PC_Task

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Chapter 1

PC_Task

1.1 Guide to using PC Task 4.0

A Guide to PC Task 4.0

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1.2 Installing PC Task

There are several version of PC Task which comes with the package. Some are based on the processor and the others are a Turbo version. To get the best speed out of PC Task ensure that you use the right version. The Turbo version uses twice as much ram as the standard version, so if you allocated 4Mb RAM for PC Task and type MEM at the DOS prompt you may only get a a quarter of that actually showing! On the PC Task screen there are various settings, these are saved in a PC.Config file. Heres a suggested list of settings which I use: Processor: 80286 Graphics Adapter: VGA Screen mode: PAL High Res Serial: Yes Parallel: Yes Sound: Yes COM2 Mouse: Yes Drive A: DF0: Drive B: DF2: Drive C: PCD: Convential Memory: 640 Extended Memory: 1536 Minimum Leave Available: 192

You should leave enough memory available for AmigaDOS to work.

1.3 Memory in a PC

Memory requirements are different. For best results, the more memory you have the better, since it emulates only a 286 you cannot use Virtual Memory on the hard disk. All PC DOS programs use the first 640Kb of memory, some programs can use Expanded RAM. To use this on a 386 you need the EMS40.SYS (not supplied) which allows you to allocate some Extended RAM as Expanded RAM.

Expanded RAM (EMS) is basically memory divided into 16K pages. When the program requires expanded ram it is paged into a page frame (located in upper memory which is located between 640Kb and 1Mb). This type of memory is slower than Extended memory.

Extended memory (XMS) is memory located above the 1Mb barrier. This requires a memory manager such as HIMEM.SYS (also EMS40.SYS can access this memory). Windows 3.x can use this memory quite effectively.

Upper memory is located above the 640Kb and 1Mb and it is 384Kb large. You need a 386 or higher processor to use this memory and requires the EMM386.EXE memory manager to be loaded.

1.4 Using Floppy disks with PC Task

Most PCs these days use 1.44Mb floppy disks. To use these disks on the Amiga you need to buy a High Density drive to read/write these disks. These drives are now much cheaper than they used to be and are available from most Amiga dealers.

If you are using the XL Drive from Power Computing and having trouble recognising PC disks - try switching to WB (LAmiga+M) and insert the new disk and wait for the Volume to appear before switching back to PC-Task.

To create a bootable floppy disk, there are three methods:

- 1. If the disk is unformatted: Type FORMAT A: /S or if its a double density disk, type FORMAT A: /F:720 /S to format to 720Kb.
- If the disk is already formatted but needs clearing using the Quick Format switch e.g. FORMAT A: /S /Q.
- 3. If the disk is formatted and cleared you can use the SYS command to copy the system files to the disk. Type: SYS C: A: which copies the files from the C: to the A: drive. If C: is the current drive, you can try SYS A: instead.

A bootable floppy should contain COMMAND.COM and two hidden system files: MSDOS.SYS and IO.SYS. To make it more useful, you should copy the following essential files onto the disk from C:\DOS:

FORMAT.COM - To format new disks FDISK.EXE - To create new dos partitions SYS.COM - To create new bootable disks XCOPY.EXE - To copy multiple files and dirs if required QBASIC.EXE - Req. for EDIT EDIT.COM - To edit Autoexec and Config files SCANDISK.EXE - To repair faulty disks UNDELETE.EXE - To recover deleted files UNFORMAT.COM - To recover formatted disks AUTOEXEC.BAT - Copy of your current Autoexec file CONFIG.SYS - Copy of your current Config file

1.5 Using Hard Disks with PC Task

There are two types of hard disks you can use with PC Task. These are HardDiskFiles and Hard Disk partitions. If you have room a Hard disk partition is recommended as they are a lot faster than harddisk files. A 50Mb partition should be adequate for most people.

To set up a harddisk partition use the following procedure:

a)Back up the hard disk as this procedure will erase any files on affected partitions.

b) Run HDToolbox, select Partition Drives.

c) Reduce the size of the partition on the right hand of the bar.

d) Select Add Partition and this will create a new partition. e) Click on Advanced Options, and change the drive name from DHx to something like PCC or PCD (last letter must be a C or D). f) Click on Change File System and select Custom File System, change the Dos Type to 0x4d534800. g) Also turn off the AutoMount feature as this will prevent an inaccessable disk icon from appearing. h) Click on OK and save the changes. Reboot. i) Format the resized Amiga partition as normal and restore any backed up files. j) Run PCTask and for drive C: enter PCC or PCD (or whatever). k) Click on Start and insert a bootable MSDOS disk. 1) You will need to run FDISK to create a Primary Dos partition and activate it. If creating a second disk such as D, change which drive to use (option 5). m) Format the partition using the command: FORMAT C: /S n) Install MS-DOS and any other software. NB: Some DOS installers will format the drive for you so step m can be left out.

