ALWIL Software

avast32

The complete antivirus for
Windows 95/98
Windows NT
Windows 2000

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1 Welcome

Dear customer, we congratulate you for purchasing the antivirus package AVAST32, which is one of the best programs in its category. We hope that you will be satisfied with our product and that you will enjoy the comfort of working with this program.

AVAST32 is a package of applications which aim is to protect your computer from virus infection. Using it correctly and periodically and in coordination with other programs as e.g. data backup utilities, you would be able to reduce radically the risk of your computer being infected by a virus, and thus to avoid losing data.

This documentation has been worked out in away that the user will be continually made familiar with the properties and especially the functions of the program as a whole, but also properties and functions of its individual parts. We presuppose good knowledge of basic terms and common skills relating to the environment of operating systems Windows 95/98 or NT without which some parts of it may seem to be rather incomprehensible. Having known anything about such terms as folder, file, window or not knowing how to activate a window or press a button, we recommend you the studying of the corresponding user's manual or help of the operating system.

In case of any problems or questions relating to the program do not hesitate and contact your dealer or the ALWIL Trade company. Their representatives will be glad and willing to help you. The staff of the ALWIL Software company wishes you pleasant and virus-free work with your computer.

2 Contacts

2.1 How to contact ALWIL Software:

If you have any technical problem or good suggestion to AVAST32 program you can contact ALWIL Software technical support

By Email
You can use this address support@asw.cz

By Phone
ALWIL Software has the following phone numbers:
(+420 2) 74005 666
Technical support: (+420 2) 74005 333

By Fax
ALWIL Software can be contacted at this number:
(+420 2) 74005 888.

By BBS
ALWIL Software provides its BBS at this number:
(+420 2) 782 25 50.

By Post
ALWIL Software's postal address is:

ALWIL Software
Prubezna 76
100 00, Praha 10

By Internet

Our web pages are on the following address: http://www.asw.cz/alwil.htm where you can get latest information about AVAST32 program as well as other useful and interesting antivirus related topics.

2.2 How to contact distributor

ALWIL Trade - Main distributor for the Czech Republic and foreign countries with no local distributor

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3 Installation

3.1 System requirements

In order to successfully install AVAST32 in your computer and subsequently use without errors, it is necessary that your computer system should meet a few of basic requirements.

For installation on computer with Windows 95 or Windows98:

- processor 486 and higher
- 16 MB RAM
- 40 MB of free space on hard disk. (The program itself requires 10 MB, the rest 30 MB is reserved for the integrity database file and its index.)

For installation on computer with Windows 4.0:

- processor 486 and higher
- 24 MB RAM
- 40 MB of free space on hard disk. (The program itself requires 10 MB, the rest 30 MB is reserved for the integrity database file and its index.)
- installed Service Pack 3 for Windows NT 4.0 and higher

Even though AVAST32 may be controlled by keyboard, we recommend using mouse or any pointing device.

It applies generally that the better equipment your computer has, the faster responses from particular applications you would receive. Especially important for work under Windows is the capacity of the memory.

3.2 Before you start installation ...

AVAST32 is supplied on CD-ROM medium compressed form and hence it cannot be used directly. An installation program creating all works has been developed for its easy installation.

AVAST32 installation is not just copying of all files to your hard drive. The installation makes all necessary changes to your system and sets up automatic launching of resident protection after system reboot.

Work with the installation CD-ROM very carefully and immediately after installation store it in a safe place. If the installation medium is damaged, the program cannot be installed.

Before starting the installation be sure that you are really working under the operating systems Microsoft Windows 95/98 or Microsoft Windows NT. In case you are not working under either of these systems (e.g. you are using Microsoft Windows 3.x featuring Win32s),

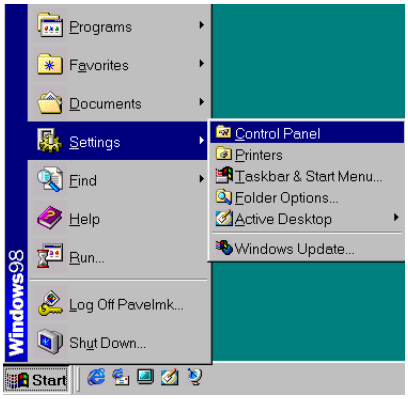
you would not be able to use neither AVAST32, nor the installation program for its installation. The most probable result of an attempt to start-up will be a "system failure" of your computer. In this case try to install the AVAST! program.

Furthermore, be sure that there is no preceding version of the AVAST32 program installed in your computer. If there is any, try to uninstall it. The description of uninstallation of a version of AVAST32 is available in its User's Manual or in the Help. Not doing that, the installation program itself will try to uninstall the older version itself. However, we do not recommend this procedure.

To be able to install AVAST32 in the environment of the operating system Windows NT, you must have administrator's rights. If you do not have them, the installation program will advise you of this fact and refuse to install the program! In this case contact the administrator of your network.

3.3 Startup of installation

You can start AVAST32 installation in several ways. The easiest one is to use a tool in your operating system created for this purpose. Firstly, remove all your floppy diskettes and CD-ROMs and insert installation AVAST32 CD. Click with left mouse button on Start button, choose Setting and then "Control Panels" (fig. 3.1).

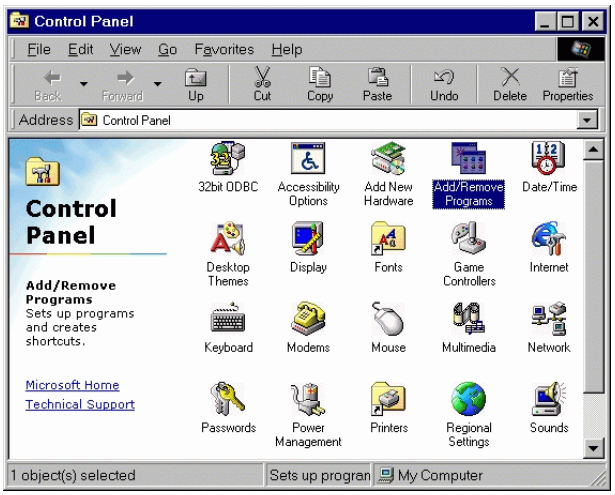


3.1 Control Panels start

After this a window containing several items would appear. Double click with left mouse button on "Add/Remove Programs" (fig. 3.2) item.

In the window which opens on the screen of your computer click on the button "Install...". Having done that, click on the button "Next >". The computer will automatically find the installation program, and the only thing to do now is to start-up - click the button "Finish". The installation process itself is described in detail in the next chapter. More experienced users can also run directly the "Setup.exe" program on the installation CD-ROM or on the first diskette (if you are installing from diskettes). The way of how to run the program is described in detail in the manual or help to the operating system. For normal users we recommend using the first way of the start-up of installation which is described above.

All the ways of the start-up of installation are fully identical and their result will be the same.



