## **Advice About Disk Problems**

Choose a topic to get information about your disk and find out how you can recover data with PC Tools for Windows or the PC Tools for DOS utility programs on the emergency utility disk supplied.

How to Protect Yourself <u>General Problems</u> <u>DiskFix Error Messages</u> <u>CHKDSK Error Messages</u> <u>DOS Error Messages</u> <u>Running DiskFix on DoubleSpace Drives</u> <u>Getting Technical Support</u>

#### Note

The suggestions made here are for software solutions to general problems and DOS and CHKDSK error messages. Many problems can be solved by using DiskFix, Optimizer, or Undelete. Some problems that cannot be solved when Windows is running, can be solved by using the DOS version of DiskFix from your emergency disk or DOS Utility Disk.

However, some problems are caused by hardware. For example, you might have a loose drive cable or badly-aligned read/write heads. In such cases, software solutions cannot help and you should talk to your computer dealer or repair service.

# How to Protect Yourself

Protect yourself against expensive and time consuming data loss by taking three ordinary safety precautions.

#### 1. Back up your system regularly.

Make sure that you have a good backup of your system. Back up your active files every day. Back up the whole disk often enough so that you can restore it easily in case of an irrecoverable disk problem. Central Point Backup makes it easy to schedule the backups you need.

# 2. Run the Mirror command from your AUTOEXEC.BAT file. Each time you start your system, Mirror will create a file that contains information PC Tools applications can use to rebuild the FAT or root directory.

#### 3. Run Central Point Anti-Virus regularly.

Make sure that your system is free of viruses that might damage data, partition tables, FATs, and other vital system information.

#### 4. Make an emergency disk.

Use PC Tools for Windows Build Emergency Disk to make a bootable disk for emergency start up. The emergency disk contains CMOS, boot sector, and partition table information. If the disk is large enough, it also contains the important data recovery programs for DOS. The latest versions of Central Point DOS applications are also provided on the DOS Utilities disk. You use these applications to solve problems when you cannot run Windows or repairs cannot be made safely under Windows.

### **General problems**

Choose any topic for emergency information.

Accidental deletion of a file Accidental format of a disk Bad partition table Bad root directory Cannot create a file Cannot find file(s) Cannot use a DOS command Cross-linked files Error reading (or writing) drive x File allocation table is bad Files or programs cannot be accessed Floppy disk cannot be accessed Hard disk getting slower Hard disk will not boot Memory-resident programs won't start or run properly No room for system files Non-DOS disk Not enough room on disk Root directory is scrambled Subdirectories cannot be accessed

## **Accidental Deletion of a File**

Use PC Tools for Windows Undelete.

If the file was recently deleted, or is protected by the Delete Sentry delete protection method, you can undelete the whole file.

If the condition of the deleted file is Poor or Destroyed, you might be able to recover parts of the file with PC Tools for DOS Undelete, which is on the DOS utilities disk and is also in the \DOSUTILS subdirectory of your PC Tools for Windows directory.

#### Accidental Formatting of a Disk

Use PC Tools for DOS Unformat for a hard disk or for a floppy disk that was formatted with PC Format, or by the DOS 5.0 or later FORMAT command **without** the /U option. If the disk was formatted in any other way, all data is lost.

Unformat is on the DOS utilities disk and is also in the \DOSUTILS subdirectory of your PC Tools for Windows directory.

# **Bad Partition Table**

If the partition table on a disk is bad, you cannot access any files in the partition.

Reboot from your emergency disk and run DiskFix. (If your emergency disk is not large enough to contain DiskFix, use DiskFix from the DOS utilities disk that is part of your PC Tools for Windows installation disk set.) Run DiskFix from the DOS command line by typing

DISKFIX

DiskFix will then analyze the disk and allow you to make repairs.

• If the damage is too severe for DiskFix to repair, you may have to run FDISK to repartition the drive, then reformat it.

## Warning

Depending on the version of FDISK you use, when you repartition the disk you will probably lose all data. You must then restore data from a backup disk or tape.

# **Bad Root Directory**

If meaningless text and characters appear when you run the DOS DIR command, your root directory might be damaged.

Run DiskFix to analyze and repair the root directory.

# **Bad Command or File Name or Missing File Errors**

This problem may have a simple cause. Follow these steps to find it:

- 1. Check your spelling.
- 2. If the spelling is correct, change to the directory where the file you want to use is located. If this solves the problem, you might want to add this directory to the PATH statement in your AUTOEXEC.BAT file.
- 3. If the file is not where you expected to find it, use SmartFind to locate it.
- 4. If this fails, the file may be deleted or in a deleted directory. Use Undelete to find and recover it.
- 5. If you still cannot find the file, use DiskFix to correct any directory corruption.
- 6. If all the steps fail, copy the program from the original disk and copy data files from the most recent backup.

