*

Assume that the file TEST.BAT contains the following command lines:

```
SHIFT
TYPE %0
TYPE %1
SHIFT
TYPE %0
```

Assume, also, that the parameters are:

%0 = TEST  
%1 = FILE1.TXT  
%2 = FILE2.TXT

To shift the parameters one position, type:

A:\>TEST FILE1.TXT FILE2.TXT

The new parameters are:

%0 = FILE1.TXT  
%1 = FILE2.TXT  
%2 =

The first TYPE %0 command displays the contents of FILE1.TXT. The TYPE %1 command displays the contents of FILE2.TXT. The SHIFT command shifts each parameter one position. The new parameters are:

%0 = FILE2.TXT  
%1 =  
%2 =

The second TYPE %0 command displays the contents of FILE2.TXT again.

If more than 10 are on a command line, those that appear after the 10th (%9) parameter are successively shifted one at a time into %9.



## **SORT**

### *Purpose*

To read, sort, and display standard input, use the SORT command. The SORT command is an external command.

### *Format*

SORT [/R] [/+n]

Where:

/R           Reverses the sort order (from Z to A).

/+n          Specifies that the SORT command should start with column n (where n is some number). If you do not specify this qualifier, the SORT command begins sorting from column 1.

### *Comments*

The SORT program checks the name of the currently loaded font file and searches for the corresponding .SRT file. This sort file contains the collating sequence for each character in the font character set.

If the .SRT file does not exist or is not in the proper format, a message is displayed.

The SORT program contains the default sort table STD.SRT.

You can use the SORT command to alphabetize a file by columns.

You can also use SORT with redirection for input and output to a file.

*Example 1*

To read the file UNSORT.TXT, reverse the sort, and write the output to SORT.TXT, type:

A:\>SORT /R < UNSORT.TXT > SORT.TXT

A:\>

*Example 2*

To sort the file UNSORT.TXT when the ISO.FNT file is loaded, type:

A:\>SORT < UNSORT.TXT

The SORT command then uses the ISO.SRT file to do the sorting.

*Example 3*

To sort the directory listing by file type (the file type starts in column 10) and send the output to the screen, type:

A:\>DIR | SORT /+10

```
MORE      COM      282    2-10-86   11:13a
ASSIGN    COM     1509    2-10-86   10:21a
APPEND    COM     1724    5-05-85   12:02a
```

.  
.  
.

```
ANSI      SYS      1903    2-06-86   3:25p
MDRIVE    SYS     2996    2-06-86   2:00p
```

Directory of A:\

A:\>

||||| SORT

*Example 4*

To sort the directory listing by file size (the file size starts in column 14) and send the output to the screen, type:

A:\>DIR | SORT /+14

```
00351C41          0    3-01-86   11:51a
00351E0F          0    3-01-86   11:51a
CONFIG  SYS       72    1-11-86    1:21p
AUTOEXEC BAT     211   1-11-86    2:43p
SORT     EXE     2144   2-06-86    2:58p
COMMAND  COM    23450  12-06-85   2:56p
```

```
Directory of A:\
        6 File(s)  1148416 bytes free
Volume in drive A is NONAME
```

A:\>

*Example 5*

To sort the directory listing by file size and send it to the screen, one screen at a time, type:

A:\>DIR | SORT /+14 | MORE



## **SUBST**

### *Purpose*

To substitute a logical drive letter for a valid path name, use the SUBST command. The external SUBST command deletes a logical drive or creates a logical drive by associating a path name with a drive letter.

### *Format*

SUBST [drv1: drv2:\path2]

SUBST drv1: /D

Where:

drv1: Is the logical drive for the substituted path name. This drive cannot be ASSIGned or in use when you execute the SUBST command.

drv2: Is the drive you want to substitute with a logical drive.

path2 Is the path you want to substitute with a logical drive.

/D Deletes the logical drive for the path name.

### *Comments*

When the MS-DOS operating system sees a drive that was created with the SUBST command, it replaces the reference with the substituted path name.

### **NOTE**

You cannot use the SUBST command with any network, ASSIGned, or JOINed drives.

||||| *SUBST*

*Example 1*

To create a logical drive E for the path name A:\USR\FRED\FORMS, type:

A:\>SUBST E: A:\USR\FRED\FORMS

A:\>

*Example 2*

To display the files in A:\USR\FRED\FORMS, type:

A:\>DIR E:

*Example 3*

To display the names of the logical drives, type:

A:\>SUBST   
E: => A:\USR\FRED\FORMS

A:\>

*Example 4*

To delete the logical drive E, type:

A:\>SUBST E: /D

A:\>



## Using Resources

Now that you are connected successfully to the network and to its resources, you use the resources on a server as if they were on your own workstation.

### Changing to Another Drive

You change from one drive to another by typing the letter (followed by a colon) of the drive to which you want to change:

```
A:\>D: 
```

After changing to drive D, you use the files in the directory specified by the alias ACCOUNTS on the DECnet node ORANGE as if they were on a disk in your workstation.

### Printing a Remote File (NET PRINT)

To display the server's print queue, display another print queue, or print a file on a remote printer, use the NET PRINT command.

If you are connected to the VAX/VMS Server for MS-DOS and issue the NET PRINT \\nodename command, the server returns information about the generic queue SYS\$PRINT. If the queue is not enabled, see your system administrator.

The NET PRINT command has the format:

```
[NET] PRINT \\nodename
```

```
[NET] PRINT [filename] device
```

Where:

nodename        Is the node name of the server to which you are connected.

filename        Is the file you want to print.

device          Is LPT1, LPT2, or LPT3.



For example, to show the print queue for the server ORANGE, type:

```
A:\>NET PRINT \\ORANGE 
```

To show the print queue for the device LPT1, type:

```
A:\>NET PRINT LPT1 
```

To send the file MEMO.TXT to the remote printer assigned to the device LPT1, type:

```
A:\>NET PRINT MEMO.TXT LPT1: 
```

### **Temporarily Disconnecting From Network Resources (NET PAUSE)**

You can temporarily disconnect from network resources to connect your devices to your own physical disks, directories, or printers.

#### ***NOTE***

To suspend disk redirection, you must first exit from MS-Windows.

For example, if you connected your device LPT1 to a network printer, you cannot use that device for your own physical printer. To temporarily disconnect from the network, use the NET PAUSE command. The NET PAUSE command has the format:

```
NET PAUSE [disk redirection | print redirection]
```

```
NET PAUSE [drdr | prdr]
```



Where:

**drdr** Is disk redirection. It temporarily suspends disk redirection, enabling you to use a previously redirected device to access your own disks.

**prdr** Is print redirection. It temporarily suspends print redirection, enabling you to use a device to access your own printer.

For example, to temporarily suspend print redirection, type:

```
A:\>NET PAUSE PRDR 
```

You can now use any of your local printers.

### Restarting After a NET PAUSE Command (NET CONTINUE)

To continue redirection to a network resource, use the NET CONTINUE command.

#### **NOTE**

To use the NET CONTINUE command for disk redirection, you must set your current directory to your local (A: or C:) \DECNET directory.

The NET CONTINUE command has the format:

```
NET CONTINUE [drdr | prdr]
```

Where:

**drdr** Is disk redirection. It enables you to resume your connection to the network resource.

**prdr** Is print redirection. It enables you to resume your connection to the network printer.

For example, to continue printer redirection, type:

```
A:\>NET CONTINUE prdr 
```

You can now use the network printer as you did before you issued the NET PAUSE command.



## Disconnecting From a Resource

You can only connect to one remote resource per device. If you want to connect to another remote resource with a previously connected device, you must first disconnect the device from its current remote resource.

## Disconnecting From a Remote Directory

To disconnect from a remote directory, use the NET USE command with the /D qualifier.

### **NOTE**

Make sure you insert a space before the /D parameter.

For example, to disconnect drive D from the network, type:

```
A:\>NET USE D: /D 
```

You can now use drive D for a different directory resource.

## Disconnecting From a Remote Printer

To disconnect from a remote printer, use the NET USE command with the /D qualifier.

For example, to disconnect LPT1 from the network, type:

```
A:\>NET USE LPT1 /D 
```

You can now use device LPT1 for a different printer resource.



All nodes defined with a key disk or the NET DEFINE command are automatically listed as MS-NET ("M").

### NET START LAT

The NET START LAT command enables you to use network communications in the terminal emulator. You use this command when you do not want to start the entire network.

The NET START LAT command has the format:

[NET] START LAT

LAT is started when NET START RDR is executed.

### NET TEST

The NET TEST command invokes the loop test for the remote node. It verifies that your node can communicate with a specified remote node.

When the test is complete, a success message is displayed. If the test is unsuccessful, an error message is displayed.

The NET TEST command has the format:

[NET] TEST name

Where:

**name** Is the name of a remote node. A node name is a 1 to 6 character (alphanumeric) string that identifies a specific node. A node address is a numeric character string consisting of an area number and a specific node number. The node address also serves to uniquely identify the node in the network.

For example, to specify the node GRAHAM as the remote node to be used in the remote node test, type:

A:\>NET TEST GRAHAM



## **NET TIME**

The NET TIME command gets the date and time from a node you specify, or from the first available node. Then, the MS-DOS operating system DATE and TIME can be set.

The NET TIME command has the format:

NET TIME [nodename]

NETTIME [nodename]

Where:

nodename        Is a DECnet node name.

For example, to get the date and time from the DECnet node named YELLOW, type:

```
A:\>NET TIME YELLOW 
```

```
The current date is 03/02/86
```

```
The current time is 09:21:05.97
```

```
A:\>
```

To get the date and time from any DECnet node, type:

```
A:\>NET TIME 
```

```
Time/Date serviced by node YELLOW
```

```
The current date is 03/02/86
```

```
The current time is 09:21:05.97
```

```
A:\>
```



## PERMIT

PERMIT is an external command that lets you use your workstation as a single-session, single-connection file server. The PERMIT command waits for the other workstation to create the connection. After the connection is made, no other workstations can connect to the server. The session is terminated when the connected workstation executes a NET USE command with the /D qualifier, or when you press Ctrl/C twice on the server workstation.

You cannot use a password with the alias. You can, however, restrict access to a particular workstation.

The network must be started before you use the PERMIT command.

Both workstation nodes must be defined in each other's network definition file. To add a node, see your system administrator.

The permit command format is:

```
PERMIT alias=drv:path [/permissions] nodename | *
```

Where:

- |              |  |
|--------------|--|
| alias        | Is a name representing the complete path name of the shared directory.   |
| drv:         | Is the drive for the existing directory offered to the network.  |
| path         | Is the path name for the existing directory offered to the network.  |
| /permissions | Controls the user's ability to modify or create files in the directory.<br><br>/R lets the user read and copy files in the directory.<br><br>/RW lets the user read, copy, and change (write to) files in the directory.<br><br>/RWC lets the user read, copy, change, and create files in the directory. This is the default. |
| nodename     | Is the DECnet node name of the workstation on the network with which you exclusively want to share your disk or directory.<br><br>Specifies that any single workstation can share your disk or directory.  |



For example, to offer read access in the directory named A:\TOOLS to the DECnet node named BUBBLE, type:

```
A:\>PERMIT TOOL=A:\TOOLS /R BUBBLE 
```

To offer file creation access in the directory named A:\TOOLS to any DECnet node, type:

```
A:\>PERMIT TOOL=A:\TOOLS /C * 
```

*Example 3*

To copy all files with the file extension SUM from a local node to the node LONDON and name them the same file names, type:

```
NFT>COPY *.SUM LONDON:*.SUM
```

*Example 4*

To copy the local file PAGE1.TXT to the remote node LONDON, name it the same file name, then print the file on the remote printer and delete it from the remote node, type:

```
NFT>COPY/PRINT/DELETE PAGE1.TXT LONDON: 
```

*Example 5*

To copy the local file PAGE1.TXT to the remote node LONDON, name it TRIP.TXT, then print it on the remote printer and delete it from the remote node, type:

```
NFT>COPY/PRINT/DELETE PAGE1.TXT LONDON:TRIP.TXT;1 
```

*Example 6*

To copy a local MS-DOS file called EMPLOY.LST to a remote VMS node named BATH and store the file on the remote node as NAMES.EMP;1, type:

```
NFT>COPY A:EMPLOY.LST <LF>  
BATH"IRON BOATS":SCRB:[IRON]NAMES.EMP;1 
```



## DELETE

### *Purpose*

To delete one or more local or remote files, use the DELETE command.

### *Format*

DELETE[/NOLOG] file

Where:

file                   Is any valid local or remote file specification.

/NOLOG                Disables printing a notification line when the DELETE command is executed.

### *Comments*

You can only delete multiple files using wildcards. You cannot delete a list of files.

When you delete multiple files using only wildcards to specify the file names, NFT displays the prompt, "Are you sure (Y/N)?" Type Y to delete the files.

### *Example 1*

To delete the file TAX.LST;3 from the directory MONEY on the remote VMS node LONDON, type:

```
NFT>DELETE LONDON::[MONEY]TAX.LST;3 
```

### *Example 2*

To delete all versions of all files, located in the directory TRAVEL on the node ROME, that have the file extension DOC, type:

```
NFT>DELETE ROME::[TRAVEL]*.DOC;* 
```

### *Example 3*

To delete all the files in the directory TRAVEL on the node ROME, type:

```
NFT>DELETE ROME::[TRAVEL]*.*;*   
Are you sure (Y/N)? Y 
```

# *Chapter 35*

## *Connecting to a Remote Host With SETHOST*

This chapter describes:

- Using the SETHOST utility with network virtual terminal services
- Using the SETHOST command
- Using the SETHOST menu
- Using Your Workstation as a VT102 Terminal
- Editing text during a remote session
- Exiting from SETHOST

### **NOTE**

You have to execute NET START LAT or NET START RDR before you can use SETHOST.

### **Using SETHOST**

The SETHOST utility connects your system to a host node, enabling the system to emulate a terminal connected to the host node.