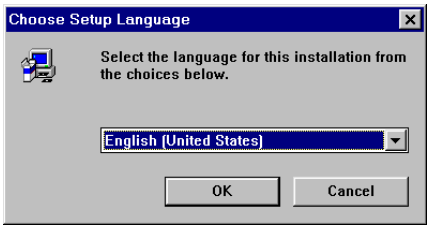
3.2 "Add/Remove Programs"

3.4 Installing

The installation of the AVAST32 program runs in the form of a dialog between the user and installation program. In the following text we will thoroughly describe particular windows which are displayed during the installation.

The installation can be canceled at any time - the way of how to do it is described at the corresponding installation windows. Before the cancelling of installation the user will be asked whether he is serious. After the confirmation of the cancelling of installation everything which has been installed till that time shall be removed and the system shall be placed in its initial status.

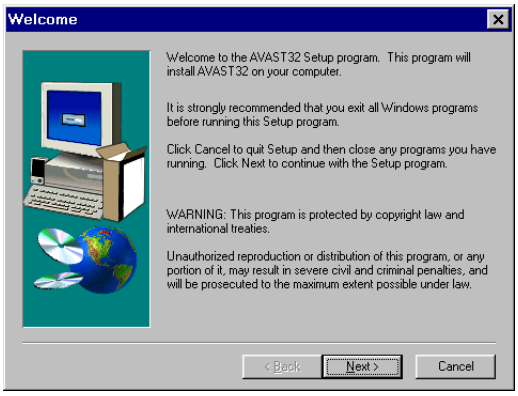
When you start AVAST32 installation you can choose the language (fig. 3.3), which you would like to communicate with in the program. Choosing a specific language from a list, which appears after a click on the arrow to the right form current language, can do the selection.



3.3 Language selection

You will be asked to be patient while the installation is preparing after the language selection.

Once the preparation of the installation is finished, you will see the window (fig. 3.4) of the installation program itself. The Wizard's window is situated in the center and it will

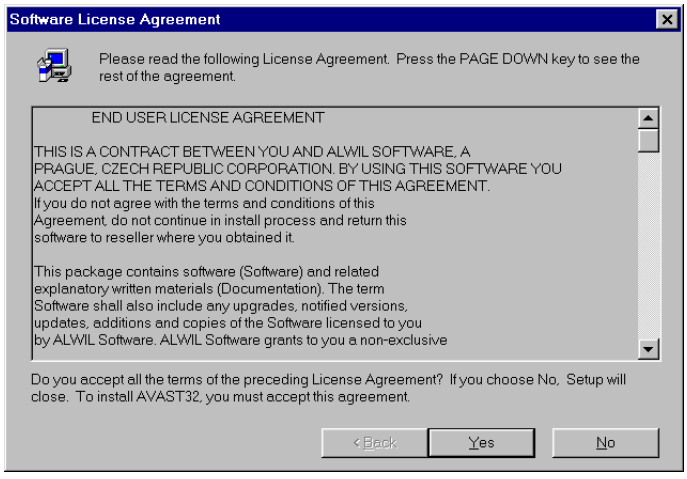


3.4 Window of the installation program

help you with the whole installation process. Its lower part contains three buttons enabling you to communicating with Wizard instructions.

Button "< Back" takes you to the preceding window of the Wizard. If it cannot be used (e.g. if you are at the first installation step, then the button is gray. Button "Next >" takes you to the next step of the Wizard. Before using it, however, we recommend you reading thoroughly the contents of the Wizard's window. Hitting the "Cancel" button you can interrupt the installation process at any time.

The first window of the Wizard provides the user copyright ownership and warns him from unauthorized usage of the program or its parts. Having read it you would move to the next window of the Wizard by clicking on the "Next >" button.



3.5 License Agreement between you and the ALWIL Software

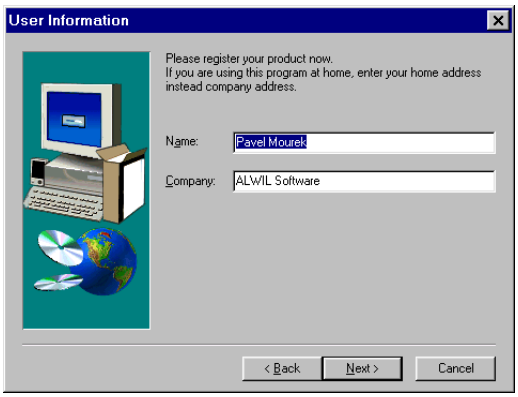
The next installation program window contains the License Agreement (fig. 3.5) between you and the ALWIL Software company. This License Agreement includes conditions that you, being a user of AVAST32, must agree with, and the rights which you have as a user of the program. If you agree with the License Agreement and to all of its parts, click on the "Yes" button. Then the Wizard will lead you to the next installation step. If you do

not agree with the License Agreement, by clicking on the "No" button you will cancel the installation program and AVAST32 would not be installed then.

As the License Agreement is greater than the Wizard's window, it cannot be displayed as a whole. On the right side of the window you will find a slider enabling move in the License Agreement. Its indicator at the same time shows the current position. To display the remaining parts of the License Agreement it is also possible to use the keys designed for the cursor movement upwards and downwards, or the keys marked as "PgUp" and "PgDn" for the movement to previous or next page of the License Agreement.

The window that follows after the License Agreement window displays the README.TXT file. This file contains important information which we have not managed to insert into this documentation because of time limitations. The information may concern the program itself but also e.g. installation, and it may also contain procedure instructions in case of problems. In any case you should thoroughly read the README.TXT file - thus you will avoid possible complications in the future.

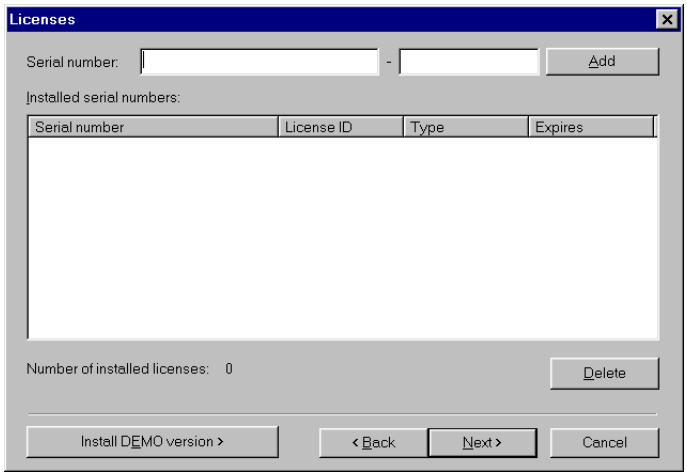
Within the displayed text it is possible to move in the same way as in case of the License Agreement in the previous Wizard's window. Also the window control is similar. If you have read the README.TXT file, by clicking on the "Yes" button you will come to the next Wizard's button. The "< Back" button will return you to previous window with the License Agreement and using the "No" button you will cancel the installation of AVAST32.