#### Note

DOS has a 66-character limit on path names. If you have renamed a directory in the middle of a path name so that the entire file specification exceeds 66 characters, you cannot access files in the last directory of the branch.

For example, in a path such as C:\FILES\...\LASTDIR, where ... represents the intermediate subdirectories, you cannot access any files in the LASTDIR subdirectory if the path name exceeds 66 characters.

### **Cannot Use DOS Command**

The command might not be on your path, or you might have a version of the command that does not match your version of DOS. Follow these steps:

- 1. Change to the directory where the command is located or specify the path as part of the command name. Use SmartFind to find the command if you do not know where it is.
- 2. If the command still does not run, use the DOS VER command to find out what DOS version you booted your system with. Examine the file dates to check version compatibility.
- 3. If the version is incorrect, either reboot with the appropriate version of DOS, or copy the command from your original DOS disks.

It is also possible that the directory is corrupted. If you suspect this, run DiskFix to repair the directory structure.

# **Cross-Linked Files**

Use DiskFix to assign file clusters to the correct file.

You can save Undo information in case you are not satisfied with the DiskFix file corrections.

# **Error Reading or Writing Drive**

There are a number of reasons for getting read or write errors. Here are a few:

- Partition table or boot sector errors.
- FAT damage.
- Hardware failure, such as bad sectors on your disk or a short circuit in the drive connection.

If the errors are intermittent, your power supply might not be working properly. If your wall jack is not isolated, other users of the circuit might be using some of its power.

# File Allocation Table Errors

Your File Allocation Table may be bad even if you do not see error messages that refer to it. If you have inaccessible data or files, or cross-linked files, your FAT might be bad.

If a file contains a large piece of data that does not belong to it, that is a sure symptom of a cross-link.

To correct FAT problems, run DiskFix.

### Note

FAT errors might also be caused by a virus. Run Central Point Anti-Virus to make sure that your disk and memory do not contain viruses.

#### Files or Programs Cannot Be Accessed

If you cannot find or use files or programs with any of the usual methods, such as changing directories, using search utilities, or checking deleted files and directories, use DiskFix to repair the disk.
If DiskFix for Windows reports errors that it cannot correct, use the PC Tools for DOS DiskFix on your emergency disk or DOS utilities disk.

## Cannot Access Floppy Disk

First make sure that you are using a disk formatted for use with DOS, that it is formatted at a density your system supports, and that it was written on a machine with the heads correctly aligned.

If the disk is correctly formatted, use DiskFix to examine and repair it.

#### Note

Some programs, such as backup programs, disable access to all floppy drives managed by the same controller. Even if you are backing up files to your A drive, you will not be able to access your B drive.

## Hard Disk Getting Slower

Your hard disk slows down as it gets full because files are fragmented and it takes longer to retrieve all the file clusters.

Clean up the disk by deleting unneeded files and backing up and deleting seldom-used files. Then defragment your disk with Optimizer.

# Warning

Before you run Optimizer, recover any deleted files you want that are not protected by Delete Sentry.

# Hard Disk Won't Boot

Boot from your emergency disk and use DiskFix to rebuild your partition table and boot sector.

If you do not have an emergency disk, you can boot from a floppy disk that contains the DOS system files and run DiskFix from the DOS utilities disk.

### Memory-Resident Programs Won't Start or Run Right

If a program has run correctly in the past, check to see if a new memory-resident program loaded after it uses the same hot keys. If there is a hot key conflict, you can probably change the hot keys of one of the programs.

If there is no hot key conflict, you might need to change the order in which memory-resident programs are installed. Edit your AUTOEXEC.BAT file and load memory-resident programs in the following order, and reboot your system:

- DOS internal commands, such as PATH and PROMPT.
- DOS external commands, such as MODE, PRINT, and KEYB.
- Mirror.
- Network drivers.
- Mouse drivers.
- Print spoolers.
- Disk caching programs.
  - Anything that does not fit in the categories above.

If you still cannot run memory-resident programs, try the following steps:

- 1. Print a copy of your AUTOEXEC.BAT file for reference, then boot from a system-formatted floppy disk, such as your emergency disk.
- 2. Enter the commands from the AUTOEXEC.BAT file one at a time at the DOS prompt. After you enter a command that loads a memory-resident program, test it to see if it works. When you find conflicting programs, changing their loading order might help.

