Disk OrGanizer - Version 2.05 December 1, 1988

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## INTRODUCTION

A disk that has been in use a while will have fragmented files and directories; that is, some of its files and directories are no longer written in contiguous disk clusters, but are located wherever DOS was able to find available disk space. This increases the time required to access any of that data, puts more wear on your disk drive's head actuator and increases the noise generated by the disk.

Disk OrGanizer will help you speed up your disk access times by defragmenting files and removing deleted entries from directories. It will also allow you to determine the order of files and subdirectories. It can also free some disk space by truncating subdirectories. A nice side effect of this is that non-fragmented files are much easier to recover with the many unerase programs available.

## SHAREWARE

This is a shareware program. This program is not in free; you may use this program for a 30 day trail period, if you wish to continue using this program after that time you must purchase a licence agreement. The cost of a licence agreement for non-commercial use is on a sliding scale of \$5.00 to \$30.00, for commercial use the cost is \$30.00 for the first unit and \$15.00 for each additional unit. Site licenses and commercial distribution licenses are available.

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If you don't support shareware it will go away.

## RUNNING DISK ORGANIZER THE FIRST TIME

Before you do anything else, back up your hard disk, and make copies of any floppy disks you want to organize.

Disk OrGanizer has been tested with MSDOS 2.10, 3.01, 3.10 and 3.30 on logical drives as large as 32 megabytes. It is believed that Disk OrGanizer will operate on any MS/PCDOS DOS disk. (DOS version 4.0 disks with 32 bit File Allocation Tables (FAT) are not supported at this time.) Disk OrGanizer performs extensive tests before it starts to move data, to make sure that the FAT and directories are in good repair and verifies all data written to the disk.

Disk OrGanizer will not cause data loss in a power failure.

WARNING: Power surges to the write head of the disk during a power failure could cause data loss. (This is the case whenever any program is writing to the disk.)

You can now test Disk OrGanizer by typing the command:

DOG [d:] /TEST

[d:] is an optional drive specifier. The current drive is the default. (The []'s mean optional and should not be typed.) If you do not receive any error messages from this command, you will be able to run Disk OrGanizer on the tested drive. Be sure that you have a backup of your data before you continue.

You can now run Disk OrGanizer and defragment all of the files on a drive by typing the command:

DOG [d:] /FAST

If you would also like to recover some disk space by truncating your subdirectories type the command:

DOG [d:] /FAST /TRUNCATE

Please note that you may not have any directories with enough deleted files to allow truncation.

Disk OrGanizer reads and tests the FAT and directories, gives you a report, tells you what it is going to do, and asks you if you wish it to organize the disk. Nothing will be written to the disk until you answer yes to this question.

You may abort from Disk OrGanizer at any time by typing an Esc or ^C (there may be a slight delay). Aborting from Disk OrGanizer while it is moving clusters may cause extreme frag-

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mentation, rerun  $\operatorname{Disk}$  OrGanizer as soon as possible if you abort while it is moving clusters.

If you think that Disk OrGanizer has stopped running, press the space bar, you should then hear a beep within a minute.

If you get error running Disk OrGanizer run CHKDSK with the F switch. (See your DOS manual.)

if you get an "Out of memory error", try running Disk OrGanizer after removing any terminate and stay resident (TSR) programs, if this does not solve the problem try lowering the number of FILES and BUFFERS in your CONFIG.SYS file. (Disk OrGanizer will run with FILES=6 and BUFFERS=1.) If you still get the "Out of memory error" you will have to decrease the total number of files on the drive.

The easiest way to do the above is to re-boot from a disk that has no CONFIG.SYS or AUTOEXEC.BAT files.

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## RUNNING <u>DISK ORGANIZER</u> FROM THE COMMAND LINE

For most applications DOG can simply be run from the command line or a batch file. This chapter will tell you how to do this.

The general format for running Disk Organizer from the DOS prompt is:

DOG [d:] /mode [/TRUNCATE][/BATCH][/NOVERIFY]

(The []'s mean optional and should not be typed.)

d: is an optional drive specifier. The current drive is the default.

mode is one of the following:

/FAST mode will defragment all files and attempt to put them in one area of disk space, FAST may leave gaps of free space between files. This is the mode that should be used by most people.

- /FILL mode will defragment files and put them as close to the FAT as possible, FILL will not leave any free space between files. FILL may leave files fragmented around BAD disk sectors and unmovable files.
- /DATE mode will put the files on the disk oldest files first (closest to the FAT). Using this mode once in a while, it can take a long time to run, may decrease the number of clusters that Disk OrGanizer will need to move with the FAST or FILL mode.
- /DIREctory mode will put the files on the disk in the order in finds them in the directories. That is the first file or sub-directory in the root directory will be closest to the FAT (also referred to as first) followed by the second file in the root, etc. (See appendix B)
- /TRUNCATE is a switch telling Disk OrGanizer to truncate all sub-directories.
- /BATCH is a switch telling Disk OrGanizer to suppress all prompts. If this switch is set any error will cause Disk OrGanizer to return an error code (see Appendix A) and terminate. This is useful for running Disk OrGanizer from a batch file.

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/NOVERIFY is a switch telling Disk OrGanizer not to verify data written to the disk. This will increase the speed of Disk OrGanizer but will allow data to be lost. This switch should not be used on a floppy disk, but may be used on a hard disk at your own risk. This is for people to whom speed is more important than data integrity.