3.6 Enter your name and your company's name here

In the following window you are required by the Wizard to enter your name and your company's name (fig. 3.6) (possibly also your address if the installation is designated for home use). The Wizard will try to find out required information by itself, so that most of the customers will be able to confirm preset data. If the data does not correspond to reality, it is of course possible to correct it. If you click with the left button of your mouse to the area of the text box with the data item in question, you will be able to edit it. On the place where you have pressed the mouse button you will see the cursor and using the keyboard you will be able to enter the correct data.

If the data displayed corresponds to the real situation, confirm it by clicking on the "Next >" button and get to the following window of the Wizard. The "< Back" button is



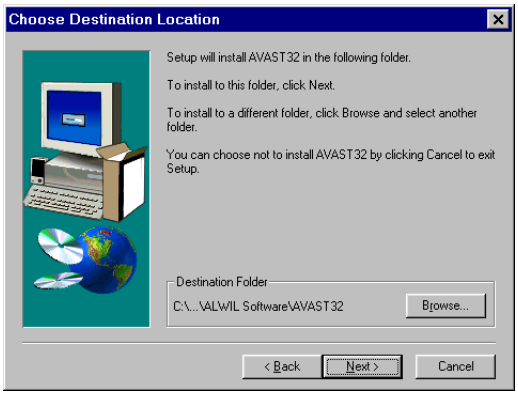
3.7 Enter your activation key here

used to return to the window with the README.TXT file and by using the "Cancel" button it is possible to interrupt the installation.

The next windows shows the Wizard's dialog into which it is necessary to enter the activation key (fig. 3.7) of your program copy. To enter or change data in a particular text box will be possible for you by clicking the left mouse button on the corresponding box. It is also possible to move to the text box in question by repeating pressing the "Tab" key.

Be careful when typing the activation key. The program can not be installed without a valid key! You can install demo version if do not know the key. Just click on "Install DEMO version >".

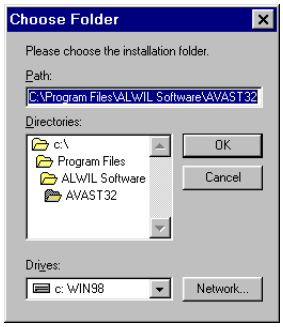
Confirm the activation key by pressing "Next >" button, if the key is valid and correctly entered the Wizard let you proceed further. Otherwise you will get error message and you would have to check the activation key. By pressing "< Back" button you can go back to the registration window, where you can change name or company. "Cancel" button quits the installation program.



3.8 Select destination folder here

If the key was entered correctly a window offering change of AVAST32 installation (fig. 3.8) folder would appear. The folder is in the "Destination Folder" frame. "ALWIL Software \AVAST32" is default folder which would be created on your system disk in "Program files" folder. This is recommended for most users. Others can choose target folder (fig. 3.9) by clicking on the "Browse" button. Default installation target folder is really recommended for less experienced users. They can avoid possible problems this way.

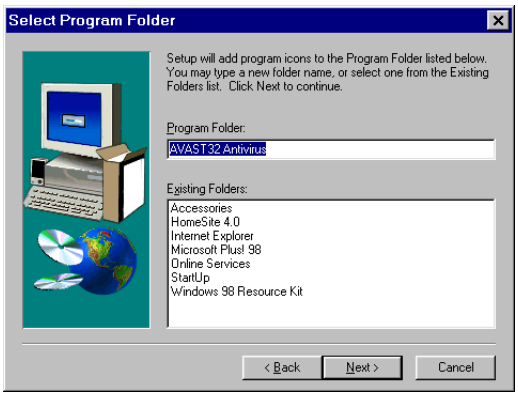
Confirm the destination folder by pressing "Next >" button to proceed further. By pressing "< Back" button you can go back to the activation key window. "Cancel" button quits the installation program.



3.9 You can browse the destination folder here

The next window offers selection of the folder name (fig. 3.10) in program folder, where program icons should be created. "AVAST32 Antivirus" folder is selected by default. You can enter new folder name here or you can choose already existed folder from a displayed list.

Confirm the folder name by pressing "Next >" button to proceed further. By pressing "< Back" button you can go back to the previous window. "Cancel" button quits the installation program.

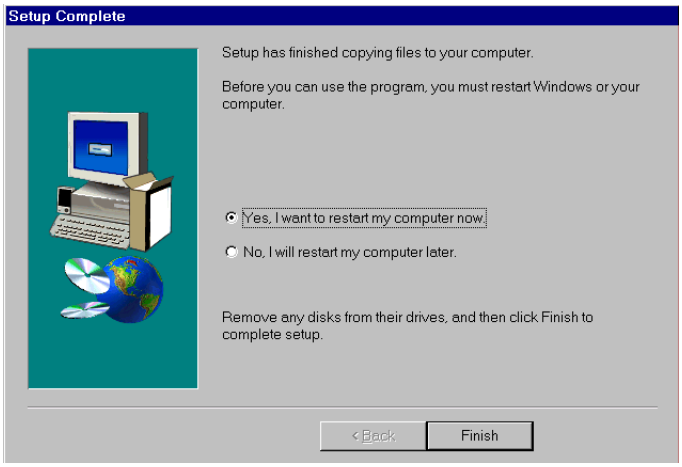


3.10 Selection of the folder name in Program folder

The following window displays all the information you have entered into the Wizard. It means that it contains the user's name, company's name or the address of the user, activation key of the program copy and destination folder, into which AVAST32 is supposed to be installed. We ask you to check the above listed data and if it is not suitable for you or if these data does not correspond to the real situation, you can return to the previous windows of the Wizard clicking the "< Back" button and correct it as appropriate. If everything is according to your requirements, by clicking on the "Next >" button you can start to install the files of the AVAST32 program onto your hard disk. By means of the "Cancel" button you can interrupt the installation.

An indicator in installation window informs you about amount of copied files. Once all files are installed installation wizard automatically goes to the next window.

The last window of the Wizard is shown in this Figure (fig. 3.11). It contains the radio buttons by means of which you can specify whether the computer is to be restarted or whether the installation program is to be completed without restarting your computer. We recommend you to keep the default radio button. By clicking on the "End" button you will finish the installation program and depending on the radio button selected your computer will (or will not) be restarted.



3.11 Computer restart selection

After the installation of the AVAST32 program and before its first start-up it is necessary to restart your computer. If you did not do so with the help of the Wizard in its last window, you would have to do it later by yourself. In the menu of the "Start" button select the "Shut Down ..." command. Then select the "Restart the computer?" radio button in the window displayed, and by pressing the "Yes" button you will restart your computer.

3.5 Problems with installation

The most frequent problems connected with the installation of the AVAST32 program:

- It is not possible to install due to a activation key error. You have entered an incorrect activation key. Make sure that it has really been entered correctly. If you are completely sure that it has and that you have not entered the letter "O" instead of zero

(and vice versa), contact ALWIL Trade Ltd. (the address is on the cover of supplied CD-ROM) and require a check of the activation key.