#### **No Room for System Files**

You see this message when you use the Make System Disk command on the File Manager File menu to add system files to a disk that is already formatted and contains files.

Make room for system files by deleting or moving one or two files to another disk. Then run the Make System Disk command again.

This message also appears if the disk is write-protected, or even if it has root directory or FAT damage.

# Not Enough Room on Disk

You see this message when you are moving or copying files to a disk and run out of disk space. DOS checks to make sure that there is room for a file before copying it to a new location.

Move or delete files already on the disk, or use a different disk.

If you think that the disk is not full, run DiskFix to find and delete lost clusters that might be using disk space.

If you are using the Delete Sentry method of delete protection on this disk, use the Purge All Files command on the Undelete File menu to get rid of files in the hidden Sentry directory.

You also see this message if your root directory is full, even if there is plenty of space on the disk. The root directory of a hard disk can usually contain 512 files and directories. The root directory of a floppy disk is considerably smaller.

# **Root Directory is Scrambled**

Run DiskFix to analyze and correct root directory problems.

## **Subdirectories Cannot Be Accessed**

Run DiskFix to find out why and fix the problem.

If you cannot access subdirectories, files might also be missing. See the advice offered under the Files or Programs Cannot Be Accessed error.

## **DiskFix Error Messages**

Although online help cannot be available when you are analyzing and repairing a disk, you can get more information about the DiskFix errors by reading the topics listed below.

Boot Error Found on Floppy Disk Boot Sector Virus Found Can't Analyze When Certain Programs Are Running Can't Run DiskFix on Network Drives Corrupted Directories Cross-linked Files Drive Not Ready File Allocation Tables Cannot Be Read File Allocation Tables Do Not Match Illegal Entries in the File Allocation Table Incorrect Media Descriptor Invalid Directory Entry Lost Clusters One File Allocation Table Cannot Be Read Partition Error Found Save Undo Information

## File Allocation Tables Cannot Be Read

Both copies of the File Allocation Table are bad. The logical drive is not usable. You might be able to revive the disk long enough to copy files to another disk, but the drive has bad sectors in the system area and cannot be used.

Try the following steps to see if you can access the disk to copy data to another drive:

- 1. Turn off the computer and let it cool down. Wait at least 10 minutes.
- 2. Boot the system from your emergency disk.
- 3. To restore the CMOS information from the emergency disk, run DiskFix from your Emergency Utility Disk.
- 4. If you know what the CMOS information should be, you might be able to enter it through your computer's initial setup and diagnostic program. The disk supplier or manufacturer can give you the correct CMOS information.

#### One File Allocation Table Cannot Be Read

One of your File Allocation Tables cannot be read. DiskFix will try to replace the unreadable copy with a readable copy if you choose OK.

It is possible, but dangerous, to use a disk with only one good FAT. If the single readable FAT is damaged, the disk is unusable. You cannot access any data that it contains.

Choose OK if you want DiskFix to replace the bad FAT with a good copy.

# File Allocation Tables Do Not Match

The File Allocation Tables on your disk are not identical. One must contain errors.

DiskFix will look at the directories and files on the disk and try to figure out which FAT better represents the data on the disk. Then it will replace the bad copy with the better copy and analyze the result.

Choose OK if you want DiskFix to determine which FAT is bad and replace it.

# **Invalid Directory Entry**

You have a directory file in which either the parent directory entry (..) or the subdirectory entry itself (.) is damaged.

Subdirectories are chained together by interlocking parent and child entries in the subdirectory file that keeps track of the files in the directory. If the parent directory entry is damaged, the subdirectory might appear to be missing. If the subdirectory entry is damaged, files in the directory might appear to be missing.

Choose Directory if you are sure that the clusters are a subdirectory. Choose File if you are not sure.

Choose File if you want DiskFix to convert the directory file to an ordinary file at the root level of the disk.

# **Incorrect Media Descriptor**

The media descriptor code does not match the disk type and capacity. If the media descriptor code is not correct, DOS might not recognize the disk.

Choose OK if you want DiskFix to correct the media descriptor code.

# **Illegal Entries in the File Allocation Table**

The File Allocation Table contains references to clusters with higher sector numbers than the highest cluster on your disk.

Choose OK if you want DiskFix to correct invalid cluster numbers.

# **Corrupted Directories**

DiskFix has found directories that contain bad entries.

A bad directory entry might contain a cluster allocation error, an illegal file name, invalid information in the reserved field, or invalid subdirectory entries.

Choose OK if you want DiskFix to correct bad directory entries.