When your workstation emulates a host terminal, you can perform standard terminal functions, access resources, and access the DEC Multinational Character Set as if the workstation is a terminal directly connected to the host node.

Each time you log onto a host node, SETHOST creates a connection called a session. With SETHOST, you can create and maintain multiple sessions. The maximum number of sessions depends on:

- The maximum number of network links you have established with the DEFINE EXECUTOR MAXIMUM LINKS command.



For more information about this command, see the *VAXmate System Administrator's Guide*.

- The number of links that are currently active for the virtual disk or the virtual printer.

You can create a session by either of the following protocols:

- LAT

LAT is a local area transport protocol that communicates over the Ethernet only. LAT supports TDMS (Terminal Data Management System) applications. It can only be used for single sessions.

- CTERM

CTERM is a wide area virtual terminal protocol that communicates over both the Ethernet and asynchronous DDCMP (Digital Data Communications Message Protocol); it lets you access the entire DECnet network. CTERM does not support TDMS applications. It can be used for multiple sessions.

When you create a session, SETHOST determines whether LAT is available. If it is available, SETHOST attempts to connect your node to a LAT line. This is the default.

If LAT is not available, SETHOST attempts to connect your node using CTERM. To select CTERM without trying LAT, use the SETHOST /CTERM command.

The first time you run SETHOST from an IBM workstation, it prompts you for the type of keyboard you are using. The SETHOST utility saves this information in a file in the \DECNET directory.

To use SETHOST, the host node must support terminal emulation from remote nodes and run Phase IV of the DECnet software on one of the following operating systems:

- VAX/VMS, Version 4.0 or later
- RSX-11M-PLUS, Version 3.0 or later
- RSX-11M, Version 4.2 or later
- Micro-RSX, Version 3.0 or later
- TOPS-10, Version 7.03 or later
- TOPS-20, Version 6.1 or later
- ULTRIX-32, Version 1.1 or later



## Using the SETHOST Command

To create, record, and modify your remote sessions, use the SETHOST command. You can specify parameters and qualifiers in the command line or at the SETHOST prompt. When you specify parameters and qualifiers in the command line, you must separate each with a space.

### *Format*

SETHOST {nodelatname} [/qualifier]

Where:

**node** Specifies the DECnet node name or DECnet node number for establishing a remote CTERM session.

Node can also include access control information, such as the user's password or account. The format for access control information is [/USER/PASSWORD/ACCOUNT]. Access control information is only used by ULTRIX hosts.

**latname** Specifies the LAT service name for establishing a remote LAT session.

LAT service names are defined by accumulation over time by the LAT driver or by the following NCP command:

NCP SET NODE address NAME name LAT

For more information about NCP, see the *VAXmate System Administrator's Guide*.

If the LAT service name you specify with SETHOST is not known by the driver, or if you have not set it with the NCP SET command, the LAT connection can fail.



<b>/qualifier</b>	<b>Is a valid SETHOST qualifier.</b>	
	<b>/ABORT=n</b>	<b>/SAVEDEFAULT</b>
	<b>/CTERM</b>	<b>/SERVICE</b>
	<b>/EDIT=mode</b>	<b>/SESSION=n</b>
	<b>/EXIT</b>	<b>/SETUP</b>
	<b>/HELP=topic</b>	<b>/SHOW</b>
	<b>/KEYBOARD</b>	<b>/SWITCH</b>
	<b>/LOG=filename</b>	<b>/TAKE=filename</b>

The **/EDIT**, **/SAVEDEFAULT**, **/SESSION** and **/SHOW** qualifiers are used with **CTERM** only.

These qualifiers are described individually in the following sections.

The following sections describe the SETHOST qualifiers in more detail.



## **/ABORT**

To abort a session, use the **/ABORT** qualifier. You can abort a single session or all sessions. To view the current sessions, use the SETHOST **/SHOW** command.

### *Format*

**/ABORT={n|ALL}**

Where:

**n** Is the specific session number you want to abort.

**ALL** Aborts all the current sessions.

### *Comments*

You can abort the current session or a session that was saved previously. If you abort the current session, it is deleted, your link disconnects, and SETHOST exits.

### *Example*

To abort session number 3, leaving all other sessions intact, type:

```
SETHOST /ABORT=3 
```



## **/CTERM**

To use CTERM protocol for the current connection, use the /CTERM qualifier. It overrides the default, which attempts to use LAT protocol first. If the LAT is unavailable or if the LAT attempt fails, CTERM completes the connection. Only CTERM supports multiple sessions.

### *Format*

/CTERM

### *Example*

To connect to the remote session THRUSH using the CTERM protocol, type:

SETHOST THRUSH /CTERM

## **/EDIT**

To control the type of command line editing you can perform during your remote session, use the /EDIT qualifier. This qualifier only applies to CTERM hosts or sessions that support command line editing.

### *Format*

/EDIT=mode

Where:

- mode Is one of the three modes you can use for editing a command line.
- |            |  |
|------------|--|
| OVERSTRIKE | Inserts the new character to replace the character at the current cursor position.     |
| INSERT     | Inserts the new character to the left of the character at the current cursor position. |
| NONE       | Turns off command line editing.  |



### *Comments*

You can toggle between INSERT and OVERSTRIKE (within a single command line) by pressing Ctrl/A.

The default mode is OVERSTRIKE unless you change it with the /EDIT qualifier, or if it is a saved default (see the /SAVEDEFAULT qualifier for more information). The default editing mode is reset at the beginning of each line.

### *Example*

To change the editing mode to INSERT, type:

```
SETHOST /EDIT=INSERT 
```

### **/EXIT**

To exit from SETHOST, use the /EXIT qualifier. You enter this qualifier after you type the SETHOST command.

### *Format*

**/EXIT**

### *Example*

To start SETHOST, request help for NODESPEC, then exit from SETHOST, type:

```
SETHOST 
```

```
SETHOST> /HELP=NODESPEC 
```

```
·  
·  
·
```

```
SETHOST> /EXIT 
```





## **/KEYBOARD**

To change the default keyboard, use the /KEYBOARD qualifier.

### *Format*

/KEYBOARD

### *Comments*

The first time you run SETHOST from an IBM workstation, it prompts you for the type of keyboard you are using. To change your keyboard type at a later date, use the /KEYBOARD qualifier to display the SETHOST keyboard menu. You can select your keyboard type from the menu.

The \DECNET directory contains keyboard files that show the position of the DIGITAL keys on each keyboard. These files have the files extension .HLP.

### *Example*

To start a SETHOST session and request a change of keyboard type, type:

```
SETHOST /KEYBOARD 
```

## **/LOG**

To record the terminal session in a log file, use the /LOG qualifier.

### *Format*

/LOG[=filename]

Where:

**filename** Is the name of the file for recording your session. You can specify a maximum of 8 characters for the name and 3 characters for the file extension. The default file name is SESSION.LOG.

### *Example*

To specify SESSION4.LOG as the file for recording the session, type:

```
SETHOST /LOG=SESSION4.LOG 
```



## **/SAVEDEFAULT**

To save the /EDIT or /CTERM qualifier settings as the default for all future sessions, use the /SAVEDEFAULT qualifier. If you specify this qualifier and do not specify any editing qualifiers to be saved, the command has no effect.

When you specify /SAVEDEFAULT, SETHOST places your specified qualifier settings in a file called SETHOST.DEF in the DECnet directory. SETHOST reads this file whenever you start SETHOST.

### *Format*

`/SAVEDEFAULT [/EDIT] [/CTERM]`

### *Example*

To save the edit mode INSERT as the default in the SETHOST.DEF file, type:

```
SETHOST /EDIT=INSERT /SAVEDEFAULT 
```

## **/SERVICE**

To display the workstation's LAT driver service-name table, use the /SERVICE qualifier.

### *Format*

`/SERVICE`

### *Comments*

The LAT driver service name table lists the services that are available to the LAT. To connect to any of the services, use the LAT protocol and the SETHOST command with the latname parameter.

### *Example*

To display the LAT driver service name table, type:

```
SETHOST/SERVICE 
```



## **/SESSION**

To specify the session number so you can reconnect to a host computer, use the /SESSION qualifier.

### *Format*

/SESSION=n

Where:

n Is the session number you use to reconnect to the host computer.

### *Comments*

Use the /SESSION qualifier only when you used the /CTERM qualifier to connect to the host computer.

You can use the /SHOW qualifier to find which multiple sessions are available. You can use the /SESSIONS qualifier to reconnect to a particular session.

### *Example*

To reconnect to session number 2, type.

SETHOST/SESSION=2



## *Connecting to a Remote Host With SETHOST*

### **/SETUP**

To start the Set-Up utility, use the /SETUP qualifier.

#### *Format*

/SETUP

#### *Comments*

Use the arrow keys to move among options in the Set-Up utility menu. Press the Return key or the Enter key to select the option you want.

To select character sets, use the General menu.

To save the new default values, select the Save Parameters command from the Action menu.

#### *Example*

To start the Set-Up utility for a SETHOST session, type:

SETHOST/SETUP



## **/SHOW**

To list the current sessions and the hosts that connect them to your node, use the /SHOW qualifier. This qualifier only works if you are connected to the host with CTERM.

### *Format*

/SHOW

### *Example*

To display the current sessions on the hosts CLOUD and SUN, type:

```
SETHOST /SHOW 
```

Session	Host
1	CLOUD
2	SUN

## **/SWITCH**

To set the character you use to access the SETHOST menu, use the /SWITCH qualifier. The default is Ctrl/4. Use the /SWITCH qualifier if you want to change the default.

### *Format*

/SWITCH=*n*

Where:

*n* Is the ASCII decimal character (1-26) to which you want to change the first character. ASCII character 1 is equivalent to A; character 2 is equivalent to B, and so on.

### *Example*

The following command changes the default for accessing the SETHOST menu, Ctrl/4, to Ctrl B:

```
SETHOST/SWITCH=2 
```



### **/TAKE**

To send text from a local file to the remote node as if you typed it at the remote node's keyboard, use the /TAKE qualifier.

You must leave a space after the name of the remote node.

#### **NOTE**

Some remote systems or services may not be able to process more than one line of text correctly.

#### *Format*

**/TAKE[=filename]**

Where:

**filename** Is the name of the file containing the text you want to send to the remote node. The default file name is SESSION.BAT.

#### *Example*

To take text from the file SESSCOM.BAT and send it to node WINTER, type:

SETHOST WINTER /TAKE=SESSCOM.BAT



## Using the SETHOST Menu

The SETHOST menu is displayed when you interrupt a session by pressing Ctrl/4. The SETHOST menu lists various options for recording or changing your remote session.

The following example illustrates a sample SETHOST menu.

```
$ Ctrl/4 <Return>
<Return> to exit SETHOST
<H>elp
<L>og session          off
<R>econnect to session 1
<E>diting mode is overstrike
<S>ession
<A>bort session
<N>ew session
Command:
```

The angle brackets indicate the key or letter you need to press to request one of the menu functions. Type only the first letter of the command you want to specify. You do not need to press the Return key after you enter the letter.

The Editing mode option applies only to CTERM hosts or sessions that support command line editing.

The following sections describe each of the menu options in more detail.

### Return Option

When using CTERM, to save the current session and exit from SETHOST, use the Return key. To return to the current session or re-establish a previous session, type SETHOST and the appropriate session number. For example, to reestablish session number 2, type:

```
C:>SETHOST /SESSION=2
```

When you are using LAT, the Return key disconnects you from the host and does not save the session.



Logging off the remote host does not save the current session.

To see the saved sessions, type SETHOST and press the Return key. The system displays a listing of available session numbers, as well as the host system to which they are connected.

### **(H)elp Option**

To display the help text for the SETHOST menu, use the Help option.

### **(L)og Option**

The Log option records your entire session in a file. Pressing the L key toggles the Log option between ON and OFF. If the menu displays “Log session off” and you press the L key, SETHOST changes logging to ON and prompts you for the file name for recording the session. The default file name is SESSION.LOG.

When you redisplay the SETHOST menu, the Log option displays “Log session on” with the specified file name.

If the menu displays “Log session on filename” and you press the L key, SETHOST changes logging to OFF and closes the log file. When you redisplay the SETHOST menu, the Log option displays “Log session off”.

### **(R)econnect Option**

The Reconnect option exits from the SETHOST menu and returns you to the current session, indicated in the menu. In the preceding menu example, the session number is 1.

### **(E)dit Option**

The Edit option changes the default mode for command line editing. This option only applies to CTERM hosts or sessions that support command line editing.



When you select the Edit option, SETHOST displays a submenu with options. Table 35-1 describes the Edit submenu options.

**Table 35-1 Options for the Edit Submenu**

Submenu Option	Description
OVERSTRIKE	Inserts the new character to replace the character at the current cursor position
INSERT	Inserts the new character to the left of the character at the current cursor position
NONE	Turns off command line editing

### **(S)ession Option**

The Session option connects you to another session that you have previously saved. This option only applies to CTERM hosts or systems that support multiple sessions.

When you select this option, SETHOST displays a list of the available sessions. You are prompted for the session number to which you want to connect.

### **(A)abort Session Option**

The Abort Session option aborts a single session. You can abort the current session or a session that you previously saved.

When you select this option, SETHOST prompts you for the number of the session to be aborted. If you abort the current session, indicated by “<R>econnect to session n”, it is deleted, your link is disconnected, and SETHOST exits.

### **(N)ew Session Option**

The New Session option begins a new session. When you select this option, you are prompted for a node name or a LAT service name for starting the next session.



## **Using Your Workstation as a VT102 Terminal**

The SETHOST Set-Up utility enables your workstation to emulate a VT102 terminal. Some of the features that you can set are:

- Cursor style (block or underline)
- Screen background (dark or light)
- Automatic repeating of keyboard keys

We recommend that you do not change the settings for terminal features unless you are familiar with DECnet concepts. If you are not familiar with these concepts, contact your system administrator.

### **Entering Set-Up Mode**

Before you can enter Set-Up mode, your workstation must be connected to a host computer.