- AVAST32 cannot be installed because there is not enough space on your hard disk. The only advice applying to this case is: cancel the installation program, empty the necessary space on your hard disk, i.e. empty the recycle bin, delete useless programs, old documents, etc. (we recommend you to make a backup copy of all the things to be deleted, and only then to delete them). For the purpose of a successful installation of the AVAST32 program you will need approximately 40MB of free space on the hard disk onto which you want to install the program. Then, when finished, start the installation program again and repeat the installation process.
- program cannot be installed for user without rights (only in Windows NT). It is essential to have administrators rights under Windows NT for AVAST32 installation. Log out and then log in as administrator or contact your network administrator.

If any other installation errors appear it is necessary to make sure whether they are not caused by your own errors or by errors of your system. If you have fully excluded any problem on your side, do not hesitate and contact the technical support. Note, however, all error messages.

3.6 Administrator's installation

The installation program for AVAST32 supports to the limited extent also the "Administrator's installation", which is based on the preparation of the actual client's installation into the shared folder on the file server. The client's installation itself can be done in a fully automatic way without any user's intervention. This way of installation can be used with advantage especially by the administrators of a large number of computers.

If you want to know more information on the Administrator's installation, read the text file ADMIN.TXT which contains more detailed information on this type of installation.

4 Uninstallation of the program

AVAST32 can be uninstalled from the system at any time. This operation (of course, with the exception of repeated installation) removes AVAST32 from the computer hard disk in an unrecoverable way and places the system to its original status. The uninstallation solves also such problems as the uninstallation of shared libraries and the renewal of internal information in the registers of the operating system.

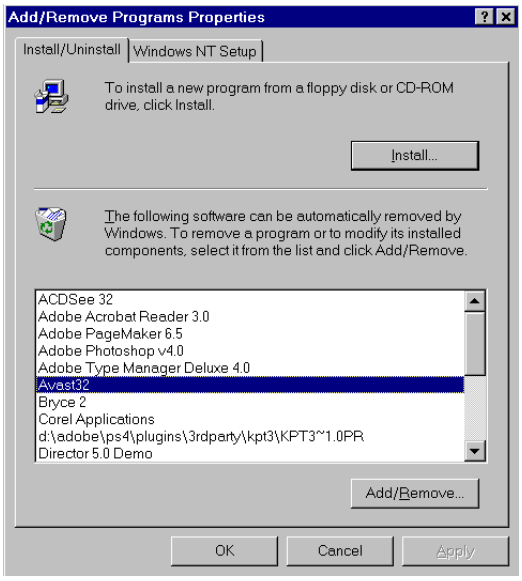
4.1 Preparation of uninstallation

Before the uninstallation of the AVAST32 program make sure that none of the programs has been run. In other case the uninstallation will not be completed as supposed to be and some rests of AVAST32 will remain on your hard disk, or the uninstallation will not start at all; nor will it be possible to restore the internal data of the system at the end. This may be (and most probably really is) a cause of SERIOUS problems in the installation of other versions from the antivirus program AVAST32.

Have a look at the lower part of the screen on task bar. Seeing any of the programs of the AVAST32 system there, cancel it. Press the right button of your mouse and select the "Close" command for the programs run from AVAST32.

4.2 Start-up of uninstalllation

For the start-up of uninstallation we recommend the use of the standard tools implemented into the operating system. You find it in the "Control panel" folder called "Add/Remove Programs".



4.1 List of the installed programs

The window of this tool contains in its lower part the list of the installed programs (fig. 4.1) that support automatic uninstallation (featuring AVAST32, of course). If you want to uninstall a program, in our case the AVAST32 program, double-click the left mouse button the name of the appropriate program. Thus you will start the uninstallation process of the AVAST32 program.

4.3 Uninstallation progress

The uninstallation run itself is fully automatic, except for the primary inquiry, also whether you are serious with the uninstallation. If you answer "Yes", AVAST32 will be uninstalled and the system will be placed in its original status. In case that the uninstallation program is unable to fully uninstall all the parts of the AVAST32 program, this fact will be announced just before the final completion. To remove components used during the uninstallation process restart the computer once the uninstallation is finished.

5 Basic description of program

AVAST32 offers complete antivirus protection of personal computers operated under the operating system Windows 95/98 or Windows NT. The program allows you to perform tests covering practically all aspects of antivirus protection.

Except today's allready classical program for scanning known viruses, AVAST32 also contains the tools that enable you to find macroviruses and polyform viruses as well, it can even discover the presence of viruses which have been unknown so far.

Thanks to resident tests it is possible to check whether the system did not perform any operations that could be caused by the activity of a virus.

The AVAST32 also makes it possible to follow all and any operations that are active within the system, in case of a suspicion, it will block an operation and send a message to the user. It can even scan the files that are being run, and thus prevent the system from virus infection.

New feature of AVAST32 3.0 is the capability of remove controling of the program via network. It allows you to create, modify a start tasks for virus scaning on remote workstations, see the results, and take the appropriate measures directly from your computer.

The next feature added, is task scheduling. You are now able to start virus scanning in time you want.

The user interface of the AVAST32 program is fully compatible with the environment of the operating systems Windows 95/98 and NT and it completely follows common standards. That is why the user working in this environment will not have any problems getting familiar with the program.In order that the users can operate this program comfortably, it contains a wide possibilities of settings, and four user interfaces. The users, which already used the previous version of AVAST32, can chose a user interface similar to the 2.0 version.

5.1 Properties and advantages of AVAST32

AVAST32 is an antivirus program designed for the operating systems Microsoft Windows 95,98 and Microsoft Windows NT. The differences between them under these operating systems are very small and they only result from the different structure of the operating systems, so that the user working with the AVAST32 program under either of these systems will not have any problems with operating this program under the other system.

The main advantage of the AVAST32 program is the quick, and especially, thorough, scanning of your system and all of its parts. The algorithms used, as confirmed by independent tests, are so effective that a virus is recognized in up to one hundred cases out of one hundred! Not only can you test the presence of a virus, but also whether there havebeen any changes made in your computer since the last testing. Thus you can discover even a virus which is still unknown! This test is called integrity checking.

It is possible to scan viruses in time when computer is not fully engaged, so when nobody is working on it. Screen saver can do this, which on the background of user selected screen

saver scans viruses. AVAST32 screen saver can be fully configured to meet wishes and needs of user similarly to other parts of program.

If a file is infected or damaged and if you maintain the database of the files, you can try to restore using AVAST32. The rate of success when restoring a file is up to ninety-five per cent and the AVAST32 program is able to find out the correctness of the renewal up to one hundred per cent in terms of exactness!

The AVAST32 program is able to make use of the tools of network communication. If a virus has been found, all of the authorized users of the network would be advised in time.This property enables you to reduce the risk of a loss of data very efficiently and so prevent the virus infection from its spreading.