1.6 Using CD ROM drives

To use a CDROM drive you need to use the PCTCDROM.SYS device driver and MSCDEX programs in the Config.sys and Autoexec.bat. For example, to use the Zappo CD-ROM drive:

a) Config.sys
 DEVICE=C:\DOS\PCTCDROM.SYS /D:cd.device,0

b) Autoexec.bat MSCDEX /D:MSCD001 /M:8 /V

For scsi CD ROM drives, change the cd.device,0 to the appropriate driver eg squirrelscsi.device,2 for CD ROM on unit 2. Note: that the Amiga device drivers needed to be loaded before being able to use a CD ROM.

1.7 Using a RAM Disk

It is possible to use a read/writable RAM disk in the full and demo version of PC-TASK. To set up a small 64K RAM Disk in Extended RAM add the following line into CONFIG.SYS:

DEVICE=C:\DOS\RAMDRIVE.SYS [d s [n]] /E

where d is DiskSize (in Kb), s is Sectorsize (128,256,512) and n is Num of Entries. Defaults are 64,512 and 64. Use /A for Expanded RAM.

It will allocate the next available drive letter to use as the RAM Disk. It will be perfect for Temporary files or a small work space.

e.g. SET TEMP=D:\ (if D: was set up as the RAM disk)

Note, you will lose whatever is on the RAM Disk once PC-Task is rebooted or exited.

1.8 Operating System

The best OS you can get is MS-DOS 5 or better and Windows 3.1. Windows for Workgroups 3.11 will not work on 286s.

If you have PC Task 4, then you may use MS Windows for Workgroups 3.11. Windows 95 has not been fully tested so don't bother trying to use it.

For more information on Windows click here.

1.9 More on Windows

Windows 3.1 and 3.11 uses a Graphical User Interface. There are several advantages of using Windows over DOS:

- 1) It is not restricted to the first 640Kb as it can use Extended RAM.
- Windows programs are much friendlier to use and the use of special keyboards shortcuts aren't required to remember.
- 3) Use of graphics.

Windows 3.1x uses Co-operative multi-tasking, that is, it is upto the programs to give up CPU time for other programs to run. Currently, this hardly happens and programs tend to use all CPU time. It is possible to run more than one program at a time and switch between them using ALT+TAB keyboard shortcut.

Besides Extended memory there is virtual memory which is diskbased and a lot slower, newer 32-bit programs tend to require this memory. There is also a smaller area of memory called Resources (see Help, About) which is displayed as a percentage. If this gets very small then you may experience 'Out of Memory' messages. This memory is only 64Kb big! This memory is used to display icons, gadgets etc on the display. The only way to fix this is to re-load Windows.

Manager Programs

Program Manager - This is the main screen you will see, the purpose is to display icons for the use to double-click on and run programs. Program icons may be grouped together in Group windows e.g. Main, Accessories, Startup, Games etc. NB: Deleting a program icon DOES NOT delete the program!File Manager - This program is used to manage files such as Copying, Renaming Deleting, Moving and Searching.Print Manager - This program queues and manages output to the printer.

Print Manager - Inis program queues and manages output to the printer. The Print Manager icon appears when output is performed and print out can be paused, stopped or deleted from the queue. Task Manager - This program is supposed to manage programs running. The task list can be brought up using CTRL+ESC or the Program Manager (top left button). Configuring Windows

There are two programs. One is Windows Setup where you can set up mouse driver, screen driver and network drivers. The Control Panel is used to the desktop, install printer, manage virtual memory. set the date and time, set up fonts, sounds and so on.

Installing programs

The standard method is to select Run from the File menu in Program Manager (there is also a Run option in File Manager) and type the name of the installer program (usually A:\SETUP.EXE). Manual installation involves copying the files to a given directory and then use the New option in the File menu to create group or program icons.

1.10 DOS Software

The majority of software which requires DOS should run with the exception of games. There are a few PD games that may work but check requirements first. Many commercial games will not work or run very slowly.