# **Cross-linked Files**

The cross-linked files error dialog box displays the names of all files with cross-linked clusters, and lists the cluster number the cross-linking occurs on.

A cross-link occurs when the FAT shows two or more files (or directories) as occupying the same cluster on the drive.

Choose OK if you want DiskFix to repair cross-linked files and other directory structure problems.

### **Lost Clusters**

DiskFix reports the number of lost clusters and the number of separate chains of lost clusters that it found.

By the time DiskFix checks for lost clusters, it has already verified that none of the clusters belong to cross-linked files. If you have corrupted directories, however, some of the clusters might belong to these directories or to files in corrupted directories. Do not delete lost clusters unless you are sure that you do not need them.

If lost cluster chains that belong to a subdirectory are recovered intact as a subdirectory, only the name of the subdirectory is changed. The files contained in the subdirectory are recovered intact.

#### Note

Recovered clusters are written as files in the root directory of the disk. Because the root directory is limited in size, you might not have enough space to write all lost clusters as files. If you run out of root directory space, exit from DiskFix and move the existing lost cluster files to a subdirectory. Then run DiskFix again to recover the remaining clusters as files.

Choose Save to write lost clusters as PCTnnnnn.FIX and lost directories as LOSTnnnn.SUB, where nnnn is a unique number that identifies the file.

Choose Delete to delete all lost cluster chains.

## **Drive Not Ready**

The drive you selected to save Undo information is not available for some reason.

Make sure that you have inserted a disk and closed the drive latch if there is one. If you are using an external drive, make sure that cables are firmly connected and the drive light goes on when DiskFix tries to read the disk in the drive.

- Choose Retry when you are ready to read the drive again.
- Choose Abort if you have changed your mind and want to select a different drive.

#### Can't Run DiskFix on Network Drives

You cannot use DiskFix to analyze and repair network drives.

You can use DiskFix only on drives that are physically connected to your system, such as internal and external floppy drives, Bernoulli drives, and external and internal hard drives.

# **Save Undo Information**

Before it makes any repairs, DiskFix prompts you to save the original, erroneous condition of your disk. You use this saved information to restore the disk to its original condition in case the first repair is not what you expected.

# Note

DiskFix asks only once if you want to save Undo information. If you choose Cancel to continue without saving Undo information you cannot restore the original condition of your disk after repairs are made.

- To save Undo information on the selected disk, choose OK.
- To make repairs without saving Undo information, choose Cancel.

#### **Can't Analyze When Certain Programs Are Running**

Although DiskFix suspends other applications during its analysis, it cannot safely make repairs when some applications are active in the Windows environment. During installation, Install made a list of applications that do not interfere with repair. If you are running any applications in Windows that DiskFix cannot safely make repairs with, a dialog box warns you that you must close these before it can repair your disk. The names of applications that you must shut down are highlighted.

These names are the actual names of the running tasks. A task is usually a recognizable file name, such as WINWORD or EXCEL, without the file name extension, such as EXE. You can shut down these applications from within Windows either from the Task Manager or from the applications themselves.

A task may also be a module that runs transparently in the background, such as NWPOPUP, the network message task, and cannot be shut down from within Windows. This kind of task is usually present because of a LOAD= or RUN= line in your WIN.INI file. See your Microsoft Windows documentation for more information about such tasks.

If a task is running that you cannot exit from, you should exit from Windows and run DiskFix for DOS from your emergency disk or the DOS Utilities disk that came with PC Tools for Windows. If you can shut down all highlighted tasks, you need to choose Analyze again to have DiskFix make repairs.

#### Note

Refer to the PC Tools for Windows manual for more information about the task list.

# **Partition Error Found**

When it starts, DiskFix checks the partition tables and boot sectors on all hard disks. If it finds a errors, it warns you to exit immediately from DiskFix and from Windows and run DOS DiskFix to repair this error.

If you boot your system from your emergency disk, DiskFix can use the partition table and other information stored there to make repairs more quickly.

To repair partition table errors, run DiskFix from your emergency disk or the DOS utilities disk that is part of your PC Tools for Windows installation disk set.

#### Note

Virus infections can cause partition table errors. Run Central Point Anti-Virus to make sure that your disk and memory are virus-free.

#### **Boot Error Found on Floppy Disk**

Each DOS-formatted disk has a boot sector that contains information about the disk and general startup information, including information that the operating system needs to read from or write to the disk. If the boot sector is corrupted, you cannot read or write files on the disk.

DiskFix for Windows cannot correct boot sector errors on floppy disks. Run DOS DiskFix to correct these errors.

