

PC Accounting Program V1.1

ACCOUNT
The PC Control Program
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Introduction

Account is a collection of four programs that can work together to help you gain a better understanding of how your Personal Computer works and to help you gain control over it by collecting data about how it runs and controlling aspects of its operation. The programs were written in assembler and C for MS-DOS compatible microcomputers running versions 2.1 through 5.0 of MS-DOS. The programs require at most 128K of memory and have no display adapter requirements except that you should have one.

The Programs

ACCOUNT.EXE

Description

This program keeps a list of all files that were accessed after it is started. It records-in a file-the type of access, the time and date of the access and, of course, the name of the file. Access means

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all opens, deletes, file attribute changes, file closes and renames, it also includes all disk directory deletes and creations as well as the names of all files that were run or executed. *account.exe* must be started from the MS-DOS prompt but will run concurrently with any multi-tasking programs such as Windows¹ 3.0 or DESQview without any problems. *account.exe* is a terminate and stay resident program.

Program Running

Change to the directory that contains the program *account.exe* and type *account* at the prompt. A file name can be given on the command line for an output file but:

- If a file name is given on the command line then
a complete path name must be given (including the drive name).
- However, a drive name (only) can be given (e.g. D:) which will change the drive the default file will reside on, but not the path.

To run *account.exe* type

```
account [drive: | filename] <Return>
```

Examples of Running

Running the account program *account.exe* from a floppy disk with a floppy disk file named *account.act* as the file to store the collected data.

or

```
C>a:account a:account.act
```

Running the account program *account.exe* from a floppy disk with a floppy disk file named

¹ MS-DOS and Windows are trademarks of Microsoft Corporation and DESQview is a trademark of Quarterdeck Office Systems

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account.act as the file to store the collected data. The same the prior example but the logged on disk drive is C:.

or

```
C>account d:
```

Running *account.exe* from C: drive with the output data going to the default directory path but on drive D: so that the complete path to the account data file is *d:\act\account.act*.

or

```
C>c:\etc\account c:\temp\acdata.act
```

The executable program resides in directory *etc* of drive c: and the data file will become *acdata.act* in the directory *temp* on drive c:.

or

```
C>account c:\msd\account\account.act
```

Running *account.exe* from the current directory (or on the current PATH) and placing the output data in a file named *account.act* in directory *msd\account* on c: drive.

or

```
C>account
```

Running *account* from the current directory (or the current PATH) and placing the output file in the default path and name which is *c:\act\account.act*.

Program Notes

The account program records all file opens, file deletes, file renames, file creates, new file creates, and temporary file creates. The account program records all FCB type file closes but not file handle type file closes for handles of number greater than 4 because of an interesting thing that MS-DOS does at the termination of a program or command:

14 close files are automatically generated at the end of each internal and external MS-DOS command (this is true for versions 3.1 through 5.0). The handle numbers are from 5 to 19 inclusive and it is suspected they are sent out as a precaution-it must be pointed out that the files that are closed are not opened (they are not opened normally) and that the closes must have no effect and it is suspected that they are done because of a software fix that was installed years ago and never removed. The 14 closes are in addition to the closes that reflect opens that were done in the program that was run. The 14 closes also occur after each command execution of any type (e.g., a dir command). As this number is inordinately large they are not recorded.

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The *account.act* file that stores the records of disk/file accesses can become large very fast and probably should be looked at fairly often to see if there is any danger of it filling up the disk.

When the account program is run, it zeros out (or blanks) the file that it records data in prior to starting. So if there is data in the file that needs to be saved, it will need to be copied to another file name, e.g.,

When recording file closes that use file handles, account has no access to the file name so only the file handle is recorded in the output file,

You should not run two versions of the program at the same time (although they will not fail).

The default name and path for the data file is

c:\act\account.act.

ACCSTOP.EXE

Program Description

Is a program that is run to stop *account.exe* from collecting data or to stop *accblock.exe* from blocking system functions.