1.11 Windows Software

A lot of Windows software requires lots of memory and disk space these days and run slowly even on 386 PCs. For PC Task it is possible to run some Windows software but an accelerator with at least 8Mb should be able to run some Windows software. If at all possible try to use a DOS based program instead of a Windows program as they will run much faster.

Check requirements before trying to use Windows software.

1.12 The AUTOEXEC.BAT and CONFIG.SYS

These two files specify what device drivers and TSRs to load at bootup. Device drivers include drivers for the screen (e.g. DISPLAY.SYS, ANSI.SYS), the keyboard (KEYB.COM), the mouse (PCTMOUSE.EXE), SCSI and CD ROM drivers. A TSR is a Terminate, Stay Resident program (similar to Amiga's Commodities), for example Virus checkers and so on.

These programs can take up a lot of memory and it is best to ensure these are kept to the minimum. If you have less than 500Kb free then you will experience Out of memory error messages.

Examples,

{b}CONFIG.SYS{ub}

DEVICE=C:\DOS\HIMEM.SYS
DEVICE=C:\DOS\SETVER.EXE

DEVICE=C:\DOS\RAMDRIVE.SYS /E DEVICE=C:\APPS\UTILS\PCTCDROM.SYS /D:cd.device,0 FILES=30 NB: Loads Extended Memory manager, DOS Version control, RAM Disk driver, CD-ROM driver and number of open files to 30. {b}AUTOEXEC.BAT{ub} CLS VER PROMPT \$p\$g PATH C:\APPS\UTILS;C:\WINDOWS;C:\DOS;C:\BATCH;C:\ SET TEMP=D:\ REM SET TEMP=C:\WINDOWS\TEMP C:\WINDOWS\SMARTDRV.EXE C lh DOSKEY CALL C:\BATCH\MACROS

NB: Clears screen, prints DOS version, sets command prompt, set command path, set temporary directory, load Disk cache, shell enhancer and sets ups some macros (aliases).

1.13 Ways of making PC Task Run faster

1. The more memory the better, this is true for real PCs. If you want to use Windows have at least 8Mb of Fast RAM.

2. If you have lots of memory use the Turbo version.

3. Use a lower resolution video driver such as MDA, CGA (Windows will require VGA at least).

4. Use a graphics board rather than the Amiga's chipset as no conversion is required for the boards.

1.14 AmigaDOS vs MS-DOS

AmigaDOS and MS-DOS are similar but there are subtle differences. Below is a list of AmigaDOS commands and their MS-DOS equivalent:

AmigaDOS	MS-DOS
Addbuffers	RUFFFRS-n (in Config sys n=1 to 99)
	borreks-n (in coning.sys, n-i co yy)
AddDataTypes	n/a
Alias	DOSKEY name=command
Ask	CHOICE
Assign	SUBST
Avail	MEM
BindDrivers	DEVICE (in Config.sys)
Break	BREAK (in Config.sys turns Ctrl-C on/off)

CD CD ChangeTaskPri n/a ConClip n/a Сору COPY Copy All XCOPY CPU n/a DATE and TIME Date Delete DEL or ERASE Delete All RMDIR or RD (or DELTREE) Dir DIR DiskChange n/a Diskcopy DISKCOPY Echo ECHO ΕD EDIT Edit EDLIN Else n/a Endif n/a n/a EndSkip Eval n/a Execute CALL Failat n/a Fault n/a FileNote n/a FixFonts n/a FORMAT Format n/a Get GetEnv n/a IconX (Use .PIF files in Windows) If ΙF If Exists IF EXIST If Warn|Error|Fail IF ERRORLEVEL n CHKDSK Info Install SYS IPrefs n/a COPY file1+file2 filen Join :label_name Lab List DIR WIN (loads Windows) LoadWB Lock n/a n/a MagTape MakeDir MKDIR or MD MakeLink n/a More MORE <file_name DEVICE= (in Config.sys) Mount NewCli n/a NewShell n/a Path PATH Prompt PROMPT Protect ATTRIB Quit n/a Relabel LABEL RequestChoice CHOICE RemRAD n/a RequestFile n/a Rename RENAME or REN Resident n/a (most common commands are in COMMAND.COM) Run n/a

Search		FIND
Set		SET
SetClock		DATE and TIME
SetDate		n/a
SetEnv		SET
SetFont		n/a
SetKeyboard		KEYB
SetPatch		n/a
Skip		GOTO
Status		n/a
Туре		TYPE
Unset		SET name=
UnSetEnv		SET name=
UnAlias		DOSKEY name=
Version		VER
Wait		n/a
Which		TREE/F FIND "filename"
Why		n/a
Serial		MODE COM
Printer		MODE LPT
ScreenMode		MODE CON
ShowConfig	MSD	
HDToolbox		FDISK
PrintFiles		PRINT
DiskDoctor		RECOVER/SCANDISK
HDBackup		BACKUP/RESTORE/MSBACKUP