### **Boot Sector Virus Found**

DiskFix has found a virus in the boot sector of the current disk and cannot continue analysis. The name of the virus is shown in the error dialog box.

To eradicate the virus, exit from DiskFix and run Central Point Anti-Virus.

### **CHKDSK error messages**

The following error messages might appear when you run CHKDSK. Click the error message text to see a description of the problem and possible solutions.

(.)(..) does not exist /x Invalid parameter Allocation error, size adjusted Cannot CHDIR to root Cannot CHDIR to subdirectory Cannot RECOVER (.) entry, processing continued CHDIR (..) failed trying alternate method Contains xxx non-contiguous blocks Convert directory to file Y/N? Directory is totally empty, no (.) or (..) Disk error reading FAT Disk error writing FAT Entry has a bad attribute (or size or link) Errors found, F parameter not specified File is cross-linked to cluster x First cluster number is invalid, entry truncated Has invalid cluster, file truncated Insufficient room in root directory Invalid current directory Invalid subdirectory entry Non-DOS diskette Probable non-DOS disk, continue (Y/N) Processing cannot continue Unrecoverable error in directory xxx Lost clusters found in yyy chains

### (.)(..) does not exist

Use DiskFix to analyze and repair directory structure.

You have a directory file in which either the parent directory entry (..) or the subdirectory entry itself (.) is damaged.

Subdirectories are chained together by interlocking parent and child entries in the subdirectory file that keeps track of the files in the directory. If the parent directory entry is damaged, the subdirectory might appear to be missing. If the subdirectory entry is damaged, files in the directory might appear to be missing.

### **/X Invalid Parameter**

You have entered an invalid CHKDSK parameter. Valid parameters are

/V Display the full path for each file on the drive as it is checked.

/F Fixes errors, but prompts first.

If you plan to use DiskFix to repair errors, do not use CHKDSK with the /F parameter. When CHKDSK fixes errors, it destroys information that DiskFix needs.

## Allocation Error, Size Adjusted

Use DiskFix to correct this error. DiskFix can usually recover the whole file; CHKDSK truncates the file when it fixes it.

# **Cannot CHDIR Errors**

Use DiskFix to repair directory chains.

## **Cannot RECOVER Errors**

Use DiskFix to repair the problem. If it happens again, reboot your machine and use DiskFix to analyze and repair the disk again.

# CHDIR (..) Failed Trying Alternate Method

Use DiskFix to analyze and repair directory structure.

### Contains xxx Non-Contiguous Blocks

This is not an error message, but it might mean that you should use Optimizer to defragment your files and put them in contiguous blocks for quicker access.

# Convert Directory to File? Y/N

Answer N (No) to this question, then use DiskFix to analyze and repair the disk.

# Directory is Totally Empty, No (.) or (..)

Use DiskFix to analyze and repair directory structure.

### Entry Has a Bad Attribute (or Size or Link)

Use DiskFix to analyze and repair directory entries.

If the problem remains, use the Properties command on the File Manager File menu and change the file attribute.

## Errors Found, F Parameter Not Specified

CHKDSK wants to repair disk errors it found. Use DiskFix instead to control the repairs and save Undo information.

## File is Cross-Linked to Cluster

Use DiskFix to repair cross-linked files.

## Invalid Cluster Errors

Use DiskFix to analyze and recover file clusters instead of letting CHKDSK truncate the file.

#### **Insufficient Room in Root Directory**

The root directory is full and there is no more room for entries. On a hard disk, the root directory can contain 512 entries, and fewer on a floppy disk.

You see this message when CHKDSK or DiskFix is writing recovered clusters or directories to the root directory. Move the recovered files to another disk or to a subdirectory, then continue.

## **Invalid Current Directory**

The current directory no longer exists or the directory file is corrupted. Run DiskFix to analyze and repair directory structures.

# Invalid Subdirectory Entry

Run DiskFix to analyze and repair directory structures.

### **Non-DOS Disk Errors**

If you are sure that the disk was formatted for use with a DOS system, run DiskFix to analyze and repair the disk. The problem might be caused by an incorrect media descriptor on the disk.

If the disk was formatted for another operating system, such as a Macintosh, reformat it or use another disk.

# **Processing Cannot Continue**

Use DiskFix to analyze and repair errors.

# Unrecoverable Error in Directory

Use DiskFix to analyze and repair directory structure.

# xxx Lost Clusters Found in yyy Chains

If CHKDSK offers to convert these clusters, answer N (No) and use DiskFix to repair the disk.

