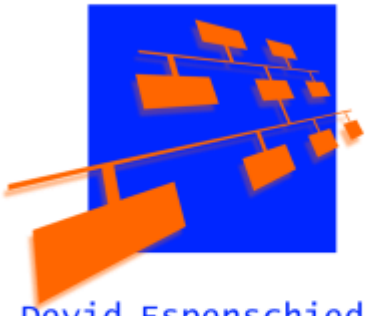

PC Analyser OEM Windows

Manual

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Manual for PC Analyser OEM Windows
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Contents

1. Introduction

PC Analyser OEM Windows is a Windows based inventory software, which detects all hardware components in a computer system. These are distributed in a prepared and clear form. The program was developed for current hardware and doesn't contain any unnecessary program routines for old hardware. Because of this its possible to keep the program size low and still represent all important internal computer data compactly.

Because of the addiditonal automatic program flow, *PC Analyser OEM Windows* can be used on the one hand to detect all network connected computers, and on the other hand as single user software. For the use in a network the software can generate a detailed description of the network computers, so that the created reports can be used for the documentation of a network. If the software is used in repair centers and production environments, the generated reports can being viewed as final reports for the computer systems.

By the purchase of the software the complete feature range can be used without reservations. For this the determination of different serial numbers, Mac addresses of network boards, hard drive diagnosis with S.M.A.R.T. as well as the batch capability are limited in the demo version. The license conditional restrictions of the demo version aren't available after the purchase. A component of the package is next to the software this manual, which extensively describes the possibilities of the software.

2. Program features

In the next list an overview is given of the program features of *PC Analyser OEM Windows*, for that program version which comes with this manual. Further details on the individual features are available in the chapter *Program analysis*.

- Program functionality under all x86 based Windows operating systems (Windows 95 up to Windows Server 2003)
- determine all processors as well as their speed, FSB and multiplyer
- show information about the BIOS, the Mainboard as well as supported specifications
- display the total amount of installed system memory
- determine all PCI devices including chipset, graphic card(s) as well as sound card(s)
- show information about the logical and physical drives
- checks the drive status of hard drives with the help of S.M.A.R.T.
- show information about the installed network cards
- recognize various serial numbers
- detect the operating system as well as service pack, build number and the Windows installation directory
- recognize the computer name and the corresponding workgroup or domain
- slim program design
- compact and clear reports in text- as well as HTM-format
- full batch capability
- modular structure with different device databases, which are exchangeable separately for database updates
- extensive manual with a detailed description of the product
- german and english program language available in one multilingual package
- additional customizations possible on customer request

3. System requirements

The system requirements of *PC Analyser OEM Windows* are quite modest. The mandatory requirements are:

- x86-compatible processor with CPUID support
- Windows operating system with version 95, 98, ME, NT4, 2000, XP or 2003
- local administrator rights under Windows NT4, 2000, XP and 2003
- hard disk with about 1,3 Mbyte of free space for program files and documentation
- for the usage in a network appropriately free storage for the created report files (per report file approx. 6-8 Kbytes)
- for the operating systems Windows 95 and Windows 98 a current DCOM version must be installed on the system. This DCOM update is obtainable from the Microsoft Homepage:
  for Windows 95: http://www.microsoft.com/com/dcom/dcom95/dcom1_3.asp
  for Windows 98: http://www.microsoft.com/com/dcom/dcom98/dcom1_3.asp
  under Windows NT4 Service pack 4 should be installed at least:
  http://www.microsoft.com/ntserver/nts/downloads/recommended/NT4SvcPk4/NT4SvcPk4.asp

4. Program files

The following list describes the files, which are delivered with *PC Analyser OEM Windows*.

In principle, the program is developed so, that for the program execution the files PCANALYS.EXE, PCANALYS.KEY and PCANALYS.DAT are exclusively necessary. The first file is sufficient to start the demo version. Additional files are optional and contain the device databases as well as the documentation.

File	Needed for startup	Description
PCANALYS.EXE	yes	program file
PCANALYS.KEY	yes (only full version)	keyfile with customer data
PCANALYS.DAT	yes (only full version)	program internal file
PCI.DAT	no	database with PCI device names
MAINBRD.DAT	no	database with mainboard names
HANDBUCH.PDF	no	german manual
MANUAL.PDF	no	english manual
HISTORIE.TXT	no	german history file
HISTORY.TXT	no	english history file
LIZENZ.PDF	no	german license agreement
LICENSE.PDF	no	english license agreement
ORDER.TXT	no	german and english order details

The following restrictions are available in the demo version:

- the program start can be done only from a local data drive,
- serial numbers and Mac addresses aren't investigated or shown,
- the S.M.A.R.T. detection is disabled and
- the command line parameters /FILE, /HTMFILE, /DMI, /SOFTWARE and /NOSERCHK are not available.

5. Install / Uninstall

5.1 Install

Installation by using a setup program is not necessary, because *PC Analyser OEM Windows* can be launched by clicking the PCANALYS.EXE file. No entry is made in the start menu of the system.