To enter Set-Up mode, press the F3 key. Your workstation displays the first Set-Up screen, which is the Set-Up Directory. This directory has five major headings, each representing a function.

Each major heading includes Set-Up menus for changing parameters that control how your terminal is set. The major headings and their corresponding Set-Up menus are:

#### *Set-Up Directory*

Action  
Display  
General  
Screen  
Exit

#### *Action Set-Up*

Main Directory  
Clear Display  
Factory Parameters  
Save Parameters  
Recall Parameters



### *Display Set-Up*

Main Directory  
No/Auto Wrap  
Dark Text, Light Screen/Light Text, Dark Screen  
No/Text Cursor  
Block Cursor Style/Underline Cursor

### *General Set-Up*

Main Directory  
VT52 Mode/VT100 Mode  
Return = CR/Return = CR/LF  
Numeric Keypad/Application Keypad  
Normal Cursor Keys/Application Cursor Keys

#### **NOTE**

The numeric keypad causes the auxiliary keypad to transmit ASCII character codes that correspond to the numeric characters on the key.

The application keypad causes the auxiliary keypad to transmit control codes used by an application program.

The normal cursor keys transmit ANSI cursor control sequences (up, down, left, and right).

The application cursor keys transmit application program control functions.

### *Screen Set-Up*

Main Directory  
Color enabled/black/white  
Screen foreground color  
Screen background color  
Pulldown foreground color  
Pulldown background color

When using the Screen Set-Up menu, you can only set the “Color black/white” parameter for your workstation.



## **Selecting a Set-Up Menu**

The Set-Up menus are listed as parameters in the Set-Up directory. To select a Set-Up menu, use the arrow keys to move to the specific menu. When you select a menu, it is displayed in reverse video. To invoke that menu, press the Enter key.

To select a parameter from the selected Set-Up menu, use the arrow keys. When you select a parameter, it is displayed in reverse video. To change the parameter's value or to perform its function, press the Enter key.

For example, to select a block cursor style:

1. Press the F3 key to invoke the Set-Up directory.
2. Select the Display parameter by pressing the right arrow key. The parameter is displayed in reverse video.
3. Press the Enter key to move to the Display Set-Up menu.
4. Press the appropriate arrow keys to move to the block cursor style parameter.
5. Press the Enter key to change this value.

The selected value is displayed in reverse video.

6. Press the F3 key to exit from the Set-Up directory.

## **Saving Set-Up Values**

To save the parameter settings that you selected in Set-Up mode, select the Save Parameters option from the Action Set-Up menu. This option places the current parameters in the DECnet directory in a file called VT102.DAT.

By storing the parameters in this file, SETHOST can restore saved parameters when it runs from any directory.



## **Using Set-Up Values**

If you do not save parameters after you change them, your workstation uses the new values until you:

- Change the Set-Up features again
- Exit from SETHOST or turn your workstation off
- Recall the original features by selecting the Factory Parameters from the Action Set-Up menu
- Run an application that changes the features

## **Recalling Set-Up Values**

If you save parameters, they are automatically read when you run the SETHOST utility. To recall the values you previously stored in the VT102.DAT file in the DECnet directory, select the Recall Parameters Set-Up menu.

## **Exiting From Set-Up Mode**

To exit from Set-Up mode, press the F3 key or select the Exit parameter from the Set-Up menu.



## Editing Text During a Remote Session

You can edit text that is typed on the current line during a remote session with one of the following methods:

- Press either the Word Char key or the backspace key to delete the last character you typed.
- Press Ctrl/W to delete the last word you typed.

You can press Ctrl/W as long as this sequence is not required by the program you are running.

- Press Ctrl/U to delete the line you are typing.

You can press Ctrl/U provided this sequence is not required by the program you are running.

The remote host may provide other special characters for editing text.

## Disconnecting From a Host

To disconnect from the host and break the logical link connection, either:

- Log off using the standard log-off procedure established for that operating system. This procedure also exits from the SETHOST utility.

For example, to log off the VAX host, type:

```
$ LOGOUT 
```

- Press Ctrl/4  . You exit from SETHOST, but you save the session and retain a link to the host.

If you then press the A key, the session is deleted, and the link to the host is disconnected.

If the session is the current session (or if you only have one session established), you also exit from SETHOST.



The result is:

```
A:\>DIR PROG.ASM
```

The command line DIR PROG.ASM is now in the template and ready to be sent to the command processor for execution. To execute the command, press:

**Return**

To cancel the command, press:

**Ctrl/C**

## Control Character Functions

A control character function affects the command line. Table 36-2 contains control character functions.

**Table 36-2 Control Character Functions**

<b>Control Character</b>	<b>Function</b>
<b>Ctrl/C</b>	Stops the current command.
<b>Ctrl/H</b>	Removes the last character from the command line, and erases the character from the screen.
<b>Ctrl/P</b>	Sends output from the workstation to a local printer only. If you press <b>Ctrl/P</b> again, no more output is sent to the printer.
<b>Ctrl/S</b>	Suspends the display of output on the screen. Press any key to continue.
<b>Ctrl/U</b>	Cancel the current command line.
<b>Ctrl/W</b>	Removes the last word from the current line and from the screen.
<b>Ctrl/Z</b>	Inserts an end-of-file character into the new template.



## **The Prt Sc Key**

You can use the Shift and the Prt Sc keys together to print an image of the information displayed on your workstation screen. However, escape sequences and bolding are not recognized. For example, to print a screen image of the information displayed on your workstation screen, press:

**Shift/Prt Sc**

## **Industry Standard Compose Sequences**

You can use industry standard compose sequences on your workstation. Therefore, regardless of the current keyboard map file, you can display the character at a given location.

To display the character at location 124, press and hold the Alt key and press the 1, 2, and 4 keys on the numeric keypad. When you release the Alt key, the character at location 124 is displayed.



- If you remove the diskette containing a batch file that is being executed, the MS-DOS operating system prompts you to insert it again before the next command can be read.
- The last command in a batch file can be the name of another batch file. This enables you to call one batch file from another when the first is finished.
- You can redirect output in a batch file using the < and > symbols.

To execute the NEWDISK.BAT file, type:

```
A:\> NEWDISK 
```

Each command is executed as if you entered it from the keyboard.

### Batch Files With Replacement Parameters

When used in MS-DOS commands, a parameter is an option that you define. With the MS-DOS operating system, you can create a batch file with replaceable parameters. These parameters, named %0 through %9, can be replaced by values supplied when the batch file executes.

To create a batch file that deletes your destination file from a previous append, appends two files together into a third file, and print the destination file:

1. Type:

```
A:\> COPY CON NEWFILE.BAT 
```

This tells the MS-DOS operating system to copy the information from the keyboard into the NEWFILE.BAT file.

2. Type:

```
DEL %3.DOC   
COPY %1.DOC + %2.DOC %3.DOC   
PRINT %3.DOC 
```

3. Press:



The MS-DOS operating system responds with the following message:

```
1 File(s) copied
A:\>
```

The file NEWFILE.BAT, which consists of three commands, now resides on the disk in the default drive.

The parameters %1 and %2 are replaced sequentially by the parameters you supply when you execute the file. The parameter %0 is always replaced by the drive designator, if specified, and the file name of the batch file (for example, NEWFILE).

You can specify a maximum 10 replacement parameters (%0 through %9). Each command line, including those generated by replacement characters, can contain 1 to 128 characters.

**NOTE**

To use a percent sign in a file name within a batch file, you must type the percent sign twice.

**Executing NEWFILE.BAT**

To execute the NEWFILE batch process, type:

```
A:\>NEWFILE A:MEMO1 B:MEMO2 B:BIGFILE 
```

A:MEMO1 is substituted for %1, B:MEMO2 for %2, and B:BIGFILE for %3.

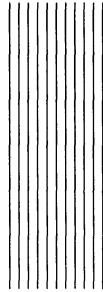
The result is the same as if you typed:

```
A:\>DEL B:BIGFILE 
A:\>COPY A:MEMO1 + B:MEMO2 B:BIGFILE 
A:\>PRINT B:BIGFILE 
```

The replacement parameter %0 is always replaced by whatever you type to invoke the batch file. If you do not refer to the batch file, start your replacement parameters with %1.

# *Chapter 40*

## *Messages*



This chapter lists and discusses:

- Disk and device messages
- MS-DOS operating system messages
- MS-Windows messages
- NFT messages
- SETHOST messages
- Terminal emulator messages

Many of the MS-Windows messages are displayed in dialog boxes with an OK and a Cancel option. To make the dialog box and the message disappear before you proceed, select the OK option. Some dialog boxes include a Retry option. To retry an operation, select the Retry option.

These messages can be displayed while running any MS-Windows application. The messages are listed alphabetically, followed by an explanation and action to correct the problem.

Each message has at least one word or one abbreviation after it, capitalized and enclosed in parentheses, to indicate the utility or program that generated the message. Most of these words and abbreviations are self-explanatory, except for the following abbreviations:

- (BR) Messages generated by either the BACKUP command or the RESTORE command
- (MS) Messages generated by the MS-DOS operating system
- (TE) Messages generated by the terminal emulator
- (WIN) Messages generated by MS-Windows



## Disk and Device Errors

If a disk or device error occurs at any time during a command or program, the MS-DOS operating system displays the following message:

```
(type) (action) drive x  
Abort,Retry,Ignore:_
```

Where:

type	Is one of the following:
	Bad call format error
	Bad command error
	Bad unit error
	Data error
	FCB unavailable
	General failure
	Invalid disk change
	Lock violation
	Non-DOS disk error
	No paper error
	Not ready error
	Read fault error
	Sector not found error
	Seek error
	Sharing violation
	Write fault error
	Write protect error
action	Is either reading or writing.
drive	Is the drive in which the error occurred.

The MS-DOS operating system waits for you to respond in one of the following ways:

- A Aborts the program requesting the disk read or write.
- R Retries the operation. Use this response after you correct the error.
- I Ignores the bad sector as if the error did not occur.



## Messages

### **Allocation error in file, size adjusted (MS)**

**Cause:** The size of the file indicated in the directory is inconsistent with the amount of data actually allocated to the file.

**Action:** To make sure the data in the file is still valid, run the CHKDSK program and specify the /F qualifier. The CHKDSK command will try to correct the error. You may need to restore the back-up copy of this file.

### **Allocation error, size adjusted (MS)**

**Cause:** An invalid cluster number was found in the file allocation table (FAT). The file was truncated at the end of the last valid cluster.

**Action:** To make sure the data in the file is still valid, run the CHKDSK program and specify the /F qualifier. The CHKDSK command will try to correct the error. You may need to restore the back-up copy of this file.

### **Allocation quantity too large. (NFT)**

**Cause:** The disk on the remote system is too full to process your request.

**Action:** Read the documentation for the remote system or contact the system administrator for the remote system. You may have to specify a smaller quantity.

### **APPEND/ASSIGN conflict (APPEND) (ASSIGN)**

**Cause:** The ASSIGN command was used, followed by the APPEND command.

**Action:** Both ASSIGN and APPEND are terminated and stay resident programs. The APPEND command must be used before the ASSIGN command if they are used together. Restart the workstation.



**Application still active (WIN)**

Cause: You tried to end the MS-Windows session while a standard application is still running.

Action: Close any standard applications that are running. For most applications, this means using the application's QUIT or EXIT command.

**Bad call format reading/writing drive 'drivename' (MS)**

Cause: The MS-DOS operating system found a request header of incorrect length for the specified device.

Action: To stop the command, press the A key. Review the source code of the program that produced the message.

**Bad disk**

**Press any key (MS)**

Cause: When you started your workstation, a hardware problem occurred which prevented the disk from being read.

Action: Turn off the workstation and restart it again. If this message is displayed again get another system diskette.

**Bad file (FC)**

Cause: One of the specified files is defective.

Action: Restore the back-up copy of the file.

**Bad or missing 'filename' (MS)**

Cause: The CONFIG.SYS file contains a reference to an invalid device.

Action: Make sure the DEVICE command is correct in the CONFIG.SYS file.



**Bad command error reading/writing drive 'drivename' (MS)**

Cause: The MS-DOS operating system found an invalid command in the command code field of the request header for the specified device.

Action: To stop the command, press the A key. Review the source code of the program that produced the message.

**Bad command or file name (MS)**

Cause: The MS-DOS operating system cannot find the specified command or file name.

Action: Make sure you typed the command correctly. Then, make sure you typed the file name correctly. Finally, make sure the file exists on the disk using the DIR command.

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**Cannot change directory to 'directoryname' (WIN)**

Cause: You specified a file name instead of a directory name using the Change Directory command.

Action: Select or type a directory name, then retry the Change Directory command.

**Cannot Chdir to 'filename'  
Tree past this point not processed (MS)**

Cause: The CHKDSK command is unable to check the specified directory. All subdirectories and files under this directory cannot be verified. Your directory structure could be corrupt. You could also have more subdirectories than are allowed by the MS-DOS operating system.

Action: To save the files that you can, run the CHKDSK program and specify the /F qualifier. The CHKDSK command will try to correct the error. You may need to restore lost files from your back-up diskette.

**Cannot CHKDSK a Network drive (MS)**

Cause: You tried to check drives that are redirected over the network.

Action: Make sure the drive is not redirected before you issue the CHKDSK command.

**Cannot Chdir to root -  
Processing cannot continue (MS)**

Cause: The CHKDSK command cannot return to the root directory. The CHKDSK command cannot continue checking the remaining subdirectories to the root. Your disk structure could be corrupt.

Action: Remember the path that would not allow you to reach the root. Try restarting the MS-DOS operating system. If this error persists, you cannot use the disk.

**Cannot close file 'filename' (GRAFTABL)**

Cause: The file 'filename' cannot be closed. Either the file handle could not be closed or the file handle is invalid.

Action: Retry the GRAFTABL command.



### **Cannot connect to self (NET)**

Cause: You tried to connect to a remote resource but incorrectly specified your network name as the computer name of the server.

Action: Specify a valid computer name for a server.