AVAST32 makes use of all the advantages of modern operating systems, as for example long names of files(up to 256 characters), new controls or the possibility to perform several program operations at the same time. The user is not restricted any longer and he can make full use of the time spent at the computer and of its capacities. User interface of the program can be fully adapted to the needs and skills of the user. Beginners are sure to appreciate the possibility of operating the program without having to learn the details concerning its operation while experts will welcome the possibility of detailed settings of the program activities and its responses to certain events.

5.2 Basic functions of program

A classical part of the majority of antivirus programs, including AVAST32, is the searching for known viruses (called as virus scanning). The program is to check the tested file for the presence of a certain sequence of bytes, which is then identified as particular viruses. This way AVAST32 can discover a large number of viruses, but as new viruses appear rapidly and regularly, it is essential to update the database of known viruses periodically. AVAST32 is also able to recognize viruses called ”polyform viruses“ which are able to change their own structure during their activity and thus they are very difficult to recognize.

Our product is able to recognize also the macroviruses, which are the viruses spreading out in the form of macros in the OLE documents (e.g. a document of the MS Word application or MS Excel).

A less known way of discovering viruses is represented by integrity checking. This is based on the presumption that at the time when the computer is turned off the virus must be stored in a resident memory. At present the hard disk of the computer is the most frequently used form of such a memory. It implies that if we observe the changes in the files, we will be able to discover even a virus that has been unknown until that time, with the same success as in the case of well-known viruses.

If, for example, a text file (a file with the TXT extension) has been changed, it is possible to say with the probability of ninety-nine per cent that it has not been caused by a virus. However, if a program or even a system file have been changed, the probability of the virus infection is very high. In order to make possible for the exploration of particular files, it is necessary to maintain information on their status, in which they were for a certain period of time. By comparing the current status of the file with the ones stored in the database it is possible to decide in a reliable way, whether the file has been changed or not. Hence if you perform the integrity checking e.g. every week, the user will be advised of all the changes that have been made in his files during the previous week before the test.

The information on the files, which is stored in the database of the files, can be used by the AVAST32 program, for besides the integrity checking, also for the rerairing of the original status of the files. If you maintain the database of the files periodically, you can attempt to repair your files in case of a virus infection. On basis of the database of the files it is possible to determine with maximum precision whether a file has been repaired successfully or not.

The AVAST32 program also offers the possibility of testing all suspicious operations on the files and system areas of the disks in the system, and to in form the user before they are performed. Then the user will have two options, either to authorize such an operation or to prevent it from being performed. This resident protection is called "Behaviour blocker", and it is based on the fact that the overwhelming majority of viruses perform certain operations with files during their activity, no matter whether or not they infect the files or damage them in a certain way.

It can even happen that a virus is present in the computer, but it may not be infected. For a virus to become active, it is necessary to start it. It implies that the majority of viruses attack the executable files, i.e. especially programs. AVAST32 offers you a resident activity called "Executable and OLE document protector", which performs a test of all programs run in your computer. Thus, if you want to start a program, AVAST32 will first check it, and whether or not it contains any virus. If everything is O.K., the program will normally be started. How ever, if a virus has been found in the program, you will receive a warning message, and the program will not be started without your authorization.

Another relatively frequent group of viruses is represented by viruses spreading out in the system areas of disks, i.e. in regular in the boot sector of diskettes. To state the truth, a computer cannot be infected if an infected diskette has only been inserted into the drive, but it can happen that the system is accidentally booted from a diskette forgotten in the drive, and thus the computer is likely to be infected. AVAST32 contains a resident activity called "Boot sector Protector", which at the first access to any diskette, first checks its boot sector, whether it does not contain any virus. If a virus is found, the program informs the user about the findings through a warning message. If no virus has been found, it is possible to work normally with the diskette.

6 Getting started

6.1 Start of program

You can immediately start using AVAST32 if the installation of the program is successfully completed.

The installation program has created "AVAST32 Antivirus" folder for you (if it hasn't been changed during the installation) containing "AVAST32" shortcut. The created folder is situated in the menu of the "Start" button (it shall be displayed after clicking on this button by the left button of your mouse), in the "Programs" folder.

The form of the menu of the "Start" button depends on the setting of your operating system and on the programs installed so far.

So for starting the AVAST32 program click on the "Start" button, then select "Programs" folder, search for "AVAST32 Antivirus" folder and in this folder click on "AVAST32" icon.

6.2 Which user interface to use?

After the first start of AVAST32 program its main window would appear. It is a window of "Simple user interface". If would like to choose other interface, click with the left mouse button on the icon in upper left corner of the program and select the interface from a displayed menu.

AVAST32 program provides four user interfaces:

It is "Simple user interface" which is suitable for beginners and less experienced users, and for users who don't need to set all the parameters of the program and don't want to learn to how to control another program. The interface if fully controlled via buttons and icons.

Program also offers "Enhanced user interface", which allows to user to set everything related to the program in details. This user interface is designed especially for experienced users, network administrators and all other user who require full control of the program. This user interface can be selected via "View" from main menu by selecting the "Enhanced user interface". If you would like to use the most of new network functions of AVAST32 program is this interface right for you.

For the user of previous version of AVAST32 program there is an option to choose the interface they know from the version 2.0.

"Version 2.0 Simple user interface" is targeted to beginners and common users, who are used to use "Tasks" in AVAST32 program. This user interface can be selected via "View" from main menu by selecting the "Version 2.0 Simple user interface".

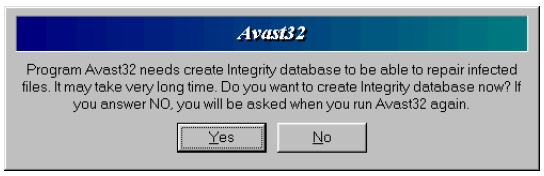
"Version 2.0 Enhanced user interface" is intended for experienced users. This user interface can be selected via "View" from main menu by selecting the "Version 2.0 Enhanced user interface".

7 Simple User Interface

If you want to detect the presence of viruses in your computer without having a detailed knowledge of AVAST32 functions Simple User Interface (fig. 7.1) is dedicated for you. You will probably encounter this interface upon your first run of AVAST32.

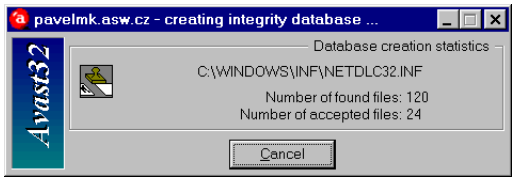
7.1 Simple User Interface

Upon the first run of AVAST32 you will be asked (fig. 7.2) whether you wish to create integrity database. If you have time enough answer yes. Integrity database is essential when there is a need to repair infected files in the future. If you do not have time enough, postpone the creation of integrity database for another time, program will ask you again.