The additional files PCANALYS.KEY and PCANALYS.DAT are necessary for the program start and contain customers as well as program internal data. For results as comprehensive as possible the device database files PCI.DAT and MAINBRD.DAT have to be kept in the same directory in which are the program and key file. Without the database files *PC Analyser OEM Windows* can't find any manufacturer and device names from PCI devices. If the mainboard database is missing, the mainboard detection is executed about DMI. Additional files are optional and exclusively serve the purpose of the documentation.

Under the Windows NT4, 2000, XP and 2003 operating systems an additional possibility exists to manually install the driver, which *PC Analyser OEM Windows* needs to access the hardware (the driver file HWACCESS.SYS is part of PCANALYS.EXE). In principle this will be taken care of during program startup. The /INSTALL command line parameter performs this process without starting up *PC Analyser OEM Windows*. Performing this installation process will only be necessary when *PC Analyser OEM Windows* encounters startup problems during installation of these drivers.

5.2 Uninstall

Because no setup program has been used, *PC Analyser OEM Windows* can easily be removed by deleting all its files.

The hardware driver HWACCESS.SYS, which is installed with the first program startup, can be removed manually by using the /UNINSTALL command line parameter. In principal however this driver will be uninstalled and deleted automatically by *PC Analyser OEM Windows* when shutting down the program.

6. Command line parameters

PC Analyser OEM Windows can be started up with several command line parameters. These commands can be used to either install or uninstall the hardware driver or to set the desired language.
Furthermore a report generator can be activated from the command line directly which suppresses the startup of *PC Analyser OEM Windows*'s graphical interface. This functionality is ideally applicable in network environments. The command line parameters are:

/?	displays a window with possible command line parameters.
/LANG=Language	manually sets the desired language (DEU = German, ENG = English).
/INSTALL	installs the *PC Analyser OEM Windows* driver manually (only for Windows NT4/2000/XP/2003, see Install/Deinstall).
/UNINSTALL	uninstalls the *PC Analyser OEM Windows* driver manually (only for Windows NT4/2000/XP/2003, see Install/Deinstall).
/DEBUG	activates the debug mode and creates the file *Debug.txt* in the current folder. This file can be used by the program developer to determine further actions.
/FILE=file.txt	activates a text based report generator that creates the report file file.txt. When the equality sign or the file name is omitted, *PC Analyser OEM Windows* automatically creates a report file named *file.txt*.
/HTMFILE=file.htm	activates a htm based report generator that creates the report file file.htm. When the equality sign or the file name is omitted, *PC Analyser OEM Windows* automatically creates a report file named *file.htm*.
/DMI	Creates an exclusively report with DMI data, which are detected with the respectively available DMI version. All other program analysis of *PC Analyser OEM Windows* are ignored by this. You can find further information about this in chapter 8 - DMI analysis.
/SOFTWARE	Creates an exclusively report with the installed software, which is detected by using the entries in the windows registry. All other program analysis of *PC Analyser OEM Windows* are ignored by this. You can find further information about this in chapter 9 - Software analysis.
/NOSERCHK	Skips the plausibility check for serial numbers.

When *PC Analyser OEM Windows* is started without any command line parameters, it detects all specified data and show them graphical in a list.

7. Program analysis

This chapter contains the analysis results represented in the program and explains the individual lines detailed. All analysis groups are separated by parting lines from each other. Several sets within a group appear directly without any blank lines under each other, but are differentiable of the description text.
All countable analysis points are represented in a numbered form. When for example several processors exist in a system, the first processor becomes the description CPU 01, the second CPU 02 and so on. These values appear in the below chapters as CPU nn -- the nn clarifies the enumeration.

An english description for the chapters 7.1 – 7.11 appears here in the next version of this manual.

8. DMI analysis

PC Analyser OEM Windows uses for the determination of internal data frequently the DMI data (*Desktop Management Interface)*, what is indicated in this manual at the appropriate places*.* Because that information provide not all available DMI data, the additional command line parameter */DMI* exclusively show extensive DMI information*.*

For this the conventional report format is disabled and the results displayed as far as the implemented DMI specification. Translations in any case are disabled, so that the data are further workable independently of different language versions of the software as well as the operating system.

The DMI analysis work as well for the automatic report, which can be enabled with the command line parameters */FILE=datei.txt* and */HTMFILE=datei.htm* in connection with */DMI*. For this combination of the command line parameters the DMI information will be divert into the named report file.

The representation of the data starts with the header information which is found out for the SMBIOS and DMI structures. Directly after this the evaluation of the individual DMI structure types is carried out.

You should note, that the DMI information doesn't have to be always correct, because they are partly detected by the BIOS and partly programmed by the mainboard manufacturer. If the detection is done by the BIOS, maybe older BIOS versions can't recognize the newest processors and their qualities correctly or only wrongly. In such a case a BIOS update is recommended when it is provided by the mainboard manufacturer.