### **Cannot copy file to itself (WIN)**

Cause: You tried to copy a file to the same file name either on the same disk or in the same directory. This is not allowed because it overwrites the file.

Action: Copy the file again, specifying a different destination file name.

### **Cannot copy more than one file to a single file (WIN)**

Cause: You selected more than one file name and specified a single file as the destination.

Action: Select the file you want to copy and start again. To copy multiple files, specify a directory to copy them into.

### **Cannot create 'filename' (WIN)**

Cause: Either of two things occurred:

- You tried to save your work to a read-only file.
- You tried to create a file on a network drive that is read-only.

Action: Specify another file name or drive name when you save your work.

### **Cannot create a temporary file on destination diskette (SELECT)**

Cause: The destination diskette's directory is full.

Action: Delete some files from the diskette, or use another diskette.



### **Cannot do binary reads from a device (MS)**

**Cause:** You tried to execute the COPY command with the /B qualifier when copying from a device.

**Action:** Try one of the following:

- Remove the /B qualifier and retry the COPY command.
- Specify an ASCII copy using the /A qualifier. Retry the COPY command.

### **Cannot edit .BAK file – rename file (MS)**

**Cause:** You tried to edit a back-up copy made by EDLIN.

**Action:** Try one of the following:

- Rename the .BAK file and give it another file extension.
- Copy the .BAK file and give it a different file extension.

### **Cannot Find 'filename' (TE)**

**Cause:** You selected an action requiring a file, and the MS-DOS Executive cannot find the file in the directory or on the disk.

**Action:** Make sure you typed the file name correctly. You may need to change directories to locate the file, or you may need to type a path name before the file name. If the file is not on the diskette, insert the diskette containing the file into the drive. Select the command and try again.

### **Cannot find 'filename' (WIN)**

**Cause:** The MS-DOS Executive cannot find the file in the directory or on the disk.

**Action:** Make sure you typed the file name correctly. You may need to change directories to locate the file, or you may need to type a path name before the file name. If the file is not on the diskette, insert the diskette containing the file in the drive. Select the command and try again.

If the file contains special characters, try the operation through the MS-DOS operating system.



### **Cannot find system file on current drive (WIN)**

Cause: You ran Make System Disk from a drive that does not contain the system files.

Action: Change your current drive to a drive containing your system files.

### **Cannot FORMAT a Network drive (MS)**

Cause: You tried to format a drive that is redirected over the network.

Action: Do not try to format a drive that has been redirected over the network.

### **Cannot format an Assigned drive (MS)**

Cause: You tried to format a drive whose input/output (I/O) is sent to another drive.

Action: To clear all drive assignments, type:

A>ASSIGN

### **Cannot format diskette (WIN)**

Cause: The diskette is defective or a read-only diskette.

Action: Try one of the following:

- Replace the diskette if it is defective and retry the command.
- Remove the write-protect tab and retry the command.

### **Cannot format drive. (FDISK)**

Cause: You set the drive type improperly.

Action: Make sure you specify the correct drive type for your workstation hard disk.



**Cannot JOIN a network drive. (MS)**

Cause: You tried to join a network drive.

Action: Specify a drive other than a network drive.

**Cannot LABEL a SUBSTed or ASSIGNed drive (LABEL)**

Cause: You tried to label a drive that was assigned using the ASSIGN command or substituted using the SUBST command.

Action: Use the LABEL command only with valid drives.

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**Cannot read from device 'devicename' (WIN)**

Cause: Either of two things occurred:

- MS-Windows could not read from the specified device.
- The specified device was not available for input.

Action: Make sure the device is properly set up (and, if appropriate, turned on). Select Retry to try the operation again, or Cancel to end the operation.

**Cannot read from drive 'drivename' (WIN)**

Cause: Any of the following things occurred:

- There was no disk in the specified drive.
- The disk drive door was open or the disk was not inserted properly.
- MS-Windows could not read the disk in the drive you specified.
- The disk was defective, damaged, or not formatted.
- There was a network error or disconnect from the device.

Action: Select Retry to try the operation again. If a floppy drive is specified, make sure the diskette is properly inserted. If you continue to receive this message, select the Cancel option.

**Cannot read graphic font file 'filename' (GRAFTABL)**

Cause: GRAFTABL cannot read from the file you specified on the command line. The file could be closed to reading.

Action: Retry the GRAFTABL command. If the message is displayed again, restore the font file from your back-up diskette.

**Cannot recover . entry, processing continued (MS)**

Cause: The . entry (current directory) is corrupt.

Action: Restore the files and directory structure from your back-up diskette.



### **Cannot recover .. entry (MS)**

Cause: The directory above your current directory is defective. The disk area is probably corrupt.

Action: Use your back-up diskette to restore the files and the directory structure.

### **Cannot recover a Network drive (MS)**

Cause: You tried to recover files on a drive that is redirected over the network.

Action: Do not try to recover file in redirected drives.

### **Cannot redirect a network printer (MODE)**

Cause: You tried to redirect a printer that is a network device.

Action: To delete the connection, type:

```
A>NET USE dev /D 
```

Now, retry the redirection.

### **Cannot rename 'filename' (WIN)**

Cause: One of the following occurred:

- The existing file is not in the current directory or on the disk.
- You did not specify a valid destination file name.

Action: Try one of the following:

- Make sure the file you want to copy exists and that you have named it correctly, then retry the command. You cannot rename a directory.
- Retry the command, specifying a valid MS-DOS destination file name.

**Cannot run 'filename' (WIN)**

Cause: An error occurred while you were running a program.

Action: Retry the Run command. If the command still does not work, make sure you are trying to run the correct file. Make sure the file is a program or invokes a program through the extension settings in the WIN.INI file.

**Cannot run with other applications (WIN)**

Cause: The program you selected is a special application that loads and stays resident and has the Modifies Memory option set in its .PIF file.

Action: Close all applications except the MS-DOS Executive before you can start this program.

**Cannot set volume name (WIN)**

Cause: Any of the following things occurred:

- The diskette is write protected.
- The diskette is full.
- The drive is a network device.

Action: Try one of the following:

- If you are trying to set the volume name for a diskette, remove the write-protect tab. Retry the command.
- Check the directory to see if any files can be removed, then try again.

**Cannot share a SUBSTed drive (SUBST)**

Cause: You specified a drive letter that is directed to another drive with the SUBST command.

Action: Specify the actual path.



**Cannot share a SUBSTed drive (PERMIT)**

Cause: You specified a drive letter that is directed to another drive with the SUBST command.

Action: Specify the actual path.

**Cannot startup from drive n (FDISK)**

Cause: You entered the Mark Start-up Partition Menu when a drive other than drive 1 was selected.

Action: Make drive 1 the start-up partition.

**Cannot SUBST a network drive. (MS)**

Cause: You tried to substitute a path name for a network drive.

Action: Specify a drive other than a network drive.

**Cannot use PRINT – Use COPY (PRINT)**

Cause: You tried to load a second print spooler after one was already loaded.

Action: Use the COPY command to print the file.

**Cannot Write 'filename' (TE)**

Cause: An error occurred while writing the specified file or the device is full.

Action: Try again. Make sure there is enough room on the device.



**Cannot write to device 'devicename' (WIN)**

Cause: Any of the following things occurred:

- MS-Windows cannot write to the specified device.
- The specified device is not available for output. Be sure the device is properly set up (and, if appropriate, turned on).
- There was a network error or disconnect from the device.

Action: Select Retry to try the operation again, or Cancel to end the operation.

**Cannot write to drive 'drivename' (WIN)**

Cause: Any of the following things occurred:

- There is no disk in the specified drive.
- The floppy drive door is open, or the diskette is improperly inserted.
- MS-Windows cannot write to the diskette in the drive you specified.
- The diskette is defective, damaged, or not formatted.
- There was a network error or disconnect from the device.

Action: Select Retry to try the operation again. If a floppy drive is specified, be sure the diskette is properly inserted. If you continue to receive the message, select Cancel.

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**Country code must be three characters long (SELECT)**

Cause: You entered a country code that is either too long or too short.

Action: Make sure you enter a three-character country code, and retry the SELECT command.

**Country code must be three digits (SELECT)**

Cause: You entered a country code that contains a character other than a digit.

Action: Make sure you enter the country code correctly, and retry the SELECT command.

**Currently no TIME SERVER available (NET TIME)**

Cause: You used the NET TIME command and specified no node name. There is no server available from which to get the time.

Action: Retry the command and specify a known node name.

**Data error reading/writing drive 'drivename' (MS)**

Cause: The MS-DOS operating system could not read from, or write to, the disk. You cannot use this disk anymore.

Action: To retry the command, press the R key.

If the problem persists and you are performing a back-up, restore, or verify operation, press the I key to ignore the problem and continue the operation. There may be a corrupt file.

If you are not performing a back-up, restore, or verify operation and the problem persists, press the A key to stop the command. Copy all your files to a new diskette, or back up and reformat your hard disk.

**Datalink initialization failure - Hardware failed to initialize.**

Cause: A hardware malfunction prevented the network from starting or initializing.

Action: Your system administrator should contact an authorized service representative.



**Datalink initialization failure – of Unknown Datalink Layer error.**

Cause: A malfunction in the datalink layer prevented the network from starting.

Action: Your system administrator should contact an authorized service representative.

**Datalink initialization failure – No memory available.**

Cause: There is insufficient memory available for starting the network.

Action: Restart the system. If the error recurs, ask your system administrator to contact an authorized service representative.

**Device is not redirected (NET)**

Cause: You specified a printer to which you are not connected.

Action: Connect to the printer using the NET USE command.

**df Error (DEBUG)**

Cause: You typed two values for one flag.

Action: Retry the RF command and specify only one value per flag.

**Directory is joined (MS)**

Cause: You tried to execute the CHKDSK command on directories that are joined.

Action: Run the JOIN command with the /D qualifier to deassign joined directories.

**Directory is not empty (WIN)**

Cause: The directory still contains files.

Action: Delete the files from the directory, or move them to a different location and start again.

**Directory is totally empty, no . or .. (MS)**

Cause: The specified directory did not contain references either to your current directory or to the directory above your current directory.

Action: Delete the specified directory and recreate it.

**Directory not empty (MS)**

Cause: You tried to join a directory that was not empty.

Action: Back up or delete all files in the directory and retry the JOIN command.

**'Directoryname' has no files in it (WIN)**

Cause: You tried to copy files from an empty directory.

Action: Make sure you are using the correct directory name.

**Disk error reading/writing drive 'drivename' (MS)**

Cause: Any of the following occurred:

- The data area of a file is defective.
- Your diskette is bad.

Action: Get a new diskette.

**Disk error reading/writing FAT 'fatnumber' (MS)**

Cause: One of your file allocation tables has a defective sector. The MS-DOS operating system automatically uses the other file allocation table.

Action: Copy all your files to another disk.

Run the CHKDSK program and use the /F qualifier. The CHKDSK command will try to correct the error.

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**Disk full—write not completed (MS)**

Cause: The EDLIN program stopped the E command and returned to the MS-DOS operating system. Part of the file may have been written to disk and saved.

Action: Delete the saved portion and restart the editing session. The file is not available after this error.

**Disk full. Edits lost (MS)**

Cause: The EDLIN command cannot save your file due to lack of disk space.

Action: Delete some files to increase the available disk space.

**Disk is full (WIN)**

Cause: You tried to save a file, or carry out an action that requires creating a new file, and the disk is full.

This message is also displayed at system start-up time if the MS-DOS operating system cannot open a file.

Action: Insert another disk, or delete any unwanted files and directories from the disk, and try again.



### **Disk is missing necessary files (SETUP)**

Cause: The \WIN\DRV directory has been corrupted.

Action: Reinstall the system following the instructions in the *VAXmate System Administrator's Guide* or restore the contents of the directory from a previous backup.

### **Disk is not properly initialized (FORMAT)**

Cause: You tried to format the hard disk without first initializing it.

Action: Run the FDISK program and initialize the disk.

### **Disk type unknown (FDISK)**

Cause: Any of the following occurred:

- The drive type is unknown.
- The disk was not initialized on a workstation.
- The boot block has been destroyed.

Action: Set the drive type. Then initialize the disk if you have not done so.

### **Disk unsuitable for system drive (MS)**

Cause: The FORMAT program detected a bad track on the disk where system files should reside.

Action: Use another disk for the system disk. You can use your original disk to store files, but do not use it as a system disk.

### **Diskette controller error (FORMAT)**

Cause: A problem occurred with the diskette controller.

Action: Make sure all cables are connected properly and reinitialize the diskette. If this message is displayed again, call Field Service.



**FC: cannot open 'filename' – No such file or directory**

Cause: One of the files you specified does not exist.

Action: Check your directory for the correct file name.

**FC: incompatible switches**

Cause: You specified switches that are not compatible. For example, specifying /B and /L together.

Action: Retry the FC command and specify only compatible switches.

**FC: out of memory**

Cause: You did not have enough memory to perform the file compare.

Action: You can use a memory drive for temporary files. You can also add more memory to your workstation.

**FCB unavailable reading/writing drive 'drivename' (MS)**

Cause: The MS-DOS operating system detected an error while trying to access a file control block. This is often due to a defective disk.

Action: Press the R key. To stop the program, press the A key.

**File allocation table bad (MS)**

Cause: The disk is defective.

Action: Use the CHKDSK command to check the disk. Get a new disk and copy what you can from the disk with the bad file allocation table.

**File allocation table bad drive 'drivename' (MS)**

Cause: The disk is defective.

Action: Run the CHKDSK command to check it.

**File cannot be converted (EXE2BIN)**

Cause: The input file was not in the correct format.

Action: See information about the EXE2BIN command in Chapter 32.

**File cannot be copied onto itself (MS)**

Cause: The source file name you specified is the same as the destination file name.

Action: Specify a different destination file name.

**File creation error (BR)**

Cause: One of the following occurred:

- You are out of space.
- You reached the maximum number of directories.
- The file is a read-only file and cannot be replaced.