#### **DOS error messages**

Access denied Bad command or file name Bad or missing command interpreter Cannot find system files Cannot load COMMAND, system halted Data error reading (or writing) drive x Disk boot failure Divide overflow Drive not ready Error in EXE file Error loading operating system Error reading (or writing) fixed disk Error writing directory Error writing FAT Error writing partition table File allocation table bad drive x File creation error File not found General failure reading (or writing) drive x Incorrect DOS Version Insufficient disk space Invalid current directory Invalid drive specification Invalid partition table Invalid path, not directory, or dir not empty Memory allocation error Missing operating system Non-DOS disk error reading (or writing) drive x Non-system disk or disk error Not ready reading drive x Path not found Read fault error reading (or writing) drive x Sector not found error reading (or writing) drive x Seek error reading (or writing) drive x Top level process aborted, cannot continue Unable to create directory Write protect error

### **Access Denied**

You do not have access to the file.

If it is a read-only file, you cannot delete or change it. If you have access rights to it, use File Manager's Properties dialog box to change the file attribute.

If it is a network file, you may not have access rights. See your network administrator.

If the file is on a local drive, make sure that you are not trying to open a directory as if it were a file or delete or write to a read-only file.

If there are too many files in the root directory, you might get this message. This means that your root directory is corrupted. Run DiskFix.

If the file is corrupted, you might also get this message. Restore the file from a backup copy.

### **Bad or Missing Command Interpreter**

DOS cannot find COMMAND.COM or an equivalent command interpreter.

If the file is on the disk, edit your CONFIG.SYS file and make sure that the SHELL command points to the correct file name and location.

If the file is missing, copy it to the root directory from another disk and try again.

If you are running disk-compression software, such as Stacker, and you use one of its utilities to switch drive letters around, if that utility is not loaded or is not working, the operating system might be searching the wrong logical drive for COMMAND.COM.

### **Cannot Find System Files**

The DOS system files are missing or damaged, or COMMAND.COM does not match the version of the system files.

Use your emergency disk to run PC Tools for DOS DiskFix and repair and analyze the system files. After DiskFix has repaired the disk, you might have to use the SYS command to copy the system files again.

If you still have problems, use the DOS SYS command to copy the system files from the emergency disk or another disk that contains the DOS system files. Make sure that the system files match the version of DOS on the disk you cannot boot. Then try to boot the system again.

This error also occurs if you change the active DOS partition, or it gets changed by accident, or if you have more than one physical hard drive and the normal boot drive fails to respond during bootup.

### Cannot Load COMMAND, System Halted

First edit your CONFIG.SYS file and make sure that the SHELL command points to the correct file name and location. Then reboot your system.

If you get the same message, follow these steps:

- 1. Boot from your emergency disk.
- Locate all copies of the COMMAND.COM file on the disk that cannot load COMMAND. If you find more than one, delete extra copies, leaving only one in the root directory. Make sure that the file you keep is for the version of DOS that you are using.
- 3. If there is no COMMAND.COM on the disk, copy it from the emergency disk.
- 4. If the system still does not boot, edit the CONFIG.SYS file and add a SHELL command to point to the COMMAND.COM file. Then edit your AUTOEXEC.BAT file and add a SET COMSPEC= command, as instructed in your DOS manual.

#### Note

This error might also occur if there is a TSR memory conflict, either with another TSR or with an application you are trying to run.

#### **Drive Read or Write Errors**

Run DOS DiskFix using the Surface Scan or Revitalize options.

DOS DiskFix is on your emergency disk, if the disk is large enough. It is also on the DOS utilities disk that is part of your PC Tools for Windows installation disk set and in the DOSUTIL subdirectory of your PC Tools for Windows directory.

# **Divide Overflow**

Reboot your system.

If you get this error again when you use a particular program, contact the program manufacturer.

#### **Drive Not Ready**

If the drive contains a floppy disk, make sure that it is a DOS disk, that it is inserted correctly and that the latch is closed. If you still get this message, run DiskFix to analyze the disk.

If the drive is a hard disk, follow these steps:

- 1. Reboot from your emergency disk and use it to rebuild your partition table and boot sector. Then boot again from the hard disk.
- 2. If necessary, run DiskFix from the emergency disk with the Test Partition Table option.
- 3. If you still get the "Drive not ready" message, make sure that the drive itself is properly connected to your system. You might have a loose cable or some other hardware problem.

#### Error in EXE File

Try starting the program with another copy of the .EXE file from the original program disk.

If this works, run DiskFix to correct the .EXE file on the hard disk. Its directory entry might have an error or the file itself might be cross-linked.

### **Error Loading Operating System**

Reboot your system.

If you get the same error, boot from the emergency disk and run DiskFix to analyze and repair the disk.