Program Running

From the directory that the program *accstop.exe* resides in type

```
accstop <type a return here>
```

Examples of Running

```
C>c:\act\accstop <return key here>
```

Means run the program *accstop.exe* in directory *act* from the logged on c drive.

Program Notes

accstop.exe needs to be run to stop the accounting program *account.exe* from collecting data or to stop *accblock.exe* from blocking system calls. It should be run prior to examining the accounting data file (generally *account.act*) but that is not absolutely required. Also *accstop.exe* can be run even if neither of those two programs is running.

ACCBLOCK.EXE

Program Description

Is a program that when run will terminate itself but prevent certain type of disk file manipulations from occurring in the future. Manipulations or changes such as file deletes or file renames. The blockage will continue until the computer is re-booted or the program *accstop.exe* is run.

Program Running

Log on to the drive containing the program and change to its directory. Type the *accblock* followed by a Return.

Examples of Running

```
C>c:\act\accblock <Return key here>
```

Causes *accblock.exe* in the directory act to be run.

Program Notes

accblock.exe stops delete files (both FCB and file handle types), rename files (both FCB and file handle types), rmdir (remove directory), and change/get file attributes.

Use *accstop.exe* to stop *accblock.exe* from blocking system calls.

ACCDISP.EXE

Program Description

accdisp.exe is a program that is run to format and display the data that was collected by *account.exe* over the span of its run.

The program has three exclusive ways it can run. They are indicated by switches on the command line:

The meaning of the display formats is discussed below.

Program Running

From the directory that the program *accdisp.exe* resides in type

```
accdisp [-1 | -2] [filename] <return>
```

Examples of Running

```
C>c:\act\accdisp <return key here>
```

Means run the program *accdisp.exe* in directory *act* from the logged on c drive using the default input file. The default input file is *account.act* in the current directory.

```
C>c:\act\accdisp -2 acc.act >acc.out
```

Means run *accdisp.exe* in directory *act* on c drive using *acc.act* in the current directory as the input file and only display the time-ordered data and send the output to the file *acc.out* in the current directory.

Program Notes

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The program displays the output in three formats:

The first is a list of all that was recorded by *account.exe* displayed in a time-ordered format.

The second is a list of all that was recorded by *account.exe* in type ordered format (what that means is that all file deletes are grouped together and separated from all file creations which are grouped together, and so on).

The third is a list of all that was recorded by *account.exe* in a file ordered format (i.e., everything recorded for a particular file name is grouped together).

Registration

All four programs and their documentation are copyrighted and are distributed and intended as shareware. The programs are not free. It is expected that if you decide to use them that you should register for their use. The registration process enables you to use the programs on one computer with what ever number of backup copies (i.e., backup only) are required for your operation. In order to become a registered user send your name along with the registration fee to the author listed below.

The registration fee is \$20 and should be sent in check form to the author

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Any questions or comments should be directed to the same.

If you want for an additional \$3, a 5.25 inch floppy disk containing a copy of the programs and documentation will be sent to you (\$23 total).

Warranty

There are no explicit or implicit warranties given for this product. The author disclaims any responsibility for its effects. The user of the program is the one who should claim responsibility for any adverse effects due to its use.

All effort has been made by the author to make the program reflect the documentation and the documentation reflect the program .

Copying the Program

These programs and their documentation shall not be copied for distribution purposes except in the packed compressed form they started in: they were initially distributed in a single file named *accnts.exe* which when run on an MS-DOS based computer self-extracts a number of files of which this documentation is one.

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Use of this product implies agreement with the above conditions.

Appendix

Installation

It is best that the account programs be installed on a hard disk inside a directory dedicated to their own use. If this is done, then operational procedures become fairly simple. To install this program in a directory named *act* on a hard drive letter c:

To create the directory, from the MS-DOS prompt type

To copy the files from where ever the account programs currently reside type

If the programs reside on a floppy disk, then type

Operation

The following control files can be used to run the account programs. They must be typed in to a batch file (.bat) using a text editor and named with appropriate names.

To start up the accounting program and decode the *account.exe* program output and delete the

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old output file (it is assumed that all the programs listed exist in a directory named *act* on C drive):