Action: Try one of the following:

- Run the CHKDSK command to see how much space is left.
- Delete some files.
- Delete some directories.
- Use the ATTRIB command to determine whether the file is read-only, and if so, use the ATTRIB command to change it.

**File is not a back-up file (BR)**

Cause: The RESTORE command tried to restore a file that did not have the BACKUP header on it. The file was not saved using the BACKUP command.

Action: Use the COPY command to copy the file to your directory.

**File is not a graphic font file 'filename' (GRAFTABL)**

Cause: You specified a file that was not a graphic font file.

Action: Make sure you typed the correct file name on the command line. Then make sure the file exists. Retry the GRAFTABL command.

**Host is down. (NFT)**

Cause: You tried to access a remote host that is not operating.

Action: Try to access the remote host later.

**Incorrect DOS version**

**This program requires MS-DOS V3.10 (ATTRIB) (BR)  
(DISKCOPY) (FC) (FONT)  
(FORMAT) (KEYB) (MS) (SORT)**

Cause: You tried to use an incorrect version of the MS-DOS operating system on your workstation.

Action: Use DIGITAL's MS-DOS Version 3.10 operating system. Contact your system administrator to obtain the correct version of the MS-DOS operating system.

**Incorrect MS-DOS version (NET)**

Cause: You tried to install a network with an inappropriate version of the MS-DOS operating system.

Action: Use DIGITAL's MS-DOS Version 3.10 operating system. Contact your system administrator to obtain the correct version of the MS-DOS operating system.

**Incorrect number of operands (NET)**

Cause: There is no keyword specified in the NET command.

Action: Use the NET HELP command to check the command format.

**Incorrect number of parameters (MS) (SELECT)**

Cause: You specified either too many or too few parameters on the command line.

Action: Check the command format and retry the command. Make sure you specify the correct number of parameters.



**Incorrect parameter (MS)**

Cause: One of the parameters you specified is invalid.

Action: Make sure the parameter is valid and typed correctly.

**Initial directory not found (WIN)**

Cause: The initial directory for this program could not be found or was invalid.

Action: Check the PIF file for the program and be sure that the initial directory setting is correct.

**Insert 'programname' or 'diskname' in drive 'drivename' (WIN)**

Cause: MS-Windows needed a program or file that was not on the disk in the active drive.

Action: Insert the specified disk and select OK.

**Insert DOS diskette in drive 'drivename' and strike any key when ready (MS)**

Cause: You specified the following command, but the disk in drive 'drivename' does not contain the MS-DOS operating system files:

A>FORMAT /S

Action: Insert a system diskette in drive 'drivename'.

**Insert system diskette in drive 'drivename' (MS)**

Cause: You did not have a system diskette in the diskette drive.

Action: Insert a system diskette into the diskette drive.

**Insufficient disk space (MS) (SETUP) (SORT)**

Cause: There is not enough disk space to complete the specified operation.

Action: Delete some files, get a new diskette, or create the file on another partition.

If you are running SETUP and this message is displayed, delete some files from your destination disk and run SETUP again. SETUP requires approximately 446700 bytes on the destination disk to run successfully.

**Insufficient memory (MS) (BR) (SORT)**

Cause: There was not enough memory to run the specified command. You may have too many terminate and stay resident programs or your directory structure may be too complex.

Action: Because certain MS-DOS commands and programs are terminate and stay resident, restarting the workstation may free enough memory to run the desired program. If not, you must edit the CONFIG.SYS file, remove some of them, then restart the workstation. Also, if you installed any device drivers, delete them from the CONFIG.SYS file.

**Insufficient room in root directory Erase files in root and repeat the CHKDSK command. (MS)**

Cause: You have reached the maximum number of files allowable in the root directory.

Action: Delete some files in the root directory, or move some files to subdirectories.



### **Intermediate file error during pipe (MS)**

Cause: One of the temporary files used by the PIPE command had an error.

Action: Retry the PIPE command. If this message is displayed again, get another diskette. Copy all files to the diskette, and retry the PIPE command.

### **Internal error (FC)**

Cause: The FC utility had an internal logic error.

Action: Retry the FC command.

### **Invalid alias (PERMIT)**

Cause: You specified an alias which contains an invalid character.

Action: Make sure you type only valid characters in the alias. The alias can have the characters A-Z, 0-9, ^, -, \_, ., %, &, ~, and \$.

### **Invalid alias or password (NET)**

Cause: You specified an alias or password which contains an invalid character.

Action: Make sure you type only valid characters in the alias and password. The alias can have the characters A-Z, 0-9, ^, -, \_, ., %, &, ~, and \$.

### **Invalid characters in volume label (LABEL)**

Cause: You typed invalid characters in the volume label.

Action: Make sure the volume label contains only letters and numbers.

### **Invalid command line parameters. (MODE)**

Cause: You typed invalid parameters on the command line.

Action: Check for misspelling and for missing punctuation. Retry the command.



**Invalid COMMAND.COM**  
**Insert COMMAND.COM disk in default drive**  
**and strike any key when ready (MS)**

Cause: The MS-DOS operating system needs to reload the COMMAND.COM file from disk. However, either the MS-DOS operating system cannot find the COMMAND.COM file on the disk, or the copy found is invalid.

Action: Insert a disk which contains a copy of the COMMAND.COM file into the default drive.

**Invalid COMMAND.COM**  
**Insert COMMAND.COM disk in drive 'drivename'**  
**and strike any key when ready (MS)**

Cause: The MS-DOS operating system needs to reload the COMMAND.COM file from disk. However, the MS-DOS operating system cannot find the COMMAND.COM file on the disk, or the copy found is invalid.

Action: Insert a disk into drive 'drivename' which contains a copy of the COMMAND.COM file.

**Invalid computer name (NET)**

Cause: You tried to connect to a computer that did not have an entry in the DECNODE.DAT file.

Action: Run the NET DEFINE command to add a node name to the DECNODE.DAT file. Run the NET LIST command to display the node names in the DECNODE.DAT file.

**Invalid country code (MS)**

Cause: You specified an invalid number for the country code in the CONFIG.SYS file.

Action: Specify a valid country code.



**Invalid date**

**Enter new date (mm-dd-yy): (MS)**

Cause: You entered invalid numbers or separators for the date.

Action: Enter a valid date.

**Invalid date received from node 'nodename' (NET TIME)**

Cause: An invalid time was received from the node 'nodename'.

Action: Retry the NET TIME command.

**Invalid destination drive specification (BR)**

Cause: You specified a destination drive that does not exist on your system.

Action: Specify a valid destination drive.

**Invalid device (MS) (NET)**

Cause: You specified an invalid device.

Action: Make sure you type the device name correctly.

**Invalid directory (MS)**

Cause: You specified a directory that is either invalid, or nonexistent.

Action: Run the DIR command to display a list of files and directories.

**Invalid disk change reading/writing drive 'drivename' (MS)**

Cause: You changed a disk in a drive when it was not allowed.

Action: To retry the operation, reinsert the disk into the drive and press the R key.

**Invalid drive in search path (MS)**

Cause: The drive does not exist.

Action: Specify only valid drives in the search path.

**Invalid drive or file name (MS)**

Cause: You specified an invalid drive or file name.

Action: Specify a valid drive or file name.

**Invalid drive specification (LABEL) (MS)**

Cause: You specified an invalid drive.

Action: Specify a valid drive.

**Invalid graphic font file name (GRAFTABL)**

Cause: You specified an invalid font file name.

Action: Specify a valid font file name. Use the DIR command to display a list of files in the current directory.

**Invalid input line (GRAPHICS)**

Cause: You specified invalid information on the command line.

Action: Retry the GRAPHICS command and specify valid information.

**Invalid number of parameters (FC) (MS) (BR)**

Cause: You specified either too many or too few parameters on the command line.

Action: Retry the command and specify the correct number of parameters.

**Invalid parameter (ATTRIB) (BR) (FC) (FONT) (JOIN) (KEYB) (MS) (SUBST) (SORT)**

Cause: One of the parameters you used is invalid.

Action: Make sure you:

- Entered the parameter correctly
- Did not join drives created by the SUBST command
- Did not use the SUBST command on joined paths

Then, retry the command.

### **Invalid path (BR)**

Cause: You specified a path that does not exist.

Action: To see the current valid paths, type:

A>PATH

### **Invalid path or file name (MS)**

Cause: You specified an invalid path or file name.

Action: Specify a valid path or file name.

### **Invalid path, not directory, or directory not empty (MS)**

Cause: You tried to remove a directory that is any of the following:

- Invalid
- Not a directory
- Not empty

Action: Try one of the following:

- Specify a valid path.
- Use the RMDIR command and specify a valid directory.
- Empty the directory before you try to remove it.

### **Invalid protocol negotiated from node 'nodename' (NET TIME)**

Cause: The remote node you specified could not communicate with your node.

Action: Retry the NET TIME command and specify another remote node.

### **Invalid Set-Up file (TE)**

Cause: The Set-Up configuration file was not the same version as the terminal emulator. The information stored was invalid.

Action: Delete the Set-Up configuration file and create a new one.

**Invalid source drive specification (BR)**

Cause: You specified a source drive that did not exist.

Action: Make sure the source drive you specify is on your system.

**Invalid source drive specified (DISKCOPY)**

Cause: You specified a source drive that did not contain a floppy diskette. You can only use the DISKCOPY command with floppy diskettes.

Action: Retry the DISKCOPY command and specify drive A as the source drive.

**Invalid sub-directory entry (MS)**

Cause: The subdirectory you specified did not exist or was invalid.

Action: Make sure the subdirectory exists and is valid. Retry the command.

**Invalid target drive specified (DISKCOPY)**

Cause: You specified a target drive that did not contain a floppy diskette. You can only use the DISKCOPY command with floppy diskettes.

Action: Retry the DISKCOPY command and specify drive A as the destination drive.

**Invalid time (MS)**

Cause: You specified an invalid time in response to the time prompt.

Action: Enter a valid time.

**Invalid time received from node 'nodename' (NET TIME)**

Cause: An invalid time was received from the node 'nodename'.

Action: Retry the NET TIME command.



### **Invalid working directory (MS)**

Cause: Your disk is bad.

Action: Replace the disk or make another copy from your back-up diskette.

### **Label not found (MS)**

Cause: The batch file you just executed contained a GOTO to a non-existent label.

Action: Edit the batch file and make sure the GOTO command contains a label that exists in the file.

### **Last back-up diskette not inserted (BR)**

Cause: You specified the /A qualifier, but did not insert the last diskette.

Action: Find the last diskette and insert it into the diskette drive.

### **Last file not backed up (BR)**

Cause: The last file was not backed up for any of the following reasons:

- You pressed Ctrl/C.
- You need to insert a new diskette.
- Your hard disk has no more space.

Action: Try one of the following:

- Back up the displayed file.
- Insert a new diskette.
- Delete some files from the hard disk and retry the BACKUP command.

**LAT – Datalink Initialization has failed.**

Cause: You tried to start the LAT before installing Datalink (DLL).

Action: Type:

Now try to start the LAT again.

**LAT – Error specifying service table size – using default.**

Cause: You tried to set the service table size to an invalid value when you started the LAT.

Action: Try to start the LAT again with a valid value for the service table size.

**LAT – Error specifying group codes – using default.**

Cause: You tried to set the group codes to an invalid value when you started the LAT.

Action: Try to start the LAT again with a valid value for the group codes.

**LAT – Error specifying retransmit limit – using default.**

Cause: You tried to set the retransmit limit to an invalid value when you started the LAT.

Action: Try to start the LAT again with a valid value for the retransmit limit.

**Line too long (MS)**

Cause: In your attempt to replace a line, you expanded the line beyond the 253-character limit.

Action: Divide the your message into two lines and retry the REPLACE command.



**Loading fonts is not supported on this machine (FONT)**

Cause: You tried to load a font file on a machine other than a workstation.

Action: Use the FONT command only on a VAXmate workstation.

**Loading keyboard maps is not supported on this machine (KEYB)**

Cause: You tried to load a keyboard map file on a machine other than a workstation.

Action: Use the KEYB command only on a VAXmate workstation.

**Lock violation reading/writing drive 'drivename' (MS)**

Cause: A program tried to access a file currently being used by another program.

Action: To stop the operation, press the A key.

You can also wait a few seconds, and retry the operation by pressing the R key.

**x lost clusters found in y chains.****Convert lost chains to files (Y/N)? (MS) (CHKDSK)**

Cause: The CHKDSK command found lost files for which the directory entry was lost. This loss usually occurs if you exit a program without closing the files.

Action: If you use the /F qualifier and respond Y to this prompt, the CHKDSK program creates a file (FILE????.CHK) in the root directory for you to resolve the problem.

If you did not use the /F qualifier, the CHKDSK program does nothing.

If you use the /F qualifier and respond N to this prompt, the following is displayed:

```
x bytes disk space free
```

If you do not use the /F qualifier and respond N to this prompt, the following is displayed:

```
x bytes disk space would be free
```

**MDRIVE installation failed (MDRIVE)**

Cause: A memory drive could not be installed on your workstation.

Action: Look at the rest of the message displayed on the screen to determine why the installation failed.

**Memory allocation error****Cannot load MS-DOS, system halted (MS)**

Cause: The MS-DOS operating system could not be loaded at system start-up time.

Action: Restart the MS-DOS operating system. If this message is displayed again, call Field Service.

**MORE: Incorrect DOS version (MS)**

Cause: You tried to use the MORE command on a version of the MS-DOS operating system that does not support it.

Action: Use the MORE command with MS-DOS Version 3.10 or later.

**Multiple destinations not allowed (WIN)**

Cause: You tried to copy a single file to more than one new file, or tried to rename a single file with more than one new name.

Action: Copy or rename the file to a single destination.

**Multiple files not allowed (WIN)**

Cause: You specified too many file names for a command.

Action: Retry the command and specify only one file name.

**Must specify destination line number (MS)**

Cause: You did not specify a destination line number when you copied and inserted a line using EDLIN.

Action: Specify a destination line number when you copy and insert a line using EDLIN.