7.2 Window enabling an automatic creation of integrity database

This window (fig. 7.3) will inform you about the process of integrity database creation. This process can be canceled anytime by "Cancel" button.



7.3 Window informing about the process of integrity database creation

7.1 Description of the main window of Simple User Interface

Main window of Simple User Interface consists of a few parts.

The first of them is the information status window showing the actual situation of the program. Using this window, the program informs you about its activity.

Beneath this window, control buttons are available which have a design similar to control buttons of, for example, CD player. The control buttons have the following functions:

- ”Play“ Button (fig. 7.4) runs a selected areas testing,

7.4 ”Play“ Button

- ”Pause“ Button (fig. 7.5) enables to pause or continue testing,

7.5 ”Pause“ Button

- ”Stop“ Button (fig. 7.6) finishes current testing,

7.6 ”Stop“ Button

- This button (fig. 7.7) enables to show statistics and current results of testing.

The lower part of the window is designated for a selection of areas which are to be tested. Areas are represented by Icons (fig. 7.8) that are similar to those you know from Windows.

Last icon (fig. 7.9) enables to turn on or off resident protection. The meaning and detailed description of resident protection can be found in the ”Resident protection“ chapter.

7.7 Button for showing statistics and current results of testing

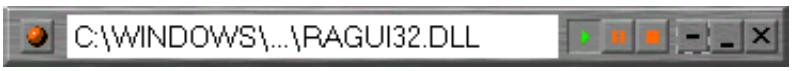
7.8 Icons for a selection of tested areas

7.9 Turning on/off resident protection

Icons (fig. 7.10) in the right upper corner of the program window have the following functions.

7.10 Icons

- first icon displays help,
- second icon increases or decreases (fig. 7.11) program window,



7.11 Decreased window of AVAST32 program

- third icon minimalizes the window,
- last icon shuts AVAST32 program

7.2 Testing in Simple User Interface

Two steps are to be taken to run testing in Simple User Interface:

- select areas to be tested,
- run testing.

If you decide to test your local disks you do not have select anything. You just click on the "Play" button. Program automatically clicks on the button representing local disk and starts to test data stored on the local disk of your computer.

If you decide to test something else than local disks, for example a diskette, you only need to click on the button representing a diskette and then click on the "Play" button. The program will test a diskette.

If you decide to test more areas at once there is no problem. Select areas you want to test by step by step clicking on their icons and then click on the "Play" button.

If the pre-defined areas are not enough or you want to specify the areas more accurately, click on the picture of a folder. A window containing an explorer-like tree will appear. Choose the folder you want to test and then click on the "Play" button.

Buttons used for a selection of tested areas work as switches. You turned them on after one click and off after the other click.

If you want to pause testing click on the "Pause" button and the testing will be paused. After reclicking on this button, the testing will continue.

If you want to shut testing before it finishes, click on the "Stop" button and the testing will be shut.

Text displayed in the information window informs you about the testing process. If a virus is found during the testing a virus warning message will be displayed. This message is described in the "Common control options/Virus warning message" chapter.

When the testing is finished Results Table (fig. 7.12) can be displayed showing information about testing finished: run time, number of tested and infected files. The information window will contain briefly described result of testing. If it says "No virus found" everything is ok.

However, if the "Virus found!!!" message appears it will be accompanied by window (fig. 7.13) showing the list of infected files.

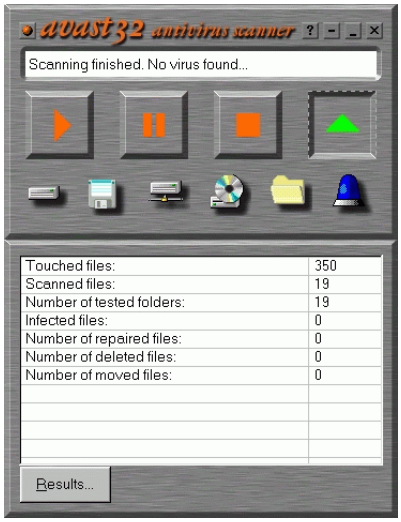
Each item of the list can be treated by "Move", "Delete" or "Repair" buttons.

The meaning of these buttons is described in the "Files treatment by AVAST32 program" chapter.

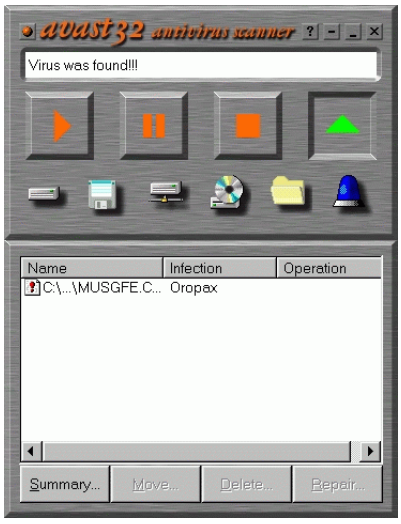
7.3 Simple User Interface Menu

Simple user interface Menu (fig. 7.14) is available through an icon in the left upper corner of the main program window. Clicking this icon, a following menu will offer:

- Simple user interface - selected by default,



7.12 Testing results table

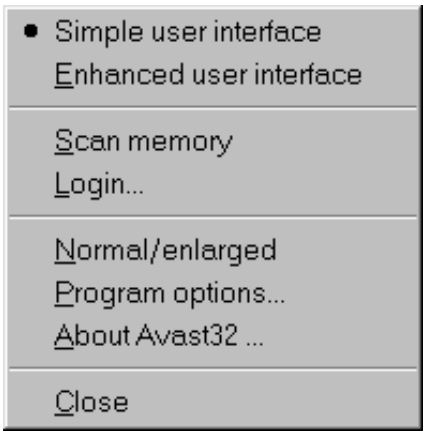


7.13 Window showing the list of infected files

- Enhanced user interface - enables to switch to Enhanced user interface,
- Scan memory - scans memory for the presence of known viruses, displays the information about the testing result. For Windows NT, only administrator can run this task.
- Login - displays a window for login,
- Normal/enlarged - serves for switching the window size of Simple user interface,
- Program options - enables to set program options,
- About AVAST32 - shows information about AVAST32.

Scanning memory or login can be carried out only if testing is not running.