9. Software analysis

In many cases it's important, which software is installed on a target system so that further steps can be initialized based on it. With the command line parameter */SOFTWARE* the program *PC Analyser OEM Windows* detects the installed software by using the Windows registry.

For this the conventional report format is disabled and the results are displayed in a list together. Translations or interventions are disabled in any case, so that the data are further workable independently of different language versions of the software as well as the operating system.

The Software analysis work as well for the automatic report, which can be enabled with the command line parameters */FILE=datei.txt* and */HTMFILE=datei.htm* in connection with */SOFTWARE*. For this combination of the command line parameters the Software information will be divert into the named report file.

The representation of the data starts with a small header and after that the numbered software packages. 001 is used as start value for the numbering. According to a colon the name appears to the detected software.

10. Example report

```
PC Analyser OEM Windows v1.5.1 (C) 2003-2004 Devid Espenschied and Sven Bergemann
License/Date/DB: Devid Espenschied and Sven Bergemann / 2004/11/15 12:27:38 / OK
-------------------------------------------------------------------------------
CPU 01               : Intel Pentium III E, 702 MHz (700,00 MHz = 7,0 x 100,00 MHz)
CPU 01: Core/Socket  : Coppermine / FC-PGA (370 Pin FC-PGA)
CPU 01: Cache        : L1: 16 KB + 16 KB, L2: 256 KB, L3: 0 KB
-------------------------------------------------------------------------------
Mainboard            : Micro Star MS-6176
BIOS Type            : Award Modular BIOS v6.00PG
BIOS Version/Date    : 6.00 PG / 03/28/2001
BIOS ID              : 03/28/2001-i810-W83627HF-6A69MM4BC-00
-------------------------------------------------------------------------------
Plug and Play        : yes, Signature: $PnP,    Version: 1.0, Address: F000h:BAE0h
SMBIOS               : yes, Signature: _SM_,    Version: 2.2, Address: F000h:13E0h
DMI                  : yes, Signature: _DMI_    Revision: 2.2, Address: F000h:13F0h
ACPI                 : yes, Signature: RSD PTR, Revision: 1.0, Address: F000h:72D0h
Multiprocessor (MP)  : not available
-------------------------------------------------------------------------------
Chipset              : Intel 82810E (i810E) Host-Hub Interf. Bridge/DRAM Controller
Total memory         : 256 MByte, 2 Modules
-------------------------------------------------------------------------------
Graphic 01: Card     : unknown
Graphic 01: Chipset  : Intel, 82810E (i810E)
Graphic 01: Memory   : 4 MB
-------------------------------------------------------------------------------
Sound 01: Card       : unknown
Sound 01: Chipset    : Intel, 82801AA (ICH) AC `97 Audio
-------------------------------------------------------------------------------
Operating System     : Windows XP Professional
Version / SP / Build : 5.1 / 1.0 / 2600
Product ID           : XXXXX-XXX-XXXXXXX-XXXXX
Operating System Path: D:\WINDOWS
Name of Computer     : MINIBOX
Domain/Workgroup     : WORKGROUP
-------------------------------------------------------------------------------
Drv Description            Capacity          Free   Type            Filesystem/Source
A:  ---                      0 MByte       0 MByte   Removable       ---
C:  BOOT                   705 MByte     319 MByte   HDD             FAT
D:  WINXP                13005 MByte    5920 MByte   HDD             NTFS
H:  IMAGES               10994 MByte    3102 MByte   HDD             FAT32
I:  ---                      0 MByte       0 MByte   CD-ROM          ---
-------------------------------------------------------------------------------
Drv Interface  SCSI-ID  Type        Capacity              SN  SMART   Description
00  IDE        ---      HDD      78159 MByte        XXXXXXXX  OK      Maxtor 6Y080L0
01  IDE        ---      DVD          0 MByte            k.A.  ---     PIONEER DVD-ROM
-------------------------------------------------------------------------------
 Bus Dev Func  Vendor Device SubVendor SubDevice Description
(00 | 00 | 00) 8086h  7124h    8086h     7124h   Intel 82810E (i810E) Host-Hub Interf.
(00 | 01 | 00) 8086h  7125h    1462h     6768h   Intel 82810E (i810E)
(00 | 1F | 01) 8086h  2411h    8086h     2411h   Intel 82801AA (ICH) IDE
(00 | 1F | 02) 8086h  2412h    8086h     2412h   Intel 82801AA (ICH) USB
(00 | 1F | 05) 8086h  2415h    1462h     6760h   Intel 82801AA (ICH) AC `97 Audio
-------------------------------------------------------------------------------
NIC 01: Name    : Intel(R) 82559 Fast Ethernet LAN on Motherboard
NIC 01: Type/MAC: Type: Ethernet, MAC : 10DCB0225F00
NIC 01: IP      : DHCP : no, IP : 192.168.5.101/255.255.255.0, GW : 192.168.5.254
-------------------------------------------------------------------------------
```