**Must specify ON or OFF (MS)**

Cause: You did not specify the ON or the OFF parameter.

Action: Retry the command and specify either ON or OFF.



### Network not installed (NET)

Cause: Either of two things occurred:

- The install check for the network fails. You must have the appropriate hardware and software to run the network.
- You try to execute a network command without starting the network.

Action: Make sure you have the appropriate hardware and software to run the network. Then type:

```
A>NET START RDP (Return)
```

Retry the command.

### Network not started (NET TIME) (NET USE)

Cause: You tried to execute the NET TIME or NET USE command but the network was not started.

Action: Start the network by typing:

```
NET START RDP (Return)
```

### Network Terminal Services driver not installed (TE)

Cause: The Network Terminal Services driver was not installed prior to starting MS-Windows or the VT240 terminal emulator.

Action: Close the session, install the driver, and restart the session. To install the driver, type:

```
A>NET START LSP (Return)
```

### New file (MS)

Cause: EDLIN could not find the file you specified.

Action: Make sure you typed the file name correctly.



**No entries in list (NET)**

Cause: You used the NET USE command without first connecting to any network resources.

Action: Type:

A>NET START RDR

Retry the NET USE command.

**No files match 'filename' (MS)**

Cause: You specified a file name for a file that could not be found.

Action: Make sure you typed the file name correctly.

**No files were found to back up (BR)**

Cause: No files were found on the specified back-up source disk to back up.

Action: Make sure you typed the file specification correctly. If you did not type the file specification correctly, retry the BACKUP command with the correct file specification.

**No files were found to restore (BR)**

Cause: No files were found on the source disk to restore.

Action: Make sure you typed the file specification correctly. If you did type the file specification correctly, retry the RESTORE command and specify the correct file(s).

**Not enough memory to run (WIN)**

Cause: MS-Windows tried to run a standard application that required more memory than was currently available.

Action: Close an application, then select the Run command. If this message is displayed again, continue closing applications and selecting the Run command until either the message is no longer displayed or until the MS-DOS Executive is the only remaining application. The program will now run after enough memory has been freed by closing other applications, and if the MS-DOS Executive is the only application running.

**Not enough memory to run 'filename' (WIN)**

Cause: Either of two things occurred:

- MS-Windows tried to run a program that required more memory than was currently available.
- Your version of MS-Windows does not support one or more of the run-time routines.

Action: Try one of the following:

- Close one or more applications. Select the Run command again.
- If this message is displayed and only the MS-DOS Executive window is running, you cannot run the specified file with this version of MS-Windows.

**Not enough room to merge the entire file (MS)**

Cause: There was not enough memory to hold the file during a TRANSFER command.

Action: Use a memory drive for temporary files. Remove some device drivers. Retry the TRANSFER command.



**Not ready error reading/writing drive 'drivename' (MS)**

Cause: The MS-DOS operating system could not access the drive you specified.

Action: Make sure the disk drive door is closed. Make sure the disk is inserted into the drive right side up. To retry the command, press the R key.

**Out of environment space (MS)**

Cause: There was not enough room in the program environment to accept more data.

Action: Do the following:

- Make the PATH command shorter.
- Make the APPEND command shorter.
- Decrease the number of SET commands you define.

**Parameters of hard disk cannot be determined. (FDISK)**

Cause: One of the following occurred:

- There is no hard disk.
- The hard disk is installed incorrectly.

Action: Make sure you have a hard disk. Make sure that it is installed correctly.

**The path entry is too long (FONT) (GRAFTABL) (KEYB) (LCOUNTRY) (SORT)**

Cause: You specified a path entry of more than 64 characters.

Action: Specify a path entry of 64 characters or less.

**The path is not set (FONT) (GRAFTABL) (LCOUNTRY) (SORT)**

Cause: The 'PATH=' string is not set.

Action: Set the path.



**The path is not set and the file was not found in the current directory or root directory: 'filename' (KEYB)**

Cause: The path is not set or the file was not found.

Action: Set the path and check the current and root directories for a valid file name.

**Path not found. (MS)**

Cause: You specified an invalid path name.

Action: Check your typing. If this message is displayed again, make sure the path exists.

**The PATH= string was not found in the environment (FONT) (GRAFT-ABL) (KEYB) (LCOUNTRY) (SORT)**

Cause: Your environment space is corrupt.

Action: Restart the workstation.

**PIF Error**

**Program directly modifies memory.  
Cannot continue processing.**

Cause: You executed a command or ran a program that directly modified memory.

Action: Restart the system.

Action: Make sure there is a hard disk in your workstation. Make sure the hard disk is installed correctly.



**Please run DLL before starting LAT**

Cause: You tried to start the LAT before starting the Datalink (DLL).

Action: Type:

NET START LAT

**Please run SCH and DLL before starting Datalink**

Cause: An error related to the SCH program was detected during network start-up.

Action: Type:

NET START RDR

**Please run SCH and DLL before starting LAT**

Cause: You tried to start the LAT before starting the SCH program and Datalink (DLL).

Action: Type:

NET START LAT

**Source and target disks are the same (BR)**

Cause: You tried to back up files to the same disk from which you copied them.

Action: Make sure the source drive and target drive specifications are different.

**Source diskette cannot be copied (DISKCOPY)**

Cause: The source and target diskettes were incompatible.

Action: Insert a compatible target diskette into the target drive and retry the DISKCOPY command.

**Source does not contain back-up files (BR)**

Cause: The source disk had no back-up files on it.

Action: Make sure you typed the information on the command line correctly. If you did, make sure the back-up files are in the specified directory. If they are not, retry the command and specify the correct directory.

**The specified file is invalid or does not exist: 'filename' (FONT) (GRAFTABL) (KEYB) (LCOUNTRY) (SORT)**

Cause: The file is not accessible or the file cannot be found.

Action: Check to see if the file exists or if it contains any illegal characters.

**Specified MS-DOS search directory bad (MS)**

Cause: One of the following occurred:

- The SHELL command in the CONFIG.SYS file is incorrect.
- The COMMAND.COM file does not exist.
- The COMMAND.COM file is not where you specified it to be.

Action: Try the following:

- Check the SHELL command in the CONFIG.SYS file.
- Make sure the COMMAND.COM file is where you think it is.



### **Start session error (TE)**

Cause: There was an error accessing the Network Terminal service. The service cannot be initiated.

Action: Contact you system administrator.

### **Syntax error (MS)**

Cause: You typed an illegal string when executing the FIND command.

Action: Enclose the string with quotation marks.

### **Target disk cannot be used for back-up (BR)**

Cause: One of the following occurred:

- The BACKUP command cannot access the disk.
- The floppy diskette is bad.
- There are hardware problems.

Action: Reformat the diskette using the FORMAT command. Retry the BACKUP command. If this message is displayed again, get a new diskette. If there are hardware problems, call Field Service.

### **Target diskette has errors**

#### **Attempting to recover target diskette by reformatting bad tracks (DISKCOPY)**

Cause: The target diskette had a bad spot.

Action: This message is for informational purposes. Because the target diskette must be reformatted, the DISKCOPY operation will take significantly more time. If this problem occurs again, the "WARNING: Error writing target diskette" message is displayed. See that message for more information about how to proceed.

### **Target diskette is write protected**

#### **Remove write protect tab and press any key to continue Or press <CTRL/C> to abort DISKCOPY (DISKCOPY)**

Cause: The target diskette was write protected.

Action: Remove the write-protect tab and reinsert the diskette into the target drive.

**Target diskette must be Rainbow RX50 pre-formatted  
Disk copy failed (DISKCOPY)**

Cause: You tried to execute the DISKCOPY command with a target diskette that was not formatted.

Action: Format the target diskette using the FORMAT command. Reinsert the diskette into the target drive. Retry the DISKCOPY command.

**Target drive cannot write high density diskettes (DISKCOPY)**

Cause: You tried to copy the contents of a high-density source diskette to a low-density target diskette.

Action: Insert a high-density target diskette into the target drive. Retry the DISKCOPY command.

**Target is full (BR)**

Cause: The target disk had no room to receive restored files.

Action: Use another disk as the target disk.

**The 96 column mode is not supported for STD type printers. (MODE)**

Cause: You tried to use 96-column mode with an STD type printer. The 96-column mode is valid only for the LA50-type printers.

Action: Do not specify 96-column mode with an STD printer.

**The last file was not restored (BR)**

Cause: One of the following occurred:

- You press **Ctrl/C**.
- It is time to switch diskettes.
- There is no more space on the hard disk.

Action: Try one of the following:

- Retry the RESTORE command.
- Insert a new diskette.
- Delete some files from the hard disk and retry the command.



**Timed out waiting for DATE/TIME from remote node 'nodename'  
(NET TIME)**

Cause: You tried to execute the NET TIME command but the node 'nodename' was too busy to service your request.

Action: Retry the NET TIME command and specify another node name.

**To activate Compose, use KEYB to load an ISO or MCS keyboard file  
(TE)**

Cause: You pressed the Compose key without first loading the ISO or MCS keyboard map file.

Action: Use the MS-DOS KEYB command to load the ISO or MCS keyboard map file. Now you can use the Compose key.

**Too many clocks or timers (WIN)**

Cause: You tried to run a program that requires a system clock but no more are available.

Action: Exit or close one of the other application programs. Try running your program again.

**Too many files open (MS)**

Cause: No more system file handles were available for you to use to open a file.

Action: Increase the value of the FILES command in the CONFIG.SYS file.

**Track 0 bad - disk unusable (MS)**

Cause: The FORMAT command found bad sectors on the disk.

Action: Use another disk.

**Unable to close connection with remote node (NET TIME)**

Cause: You issued the NET TIME command and the remote node serviced your request, but your local node could not close the connection.

Action: Contact your system administrator.

**Unable to connect to 'servicename' (TE)**

Cause: You entered an invalid or inaccessible network name.

Action: Make sure you entered a valid service name. If the service is not available, try again later.

**Unable to contact remote node 'nodename' (NET TIME)**

Cause: One of the following occurred:

- You issued the NET TIME command but the remote node 'nodename' was not listening.
- You tried to connect to a server that has no sessions available.
- You tried to connect to a server from a workstation that has a maximum number of sessions running.

Action: Try one of the following:

- Retry the NET TIME command and specify another node name.
- Increase the number of sessions that can connect to the server. Check that there are no active sessions, then restart the server.
- Disconnect from a remote node or server, or increase the number of sessions allowed from your workstation.

**Unable to create directory (MS)**

Cause: The MS-DOS operating system could not create the directory you specified.

Action: Make sure there are no other directories with the name you specified in the MKDIR command line. Make sure the disk is not full.



**Unable to erase 'filename' (BR)**

Cause: The BACKUP or RESTORE command could not erase file 'filename'.

Action: Start with a blank, formatted diskette. You can also delete or move some files on the destination diskette before you execute the BACKUP or RESTORE command again.

**Unable to make local file name from remote name:**

**'nodename::filename'**

**Enter local file name: (NFT)**

Cause: You omitted the local file name with the COPY command. NFT was not able to create a local file name from the specified remote file name.

Action: Retry the COPY command and specify a local file name.

**Unable to open file: 'filename' (NFT)**

Cause: NFT could not open the file you specified.

Action: Make sure you typed the file name correctly.

**Unable to send command to remote node 'nodename' (NET TIME)**

Cause: You issued the NET TIME command but your local node could not talk to the network.

Action: Contact your system administrator.

**Unexpected network error 'errornumber' (NET)**

Cause: A network command returned an unexpected error. The parentheses contain the MS-DOS operating system extended error code.

Action: Contact your system administrator.

**Unrecognized command in CONFIG.SYS (MS)**

Cause: Your CONFIG.SYS file contained an unrecognized command.

Action: Make sure the commands in your CONFIG.SYS file are valid.



**Unrecognized command. (SETHOST)**

Cause: The command you used was not a valid SETHOST command.

Action: To see all the valid SETHOST commands, type:

SETHOST>SETHOST/HELP

**This page intentionally left blank.**

**Unrecognized error code 'errorcode' (SETHOST)**

Cause: The error code you specified was invalid.

Action: Contact your system administrator.

**Unrecognized Help option; try typing just /HELP. (SETHOST)**

Cause: You specified an invalid SETHOST help option.

Action: To see the valid SETHOST help options, type:

```
SETHOST>SETHOST/HELP 
```

**Unrecognized nodespec. (SETHOST)**

Cause: The nodespec was invalid.

Action: To see the valid nodespec formats, type:

```
SETHOST>SETHOST/HELP=NODESPEC 
```

**Unrecognized Parameter. (SETHOST)**

Cause: The parameter you specified was not a SETHOST parameter.

Action: To see the valid SETHOST parameters, type:

```
SETHOST>SETHOST/HELP 
```

**Unrecoverable error in directory****Convert directory to file (Y/N)? (MS)**

Cause: The directory structure is corrupt.

Action: To convert the bad directory to a file, press the Y key. Now you can delete the bad directory. Then use your back-up diskette to restore the directory structure.

If you respond N to this prompt, you may not be able to read from or write to the bad directory.



**Use of the /1 switch is not allowed for the target drive (FORMAT)**

Cause: You tried to do either of the following:

- Format the hard disk using the /1 switch.
- Format a single-sided diskette in the high-density RX33 drive.

Action: Format a low-density diskette using the /1 switch together with the /4 switch.

**Use of the /4 switch is not allowed for the target drive (FORMAT)**

Cause: You tried to format the hard disk with the /4 switch. The /4 switch indicates that you want to format an 8- or 9-sector diskette on a high-density RX33 drive.

Action: Retry the FORMAT command without specifying the /4 qualifier.

**Use of the /8 switch is not allowed for the target drive (FORMAT)**

Cause: You tried to do either of the following:

- Format a hard disk using the /8 switch.
- Format a single-sided diskette in the high-density RX33 drive.

Action: Format a low-density diskette using the /8 switch together with the /4 switch.

**Use of the /L switch is only allowed in combination with the /4, /8, or /1 switches (FORMAT)**

Cause: You tried to format a disk using the /L switch by itself.