Setting simple user interface options

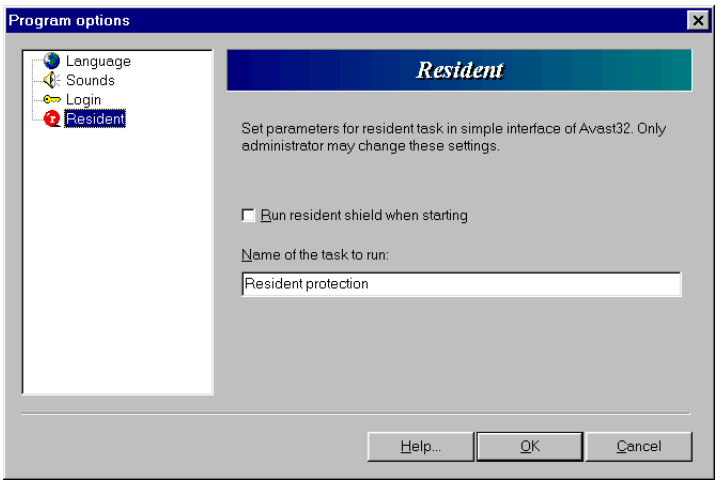


7.14 Simple User Interface Menu

Simple user interface options can be set by ”Program options“ item in the main menu of the program. Clicking on this item, a window which enables to set program options will appear. The list of all options that can be set is shown in the left part of the window. Click on the option you want to set. The right part of the window displays setting parameters. Description of ”Language“, ”Sounds“, ”Login“ options can be found in the ”Setting program parameters“ chapter.

7.4 ”Resident protection“ Option

”Resident protection“ option enables to set resident protection parameters. (fig. 7.15)



7.15 ”Resident protection“ Option

”Run resident shield when starting“ field determines whether to start the resident protection when starting simple user interface. Resident protection set on will ensure data protection while working with your computer.

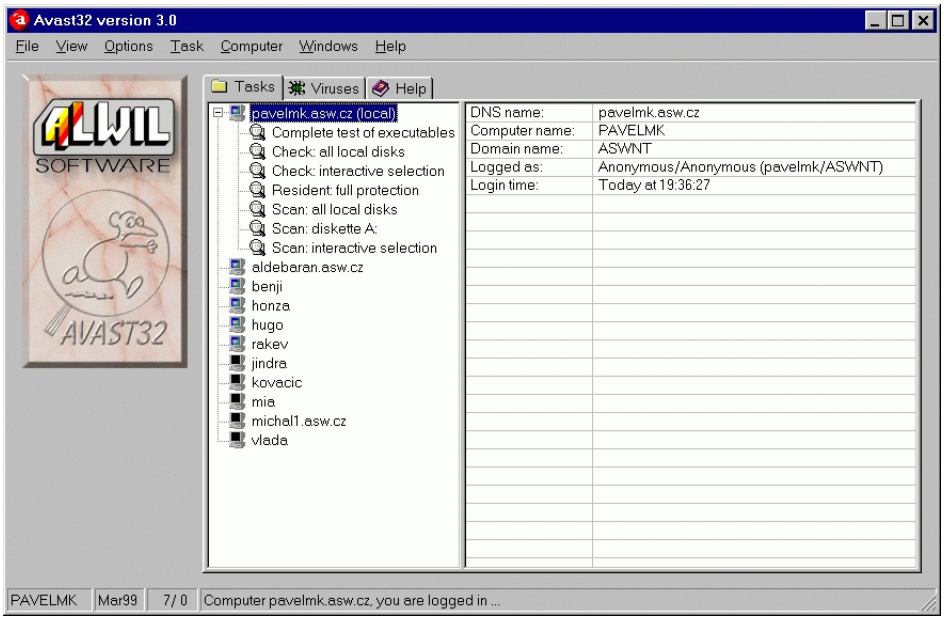
Text field in the lower part enables to determine the name of the task. We do not recommend current users to change this setting.

8 Enhanced user interface

The enhanced user interface contains the user-friendly interface for the access to all functions and settings, which are offered by AVAST32.

8.1 ”Tasks“ Sheet

”Tasks“ Sheet (fig. 8.1) is divided into two parts.



8.1 ”Tasks“ Sheet

Left part contains list of computers available via network. Next to the computer name is always icon displayed, showing if the engine of AVAST32 program is running on the computer or not.

If this icon (fig. 8.2) is displayed, there is no information known about the given computer yet. It isn't possible to login to this computer.

8.2 No information known yet.

8.3 The program engine is probably running

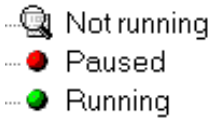
If this icon (fig. 8.3) is displayed, program engine is probably running and it is possible to login to this computer.

If this icon (fig. 8.4) is displayed, program engine is probably not running and it isn't possible to login to this computer.

8.4 The program engine is probably not running

If you are logged in on some computer, you could see a list of available tasks, which can be used at the moment.

There is an icon next to the file name of each task showing its current state. If the task is not running, it shows this icon (fig. 8.5) (task "Not running" in Figure). If the task is running, there is a green ball (task "Running" (fig. 8.5) in Figure) next to the task name. If the task is paused the ball is red (task "Paused" (fig. 8.5) in Figure).



8.5 Icons showing current state of the task

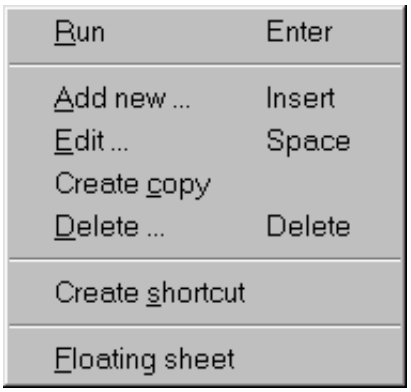
The operations with tasks can be performed either by the popup menu or via the "Task" menu, which is available in the main program menu. Both these menus offer absolutely the same items allowing to perform the appropriate operations.

You can start or pause (not to stop) the task by selecting the task by mouse and pressing "Enter" key or double clicking on the task name with left mouse button.

The shortcut menu displayed after the right mouse button click on the task name, shows this picture (fig. 8.6). Its concrete content depends on the actual state of the task and the user's rights. The chosen function will be performed with the task on which name the right mouse button has been pressed.

The popup menu can contain the following commands:

- the "Run" command will start the task. It is only available for not running tasks,
- the "Stop" command will stop the task. It is only available for running tasks or paused tasks,



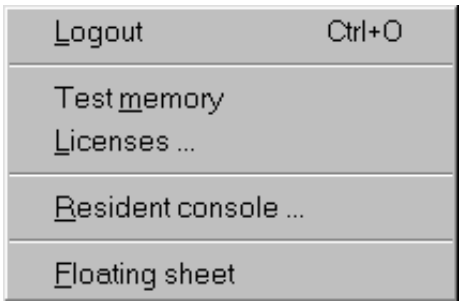
8.6 Popup menu "Task"

- the "Pause" command will pause the task run. It is only available for the tasks that are running at the moment
- the "Create Desktop Shortcut" command will create a shortcut to the task on the desktop. Such a shortcut can then be used for the direct start-up of the task, without having to start AVAST32 first. This command is always available in the popup menu,
- the "Add new ..." command is used for the creation of new tasks,
- using the "Create copy" command it is possible to create an exact copy of the task in question. The new task will contain a fully identical setting of all parameters, as the task selected. However, the name of the new task will have the form "<selected task name>.number of copy".
- the "Edit ..." command enables the user to modify the setting of the task parameters. The modification of the task is done in the entirely same environment as the task creation.
- the "Delete" command is used to delete the appropriate task from the list of tasks and at the same time also from the hard disk. After selecting it the user will be asked, whether he is serious about the deletion of the task. After the pressing of the "Yes" button the task will be irrevocably deleted from the list of available tasks and from the hard disk of the computer,
- the "Floating sheet " command opens the active sheet (in this case "Task" sheet) in the separate window .