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# RUNNING <u>DISK ORGANIZER</u> WITH AN ORDER FILE

If you would like to have more control over the location of files (a subdirectory is a special file) on your disk you can create an ORDER file.

This file allows you move named files close to the FAT or away from the FAT, any files that are not named in this file are then placed between these two areas.

The area of the disk close to the FAT is called the LOW area and the area away from the FAT is called the HIGH area. Any file that is not named anywhere in the ORDER.DOG file is said to FLOAT.

In making this file you should name as few files as possible.

The command to run Disk OrGanizer with an ORDER file is:

DOG [d:] [orderfile] [/mode] [/switch]

d: is the optional drive.

orderfile is the path and filename of the order file. If this is not included Disk OrGanizer will look for a file called ORDER.DOG in the root directory of the drive being organized and if it does not find that it will look in the environment for 'DOG=d:\path\filename' and use that file.

#### MODES

You must include a mode. The Mode only affects files not included in the ORDER file. A mode given on the command line will override the mode in the ORDER file.

- [FAST] mode will defragment all files and attempt to put them in one area of disk space, FAST may leave gaps of free space between files. This is the mode that should be used by most people.
- [FILL] mode will defragment files and put them as close to the FAT as possible, FILL will not leave any free space between files. FILL may leave files fragmented around BAD disk sectors and non-moveable files.
- [DIREctory] mode will put the files on the disk in the order in finds them in the directories.
- [DATE] mode will put the files on the disk oldest files first.

- You may also set some of these switches from the command line.
  - [TRUNCATE ALL] is a switch telling Disk OrGanizer to truncate all subdirectories. This is the same as the command line TRUNCATE switch.
  - [BATCH] is a switch telling Disk OrGanizer to suppress all prompts. If this switch is set any error will cause Disk OrGanizer to return an error code and terminate.
  - [NOVERIFY] is a switch telling Disk Organizer not to verify data written to the disk. This will increase the speed of Disk OrGanizer but will allow data to be lost. This switch should not be used on a floppy disk, but may be used on a hard disk at your own risk.

## COMMANDS

- [LOW] tells Disk OrGanizer to place the files described by following filenames close to the FAT. This also affects the FREE command. (see below)
- [HIGH] tells Disk OrGanizer to place files described by following filenames away from the FAT. This also affects the FREE command.
- [FORCE] tells Disk OrGanizer not to move the files that follow.
- [FLOAT] tells Disk OrGanizer to ignore the files that follow. This is used if you wish to TRUNCATE a subdirectory but don't want to put it LOW, HIGH or FORCE. NOTE: in future releases this may be used to allow HIDDEN and SYSTEM files to be moved.
- [TRUNCATE] subdirectories named between TRUNCATE and ENDTRUNCATE will have there size changed so that they will use as little space as possible.
- [ENDTRUNCATE] see TRUNCATE above.
- [FREE nn] tells Disk OrGanizer to leave nn clusters of free space after the last file named in the order file if files are being placed LOW or before the file if files are being placed HIGH. Disk OrGanizer ignores this command if there isn't enough free disk space. The nn

may be replaced with an asterisk (\*) if you want all available free clusters in a location.

## FILE-IDENTIFIERS

A file-identifier is a string that starts with a backslash (\), has zero or more subdirectory names, separated by backslashes (the Path) and ends with a filename or subdirectory name. A file-identifier ending with a subdirectory name can be followed by an optional backslash.

It is important to understand that a sub-directory is a file with a special format and that Disk OrGanizer treats subdirectories just like files in the ORDER file except that sub-directories can be TRUNCATED.

You must always include the full path of a file or subdirectory.

Wildcards may be used in filenames. But please note that including a large number of files in the ORDER file can greatly increase the amount of time it take Disk OrGanizer to organize a disk.

## COMMENTS

A comment starts with a semicolon and ends with a carriage return.

## SAMPLE ORDER FILE

# Below is a simple ORDER file:

```
[FAST]
                        ; this sets the mode
[TRUNCATE]
\DIR A\
                       ; Truncate subdirectory DIR_A, but let
                        ; it FLOAT.
                       ; Set move files LOW.
[LOW]
                       ; Truncate subdirectory DOS, and put it
\DOS\
                     ; next to the FAT.
[ENDTRUNCATE]
\COMMAND.COM ; COMMAND.COM will be placed after \DOS.
                       ; set move files HIGH.
[HIGH]
                       ; As this file is used only once, on
\AUTOEXEC.BAT
                       ; reboot, we can move it away from the
                       ; FAT.
\ORDER.DOG
                       ; This file will be place just in front
                       ; of AUTOEXEC.BAT
```

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Appendix A

This is to be added in the next release.

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/DATI	Ξ																												4
	Ector	V																											4
/FAST		4		_																									4
/FILI																													4
COMMA		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
COIII	[END	· TRI	· INC	• ר ב	• והי	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
	[FLO			711	ر ب		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
	[FOR	_		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
	[FRE]			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
			111]		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
	[HIG	_	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
	[LOW]		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	[TRUI	NCA	Y.T.E.	]	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
DOG=		_ •	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	6
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Filer		•	•			•			•			•		•	•	•	•			•		•	•	•	•	•	•		9
FLOA:	Γ																										6	,	7
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Path	<i>x</i> ±0 <i>a</i>	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	9
	eware	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1
SWIT(		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
CMIT	BAT	• ~⊔1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
	-	_	T. 7.7	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
	[NOV]				• . T T	1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
mp:::::	[TRUI	NCP	7 T Ľ	F	LL	1]	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	7
TRUNG	-AIL																												/