Action: Make sure you specify the /4 switch, the /8 switch, or the /1 switch when you specify the /L switch.

**Video shifting is not allowed on this hardware. (MODE)**

Cause: You tried to shift the video on your VAXmate workstation.

Action: Do not attempt video shifting on your VAXmate workstation.

# *Appendix G*

## *International Features*

This appendix discusses:

- International country codes
- International character set codes
- Country keyboard abbreviations
- Commands providing international support
- How support files work together
- Character sets
- Country keyboards

### **International Country Codes**

The following list contains international country codes.

001	United States	002	Canada
031	Netherlands	032	Belgium
033	France	034	Spain
039	Italy	041	Switzerland
044	United Kingdom	045	Denmark
046	Sweden	047	Norway
049	Germany	061	Australia
358	Finland	972	Israel



## **International Character Set Codes**

The following list contains international character set codes.

CA7	Canadian 7-bit NRC	CH7	Swiss 7-bit NRC
DE7	German 7-bit NRC	DK7	Danish 7-bit NRC
ES7	Spanish 7-bit NRC	FI7	Finnish 7-bit NRC
FR7	French 7-bit NRC	ISO	ISO Multinational
IT7	Italian 7-bit NRC	MCS	DIGITAL Multinational
NO7	Norwegian 7-bit NRC	SE7	Swedish 7-bit NRC
ST2	IBM Norway/Denmark Extended	STD	IBM Extended
UK7	United Kingdom 7-bit NRC		

## **Country Keyboard Abbreviations**

The following list contains country keyboard abbreviations.

CA	Canadian	CH	Swiss
DE	German	DK	Danish
ES	Spanish	FI	Finnish
FR	French	IT	Italian
NO	Norwegian	SD	Swiss (German)
SE	Swedish	SF	Swiss (French)
UK	English	US	American English



## Commands Providing International Support

Table G-1 contains the commands providing international support.

**Table G-1 International Support**

Command	What It Does
FONT	Loads a text character set. FONT files have a .FNT file extension.
GRAFTABL	Loads a graphic character set. GRAFTABL files have a .GRF file extension.
KEYB	Loads a keyboard map file. KEYB files have a .KEY file extension.
LCOUNTRY	Loads country-specific information and case conversion information into the MS-DOS operating system. LCOUNTRY files have a .COU file extension.
SELECT	Provides the coordination of the various pieces of internationalization.
SORT	Is an MS-DOS operating system filter that sorts characters according to current character set. SORT files have a .SRT file extension.

### The FONT Command

Use the FONT command to load a text font file that corresponds to a character set. The FONT command loads the bit maps of the ASCII characters. Each text character is represented by 16 bytes of data.

### The GRAFTABL Command

Use the GRAFTABL command to load the bit maps of the graphics characters that are displayed when the workstation is in a graphics mode. All workstation graphics modes are supported.

Each graphics character is represented by 8 bytes of data.

### The KEYB Command

Use the KEYB command to load keyboard map files. Two factors determine which keyboard map file should be loaded; the country selected and the character set selected. For example, if you want to use an MCS character set in the United Kingdom, you would load the MCSUK.KEY file.



## **The LCOUNTRY Command**

Use the LCOUNTRY command to load country-specific information into the MS-DOS operating system.

## **The SELECT Command**

Use the SELECT command to change the CONFIG.SYS and AUTOEXEC.BAT files to the desired character set and country information. The SELECT command sets up the parameters for FONT, KEYB, and LCOUNTRY.

After setting these parameters using the SELECT command, and restarting the MS-DOS operating system, the correct character set and country information is installed.

It is your responsibility to ensure compatibility among the international components.

SELECT accepts user input on the command line.

## **The SORT Command**

The SORT command is an MS-DOS operating system filter that collates characters according to a given sort table. Each character set has its own sort file.

## **Similarities Between FONT, GRAFTABL, KEYB, LCOUNTRY, SORT**

Each command accepts user-created files. For example, you can create a set of PACMAN graphic fonts to be loaded by GRAFTABL.

You can load any combination of files, but you must ensure compatibility yourself. For example, you could load an ISO font set, be running a STDFR keyboard, and using DE7 country-specific information. We do not recommend it, but we do not prohibit it, either.

Each command has an option so that you can load the default set.

GRAFTABL, SORT, or LCOUNTRY typed with no arguments match the current .FNT file. For example, if you load ISO.FNT and type the following command lines, GRAFTABL loads ISO.GRF and LCOUNTRY loads ISO.COU:

```
A:\>GRAFTABL 
```

```
A:\>LCOUNTRY 
```



Each command searches the current directory, any appended directories, the root directory, and then the current path for the specified file.

Each command assumes a default file extension if you do not specify it. Table G-2 lists examples of what you type and what is loaded.

**Table G-2 Examples of International Commands**

What You Type	What Is Loaded
FONT ISO <input type="button" value="Return"/>	ISO.FNT
GRAFTABL ISO <input type="button" value="Return"/>	ISO.GRF
KEYB ISOUS <input type="button" value="Return"/>	ISOUS.KEY
LCOUNTRY ISO <input type="button" value="Return"/>	ISO.COU

The KEYB and FONT utilities allow you to return to the default ROM-BIOS tables using the /D qualifier after the command. The KEYB and FONT utilities allow you to see the current character sets using the /S qualifier after the command.

### Changing Character Sets for a Specific Country

If a French user wants to use the ISO Latin-1 character set, the sequence of commands shown in Table G-3 is typed.

**Table G-3 Changing Character Sets**

What You Type	What Is Loaded
A:\>FONT ISO.FNT <input type="button" value="Return"/>	Loads the ISO Latin-1 text character set
A:\>KEYB ISOFR.KEY <input type="button" value="Return"/>	Loads the French ISO Latin-1 keyboard map tables
A:\>LCOUNTRY ISO.COU 033 <input type="button" value="Return"/>	Loads the ISO Latin-1 character set country data and specifies the country as France



## International Features

If the user also wants to use graphics video mode, the following command needs to be given:

```
A:\>GRAFTABL ISO.GRF 
```

The ISO Latin-1 graphics character set is loaded.

### **NOTE**

Specifying the file extensions for each of these files is optional.  
The extensions are assumed by default.

## How Support Files Work Together

Tables G-4 through G-8 show how all the utilities work together to give you full support for the desired character set and country. Use these tables only as a guideline.

**Table G-4 IBM Extended Character Set**

Language	Keyboard	Font (Text)	Graphics (Font)	Sort
U.S.*	STDUS.KEY *	STD.FNT *	STD.GRF *	STD.SRT *
U.K.	STDUK.KEY			
FRENCH	STDFR.KEY			
GERMAN	STDDE.KEY			

\* Default set up at start-up time

**Table G-5 Digital Multinational Character Set**

<b>Language</b>	<b>Keyboard</b>	<b>Font (Text)</b>	<b>Graphics (Font)</b>	<b>Sort</b>
U.S.	MCSUS.KEY	MCS.FNT	MCS.GRF	MCS.SRT
U.K.	MCSUK.KEY			
FRENCH	MCSFR.KEY			
GERMAN	MCSDE.KEY			

**Table G-6 French 7-Bit National Replacement Character Set**

<b>Language</b>	<b>Keyboard</b>	<b>Font (Text)</b>	<b>Graphics (Font)</b>	<b>Sort</b>
7-BIT FRENCH	FR7FR.KEY	FR7.FNT	FR7.GRF	FR7.SRT

**Table G-7 German 7-Bit National Replacement Character Set**

<b>Language</b>	<b>Keyboard</b>	<b>Font (Text)</b>	<b>Graphics (Font)</b>	<b>Sort</b>
7-BIT GERMAN	DE7DE.KEY	DE7.FNT	DE7.GRF	DE7.SRT

**Table G-8 International Standards Organization**

<b>Language</b>	<b>Keyboard</b>	<b>Font (Text)</b>	<b>Graphics (Font)</b>	<b>Sort</b>
U.S.	ISOUS.KEY	ISO.FNT	ISO.GRF	ISO.SRT
U.K.	ISOUK.KEY			
FRENCH	ISOFR.KEY			
GERMAN	ISODE.KEY			



## **Character Sets**

### **Using All Character Sets With MS-DOS and MS-Windows**

You should not create file names using accented characters or other 8-bit characters. Instead, use only characters from the ASCII character set (A-Z, 0-9). The accented characters and their positions in the set differ from character set to character set. Using them in file names could result in different file names being displayed under different character sets.

MS-DOS supplies the MCS/ISO and NRC character sets. If a file is created using the MCS/ISO character set, it could look different if viewed with the NRC set loaded. Ensure that the loaded character set matches the one that was used to create the file.

### **Using Character Sets With MS-Windows**

MS-Windows uses ANSI (ISO Latin-1) a universal, standard character set. This 8-bit character set allows you to represent up to 256 characters (0-255). This character set is split into:

- 0-127
- 128-255

The first half (0-127) is standard U.S. ASCII. Characters from 128-255 may differ from one character set to another. The differences are special characters, such as accents and currency symbols.

You probably have documents containing non-ANSI characters if you are using:

- A workstation in a non-English speaking country
- Documents not created in MS-Windows

These files will display differently if you use them under MS-Windows.

The MS-Windows stroke fonts (ROMAN, SCRIPT, and MODERN) do not fully support the ISO Latin-1 character set.

### **Using the NRC Character Set With MS-DOS**

The NRC character set does not contain the backslash (\) or the vertical bar (|). To generate these characters, use the following procedures. When you type the numbers, use the numeric keypad.



To generate the backslash, type:

<Alt/92>

To generate the vertical bar, type:

<Alt/124>

The MS-DOS operating system interprets these generated characters as the backslash or the vertical bar.

### **Using Character Sets With the VT220 and VT240 Terminal Emulators**

The ISO Latin-1 dead-diacritical keys are used with MS-Windows. The VT220 terminal emulator, which runs as an MS-Windows application, also uses the ISO Latin-1 dead-diacritical keys, regardless of the current mode of the terminal emulator (MCS/ISO or NRC).

The VT240 terminal emulator uses the same dead-diacritical keys used under the MS-DOS operating system, regardless of the current terminal emulator mode (MCS/ISO or NRC).



# Country Keyboards

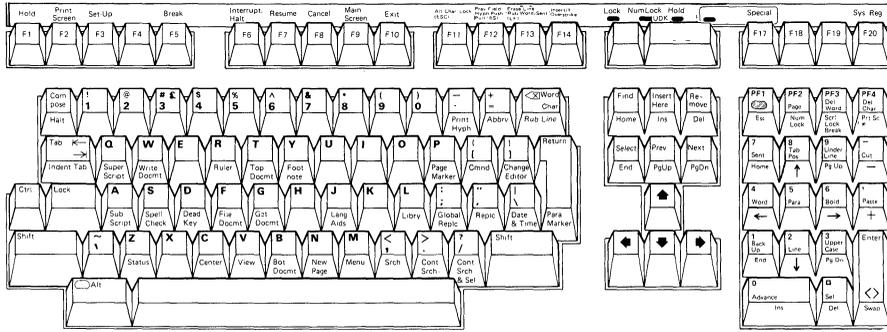


Figure G-1 U. S./U. K. Keyboard

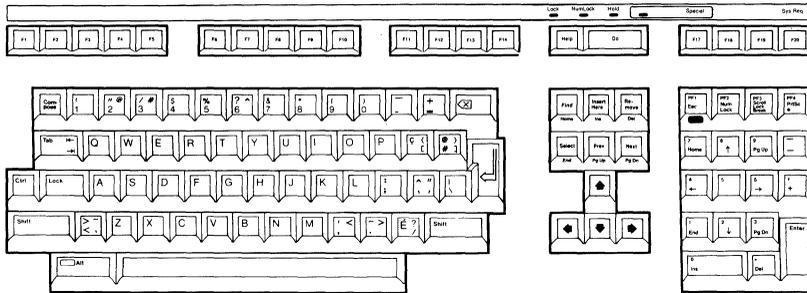


Figure G-2 Canadian/English Keyboard

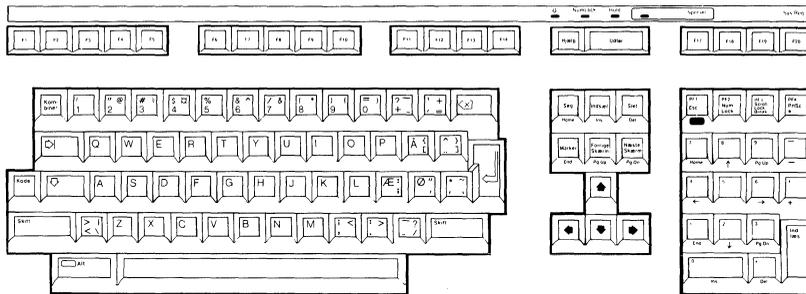
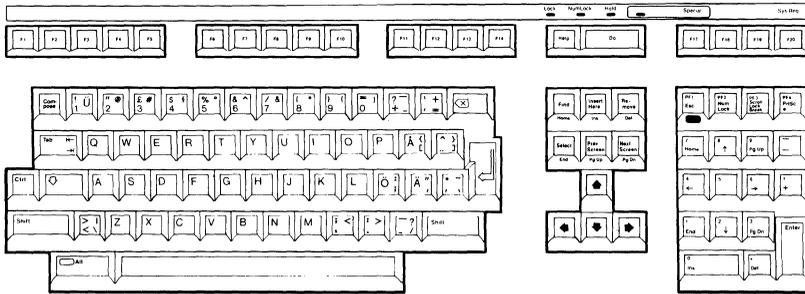
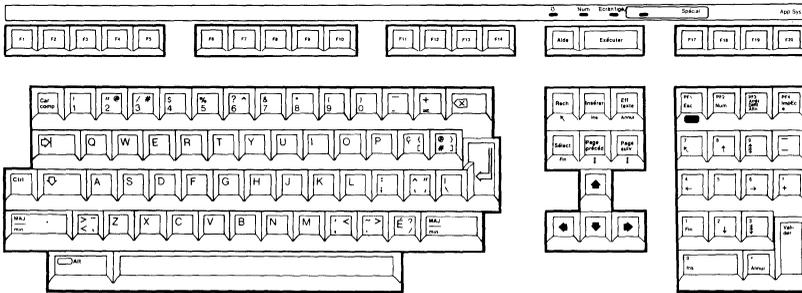