1.15 Transferring Files

In PC-Task it is possible to transfer files between the PC and Amiga sides using the utilities provided:

In PC-Task

DIRA	Dire	ctory	of	an	Amig	a disk.
	e.q.	DIRA	Woi	ck:I	Docs/	Letters

COPYTOA Copy one file to an Amiga disk. e.g. COPYTOA C:\MYFILE.TXT Work:Docs/Letters/MyFile.txt

COPYTOI Copy one file from an Amiga disk. e.g. COPYTOI Work:Docs/Letters/MyFile.txt C:\MYFILE.TXT

NB: Note that the commands do differentiate between ' $\$ used in MS-DOS and '/' used in AmigaDOS.

In Workbench

If you have a Hard Disk Partition or a HardDisk file, run the PCTCrossMount Program. This requires the C: or D: entries saved in the PC.config file and will automatically create a DOSDriver to be used

-only- in Workbench (It is NOT to be used by PC Task in the C: or D: entries). To make the icon created in RAM: a DOSDriver, load up a text editor and delete the first line 'TCC:' and the '#' at the end. Then create an .info file for it and change the following: Default tool should be C:MOUNT Add Tooltype ACTIVATE=1

To get the icon to appear, execute the command DIR TCC: or whatever from the Workbench/Execute menu option. You can now drag files to/from the MS-DOS partition.

1.16 Using PC files on Amiga

It is possible to use PC files on the Amiga and vice versa although in some cases some conversion work may be needed.

Text Files

PC and Amiga text files differ in one respect. PCs use CR (Carriage Return) and LF (Line Feed) characters at the end of each line, while the Amiga only use LFs. To remove the extra CRs you should load the CrossDos commodity which does this automatically. Alternatively, there are a few PD programs to do this for you.

Word Processing Files

Most PC Word Processing documents are incompatible with Amiga word processors if saved in their native format. Some Amiga Word Processors can import different types of files such as ASCII/Text or RTF (Rich Text Format). For example, if you are using Microsoft Word you should save your file twice, once in Word format and then in RTF format so that you do not loose the formatting information (pictures etc may be lost). Wordworth 6 can read RTF files easily.

Graphics Files

The PC has many graphic formats including common ones such as GIF and JPEG. A good PC paint program such as PaintShopPro can convert between many formats including Amiga IFF. There are other formats used by Clipart which are not easily read by Amiga programs and may need to be converted first.

1.17 Version 4 and Otherss

Version 4 of PC-Task

The latest version can emulate a 80486 PC, has CD ROM support, CyberGraphics and speed improvements. Cost is 69.99 pounds and is now available from Wizard Developments. A demo is now available in the archive PC-TASKDEMO40.LHA (or LZX) on aminet/misc/emu. Cost is AUD\$114 or to upgrade from v3.1 is 35UKP (AUD\$60) or from v2.0 is AUD\$84. The UK distributor is Wizard Developments.

There are two versions available a Dynamic (similar to old Turbo which uses more memory) or Interpretive. Speed is quite good but I tried running DOOM using AGA and it was s-l-o-w. Buying a real PC or console would be much better for game playing!.

The latest version is now 4.2 and the patches are available on Aminet in aminet/misc/emu to upgrade from 4.0 or 4.1.

Emulators/PC Boards/Networking

IBeM	- Old and slower PC emulator
CrossPC	- Emulator provided with CrossDOS. Now discontinued.
KCS	- Real 8086 processor for A500
ATOnce	- Real 80286 processor for A500
Bridgeboard	- Real Intel processor board for Zorro based Amigas.
GVP	- Real Intel processor board for A500 hard disk
Emplant	- PC 586 Emulator (Blittersoft)
Shuttle	- Combines Amiga Tower with PC systems inc. Pentium systems!
	(Blittersoft)
Siamese Syst	em - Combines Amiga with a real PC system (HiQ)
PCx	- Latest PC Pentium emulator from Blittersoft (49.95UKP)
Network PC	- Accessing PC drives from the Amiga. Weird Science (19.95UKP)

1.18 The Author

Comments about this document may be mailed to:

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Critisms and additions are welcome! Hope this is of use to someone in Amigaland!