If you continue to get the "Error loading operating system" message, boot from the emergency disk and use the DOS SYS command to copy all system files to the hard disk. Then edit the CONFIG.SYS file to make sure that the SHELL command points to the COMMAND.COM file. Occasionally, you might get this error if you have minor damage to your boot sector or partition table.

# **Error Writing Directory**

Use DiskFix to analyze and repair the disk, then reboot.

#### **Error Writing Partition Table**

You have already destroyed data on the disk if you are modifying a partition table, so you can perform a low-level format of the disk. The dealer who sold you your hard disk can tell you how to do this. Some drives must be low-level formatted at the factory.

After you have performed a low-level format, use FDISK to repartition the disk and reboot.

Then use PC Format from your Emergency Utility Disk to reformat the drive.

If you have a backup of the data that was on the disk before you tried to create or modify the partition table, you can restore it to the newly formatted and partitioned disk.

#### **File Creation Errors**

Make sure that you have write access to the file you are modifying. Use the Properties dialog box on the File Manager File menu to change file attributes. If it is a network file, you probably cannot change your access rights.

If you are creating a new file in the root directory, the root directory may be full. Try to write the file to a subdirectory or move or delete some existing files.

If you are creating a new file in a subdirectory, the directory file may be corrupted. Run DiskFix to analyze and repair directory structure, then try again.

### General Failure Reading (or Writing) Drive x

Make sure that the disk is formatted correctly for the drive. If it is not, reformat it or use another disk.

If the disk is formatted correctly, use DiskFix to analyze and repair it.

If there is no software problem, there might be a hardware problem. The drive might be overheating. Turn off your system for at least 10 minutes so that it can cool down before you reboot.

### **Incorrect DOS Version**

You might be trying to run a DOS command from a different version than the one used to start your computer.

- 1. Enter the DOS VER command at the DOS prompt to find out what version of DOS you used to start your computer.
- 2. Make sure the DOS utility or command is from the same version. Compare the file date for this utility or command with the date of another command that works. They should be the same.
- 3. If there is any question, copy the utility or command from your original DOS disks.

### **Invalid Drive Specification**

If you see this error when you start your computer, follow these steps:

- 1. Reboot from your emergency disk, and use DiskFix from your emergency disk to rebuild the partition table and boot sector.
- 2. If necessary, recopy the partition driver from the emergency disk or from its original disk to your hard drive and reboot.
- 3. Run DiskFix to analyze the disk.

If you are running disk compression software such as Stacker, you might see the error if the driver for the compressed drive is missing or damaged, or if the compressed volume itself is damaged. Consult your disk compression software manual for information about what to do.

#### Note

Viruses can damage the boot sector and partition tables. Run Central Point Anti-Virus to make sure that your system is free of virus infection.

## **Invalid Partition Table**

This error might mean that you have lost all data on the disk.

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- Reboot from the emergency disk and run DOS DiskFix. If the damage is too severe for DiskFix to repair, you may have to run FDISK to repartition the •

drive, then PC Format to reformat it.

# Warning

Depending on the version of FDISK you use, you will probably lose all data when you repartition the drive. This is why backups are essential.

# Invalid Path, Not Directory, or Dir Not Empty

You see this message when you try to remove a directory with the DOS RD command.

First, make sure that you have deleted all files and any subdirectories.

If you still get this message, use DiskFix to analyze and repair directory structure, and try again.

# **Memory Allocation Error**

Reboot your computer immediately to clear Random Access Memory (RAM).

Until you reboot, your system might behave unpredictably, the system might lock, or you might lose data in files you access.

# **Missing Operating System**

Run DiskFix to repair any directory structure errors.

If this does not solve the problem, use the DOS SYS command to copy system files to the disk.

If you still get this error, copy or back up any files you want to keep, then use PC Format from your emergency disk and select the Install System Files option.

Then you can restore the backups or other copies of files.

# Non-System Disk or Disk Error

Use another bootable disk or use the DOS SYS command to copy system files to the disk. If you think this disk should be bootable, run DiskFix to analyze and repair it.

#### **Media Errors**

Run DOS DiskFix with the Surface Scan option, or the Revitalize option if necessary.

DOS DiskFix is on your emergency disk, if it is large enough. It is also on the DOS utilities disk that is part of your PC Tools for Windows installation disk set and in the DOSUTIL subdirectory of your PC Tools for Windows directory.

As a last resort, perform a low-level format if possible and run FDISK from your emergency disk. Then restore your data from backup copies.