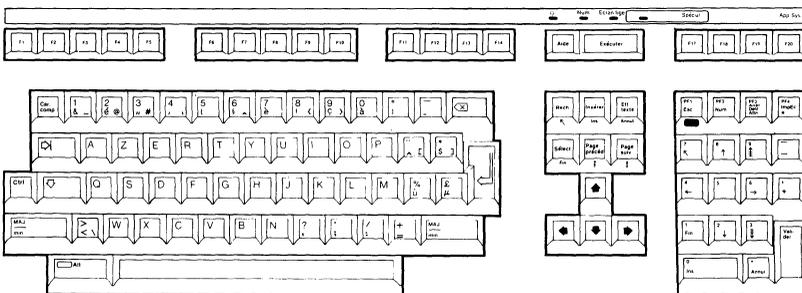
Figure G-3 Danish Keyboard



**Figure G-4 Finnish Keyboard**



**Figure G-5 French/Canadian Keyboard**



**Figure G-6 French Keyboard**

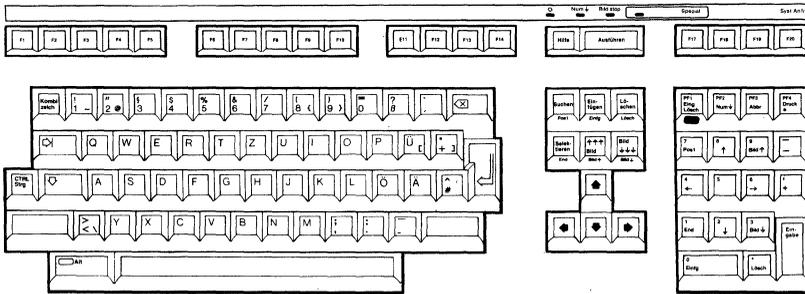


Figure G-7 German/Austrian Keyboard

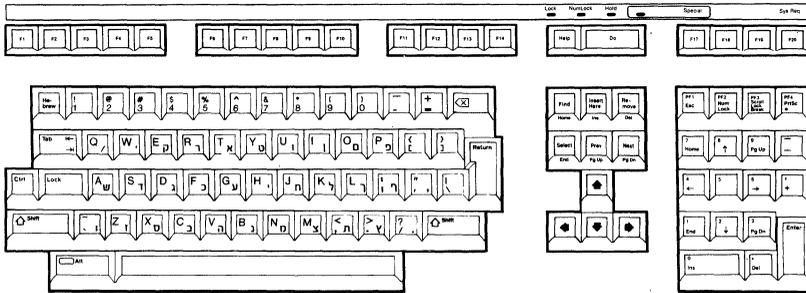


Figure G-8 Hebrew Keyboard

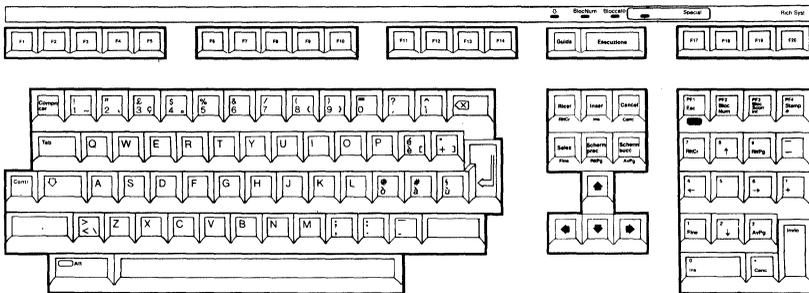


Figure G-9 Italian Keyboard

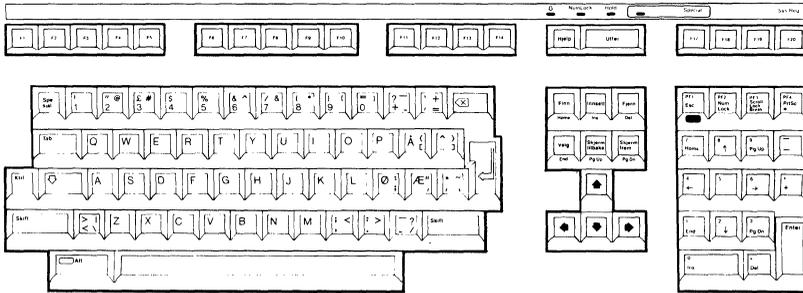


Figure G-10 Norwegian Keyboard

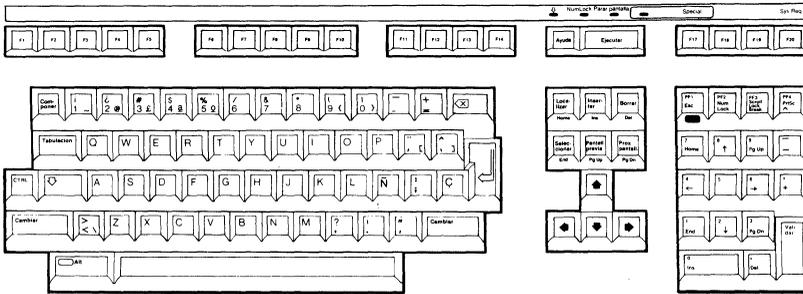


Figure G-11 Spanish Keyboard

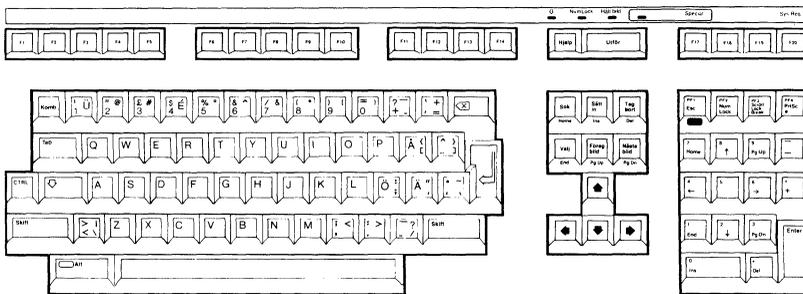


Figure G-12 Swedish Keyboard

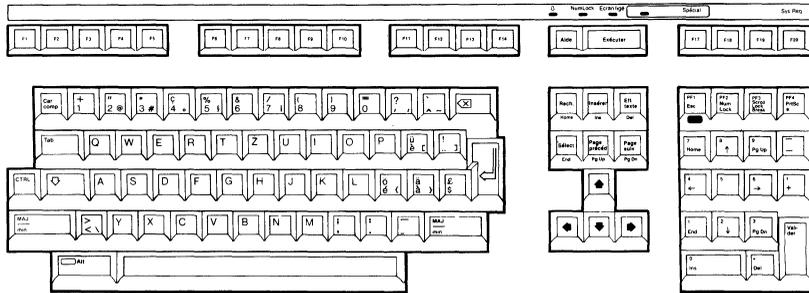


Figure G-13 Swiss/French Keyboard

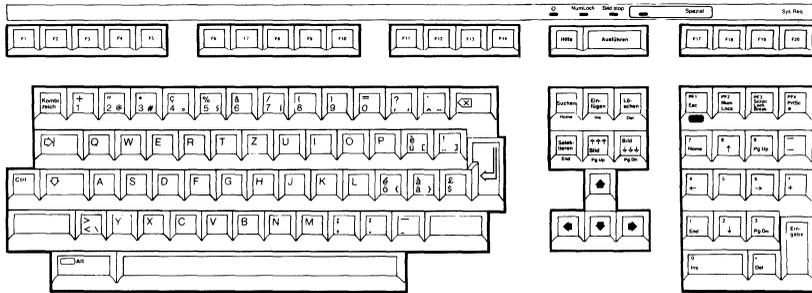


Figure G-14 Swiss/German Keyboard

# *Appendix I*

## *How to Configure Your System*

This chapter discusses:

- What a configuration file is
- How to change a configuration file
- Configuration commands

### **What Is a CONFIG.SYS File?**

When you start the MS-DOS operating system, there are installation-specific settings that need to be configured. For example, if you want to install a memory drive, you would configure this when you start the MS-DOS operating system.

The configuration file, named CONFIG.SYS, contains CONFIG.SYS commands which the MS-DOS operating system reads at startup. The MS-DOS operating system searches for the CONFIG.SYS file in the root directory of the startup drive.

The CONFIG.SYS file helps you configure your system with a minimum of effort. You add device drivers to your system by adding commands to the CONFIG.SYS file. You can only add device drivers to your system at startup. In order for the new values to take effect, you must restart your workstation.

## Creating the CONFIG.SYS File

If there is not a CONFIG.SYS file on the MS-DOS disk, you can use the COPY command to create one. For example, to create a CONFIG.SYS file, type:

```
A:\>COPY CON CONFIG.SYS   
BUFFERS=10   
FILES=10   
DEVICE=\BIN\NETWORK.SYS   
BREAK=ON   
SHELL=A:\BIN\COMMAND.COM A:\BIN /P   
LASTDRIVE=P  
```

After you press the Return key, a file named CONFIG.SYS is saved on the MS-DOS operating system disk in your root directory.

## CONFIG.SYS Commands

Table I-1 lists the CONFIG.SYS commands.

**Table I-1 CONFIG.SYS Commands**

Command	Use
BREAK	Sets Ctrl/C check.
BUFFERS	Sets the number of disk buffers.
COUNTRY	Sets the international time, date, and currency.
DEVICE	Installs the device driver into the system.
FCBS	Specifies the number of FCBS that can be concurrently open.
FILES	Sets the number of open files that can access certain MS-DOS system calls.
LASTDRIVE	Sets the maximum number of drives that you can access.
SHELL	Begins execution of the shell from a specific file.

These commands are described in detail on the following pages.

# *Appendix L*

## *MS-DOS and VAX/VMS*

### *File Compatibility*

The MS-DOS operating system and the VAX/VMS operating system have different file systems. While both have directory structures rooted on disk drives, their file-naming syntax is different. The following sections contain information you need to know if you are sharing files and directories between the MS-DOS and the VAX/VMS operating systems.

#### **Naming Files and Subdirectories**

When using the MS-DOS operating system, you cannot create a file name with a null file extension if a subdirectory with the same file name already exists. For example, you cannot create a file called BOX. if a subdirectory called BOX <DIR> already exists.

When using the VAX/VMS operating system, you cannot create a subdirectory if an existing file in the directory has the same file name as the subdirectory and a .DIR extension. For example, if the file NAME.DIR exists in a directory, you cannot create a subdirectory called NAME in that directory.

When using the VAX/VMS operating system, you cannot create a file with the .DIR extension if a subdirectory with the same name already exists. For example, if the directory NAME exists, you cannot create a file called NAME.DIR.

#### **Creating Files with Text Editors**

Certain MS-DOS text editors end a .TXT file with Ctrl/Z as a delimiter. If you create such a file on your workstation with an MS-DOS text editor and want to use the file as a .COM file in the VAX/VMS environment, you must first insert a "\$ EXIT" as the last line of the .COM file, or edit the file on the VMS system and remove the Ctrl/Z.



If you use a VMS text editor to create a file that is to be used later in the MS-DOS environment, you must copy the file, using the /A qualifier, from the drive connected to the VAX/VMS server to any other drive. Copying the file removes any appended Ctrl/Z characters. Certain MS-DOS application programs terminate abnormally when they encounter a Ctrl/Z character.

### **Special Characters in File Names**

Of the 11 characters you could specify in an MS-DOS file name and file extension, do not specify more than nine special characters when creating a subdirectory. Special characters are any valid MS-DOS file name characters other than A-Z, 0-9, \$, and \_ .

The VAX/VMS server translates MS-DOS directory names with file extensions by treating the "." as a special character and appending .DIR as the file extension. For example, if a workstation user creates an MS-DOS directory named A.EXT, the directory is listed as A.EXT. However, the VAX/VMS lists the directory as A\_\_2EEXT.DIR.

### **Copy Binary Files Between MS-DOS and VAX/VMS Directories**

You can copy MS-DOS binary files to a VAX/VMS directory. To copy binary files between the MS-DOS and VAX/VMS environments, use the MS-DOS COPY command.

Any binary files that were not copied to your VAX/VMS directory with the MS-DOS COPY command should be copied to the MS-DOS environment with the NFT COPY command.

### **Using MS-DOS Applications With VMS-Created Files**

Some MS-DOS applications (for example, EDLIN) do not work with a file created by a VMS process because the VAX/VMS server does not allow write access to those files. It does allow write access to VAX/VMS files with the stream record format, but supports only read access to files with any other record format. To determine the record format of a file created by a VMS process, use the DIR/FULL command at the VAX/VMS operating system prompt. For example:

```
$ DIR/FULL filename 
```



Table L-1 describes the VAX/VMS server support for MS-DOS access to VAX/VMS files.

**Table L-1 MS-DOS Access to VAX/VMS Files**

If VAX/VMS file's record format is ...	MS-DOS allows you to ...
Stream	Open Close Create Read Write/Append Delete
Sequential record	Open Read (sequential only)
Relative record	Open Read (sequential only)
Indexed record	Open Read (sequential only)

The VAX/VMS server supports only read access to ordinary RMS record files (nonstream files).

To convert a nonstream file to a stream file, copy the file to another file name. For example, to convert the nonstream file A.DAT to a stream file named B.DAT, at the MS-DOS operating system prompt, type:

```
A:\>COPY A.DAT B.DAT 
```

### Read-Only Directories

Directories marked as read-only on the VAXmate server are ordinary MS-DOS directories. You can create files in the directory and remove directories when they are empty. Directories marked as read-only on the VAX/VMS server cannot be deleted by an MS-DOS process. Also, you cannot delete files from or create files in that directory.