# Path Not Found

This problem may have a simple cause. Follow these steps to find it:

- 1. Check your spelling.
- 2. If the spelling is correct, change to the directory where the file you want to use is located. If this solves the problem, you might want to add this directory to your PATH command.
- 3. If the directory is not where you expected, use SmartFind to find it.
- 4. If this fails, the directory may be deleted. Use Undelete to find and recover it.
- 5. If you still cannot find the directory and you are sure that it exists, use DiskFix to correct any directory corruption.

### **Top Level Process Aborted, Cannot Continue**

Reboot your system.

Then run DOS DiskFix to analyze and repair the disk.

DOS DiskFix is on your emergency disk, if it is large enough. It is also on the DOS utilities disk that is part of your PC Tools for Windows installation disk set and in the DOSUTIL subdirectory of your PC Tools for Windows directory.

As a last resort, run FDISK from your emergency disk and perform a low-level format if possible. Then restore your data from backup copies.

### **Unable to Create Directory**

If you are creating a subdirectory of the root directory, make sure that it is not full. The root directory on a hard disk can contain only 512 files and directories. A disk label counts as a root directory entry, too.

The disk itself might be full. Check to find out how much available disk space you have left.

If the root directory and disk are not full, or close to full, try a different name. There might be a file with the same name in the directory where you are creating a subdirectory.

#### Write Protect Error

If the drive is a floppy disk drive, remove the write-protection tab from the disk and try again.

If the drive is on a network, make sure that you have proper privileges to write to it.

If the drive is a compressed drive, the volume might be damaged. Consult the drive-compression software manual for information.

### **Data Protection Guidelines**

The most effective insurance against lost data is a recent backup copy of your data files.

When you installed PC Tools for Windows, you made an emergency disk that contains crucial bootup information for your unique system. The emergency disk insures you against losing your whole hard disk.

### Note

In an emergency, when you cannot use files on your hard disk, use the programs below from your emergency disk or the DOS utilities disk supplied with PC Tools for Windows.

### Problem

## Program To Use

Accidentally deleted file Undelete

Accidentally formatted disk Unformat

Any kind of disk problem DiskFix

Advice about general computer problems and what to do about DOS or CHKDSK error messages is listed under <u>General Problems</u>, <u>DOS errors</u>, and <u>CHKDSK errors</u>.

### **Getting Technical Support**

You can get technical support from Central Point Software by fax, bulletin board, or telephone.

Call the numbers listed in your PC Tools for Windows manual.

Technical support telephone hours are from 6 a.m. to 5 p.m. Pacific time.

When you send us your problems or technical questions, please include as much information as you can about your hardware and software configuration, including the number and kind of disk drives you have, the kind of network you have, the version of Windows you are running, and the names of other programs that were running at the same time a problem occurred.

Make a word-for-word copy of the actual text of any error messages that appear so that you can be precise in pinpointing your problem.

Copies of files that contain basic settings, such as your WIN.INI, SYSTEM.INI, AUTOEXEC.BAT and CONFIG.SYS files, are also useful in diagnosing and correcting your problem.

### Running DiskFix on DoubleSpace Drives

DiskFix can test and repair your DoubleSpace volumes.

#### What is a DoubleSpace volume?

A DoubleSpace volume is a very large, compressed DOS file that is managed by DoubleSpace as if it were a hard drive. Because the volume is really a file, it does not occupy clusters that are marked bad in the underlying drive's FAT, although occasionally clusters become corrupt after data is written to them.

If the drive you select for DiskFix analysis is a DoubleSpace drive, a dialog box asks if you want to use DiskFix to analyze and repair the underlying drive.

- To analyze only the DoubleSpace drive, choose Skip.
- To analyze the underlying drive, choose Analyze Host.

#### When should you run the decompression test?

Run the test if you are experiencing read errors on the DoubleSpace volume.

The most common cause of read errors on DoubleSpace volumes is corrupt data in a cluster. Compressed data is extremely sensitive. If a single character is corrupted, no data in the cluster can be read. DiskFix can test data in each cluster by decompressing it. Because the decompression test takes a few minutes, you might skip it if you do not suspect DoubleSpace data problems.

#### What happens if DiskFix finds corrupt data in a cluster?

If DiskFix cannot decompress data in a cluster, it displays a dialog box showing the corrupted cluster number and associated file name. DiskFix can remove the corrupted data so that the rest of the file clusters can be recovered into a usable file with one missing cluster. The dialog box asks you to choose to remove the corrupted data or leave it.

If you do not run the decompression test, you can still run DiskFix on the DoubleSpace volume. If DiskFix finds any errors, a dialog box describes the error and lets you choose to repair the error or leave it.