The operations with listed computers can be performed either by the popup menu or via the "Computer" menu, which is available in the main program menu. Both these menus offer absolutely the same items allowing to perform the appropriate operations.

The popup menu displayed by clicking on the computer's name with the right mouse button shows this picture. (fig. 8.7)

- command "Login" displays the Login dialog allowing the user after entering the user's name and password to login onto selected available computer. The selected computer has to be turned on and the program engine must be running on it,



8.7 ”Computer“ popup menu

- command ”Login as anonymous“ allows the user anonymous login to the computer with running program engine. For the successful login the user needs the appropriate rights,
- command ”Resident console“ will show the main window of resident protection of the given computer,
- command ”Licenses“ will display the list of licenses on the computer.

There is more information about the currently selected item in the right part of the page.

If the user has computer selected, there is an information displayed about the chosen computer: its name, domain name, DNS name. Furthermore it is login time and name of the user logged in.

Some of this information is not available if the computer is not connected in the network.

If the user has task selected, there is an information displayed about the chosen task: task owner, group, the computer on which is task stored, the user using the task at the moment, the tests which are performed by the task. If the task is running, the user is informed about the task progress.

8.2 Results pages

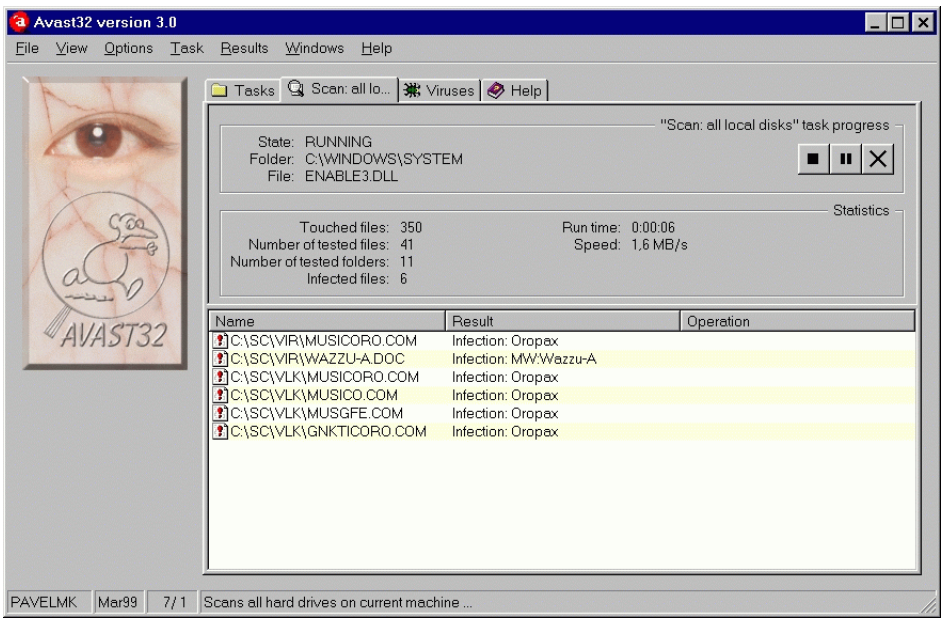
Results page of every task has its name and the icon in the title bar.

In the upper part of this page there is an information about the current state of the task, and three control buttons on the right. The statistic about the task can be found in the middle of the page, the obtained results in the bottom part of the page.

The information about the state of the current task is situated in the upper part of the window.

The first item informing about the currently running task is ”State“ item, showing the current state of the task. Four states are possible: the task has not been started (”no job“), the task has been started (”running“), the task has been started, but at the time being its run has been paused (”paused“) or task has been finished (”done“).

The complete path to the folder which is currently tested is indicated by the second item ”Folder:“, while the last item ”File:“ contains the name of the file which is being tested.



8.8 Results page

The control buttons

The control buttons are shown in this picture (fig. 8.9).

The left button serves for starting or stopping the task. If the task is not running, there is a picture of arrow on the button and the button is used for starting the task. If the task is running or paused there is a picture of square on the button and the button is used for stopping the task.

The middle button is active only if the task is running or paused, and it is used for pausing the task, or continuing the task run.

The right button is used for closing the results page, including task stop, if the task is running. Also all results will be deleted. The user will be asked for the confirmation of this operation.

8.9 The control buttons

The infected or somehow changed files are displayed in the result list.

The icon illustrating the action, which has been performed with the file, will be situated next the name of each file.

If the blue sign plus (fig. 8.10) is here, it means that the file is new, i.e. it has been created since the last check. If you have started the integrity checking for the first time, all

the files found will be marked as new, because the internal database of files is still empty, and it must be filled first.

8.10 Icon

The green sign minus (fig. 8.11) signals, on the contrary, that the file bearing a given name is missing here (the file was deleted). It is good to realize what you have been doing with the computer. If you, for example, have emptied the recycle bin since the last check, it is obvious that the program will report the files missing on the disk in question in the folder "RECYCLED", in the same way you are likely to be informed on the disappearing of temporary files, etc.

8.11 Icon

Another character which could appear next to the file name is red exclamation mark (fig. 8.12). AVAST32 uses this for telling the user that file is infected or during the file testing a serious error appeared. If the file is infected in "Result" column there will be "Infection: virus name" displayed.

8.12 Icon

If you have performed a repairing of the OLE document, a yellow question mark (fig. 8.13) can appear next to the name of the corrected file. Thus AVAST32 indicates that the file state is unknown after the performing of the repair or after the removal of a macrovirus from the file. Yellow question mark will also appear next to the files, which are not OLE documents and has been successfully recovered.

8.13 Icon

The next icon, which can be displayed next to the file name shows this picture (fig. 8.14). The icon will be displayed in case, that the operation of deleting has been performed on the file.

If there is a icon from this figure (fig. 8.15) next to the file name, the file has been renamed or moved.

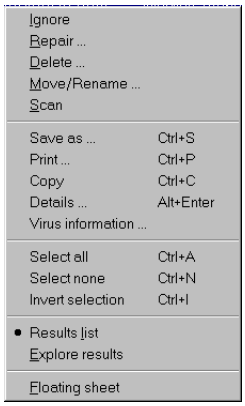
8.14 Icon

8.15 Icon

The operations results can be performed either by the popup menu or via the "Results" menu, which is available in the main program menu. Both these menus offer absolutely the same items allowing to perform the appropriate operations.

Popup menu

The Popup menu (fig. 8.16) relates always to files which has been selected. The chosen command will be performed with all selected files.



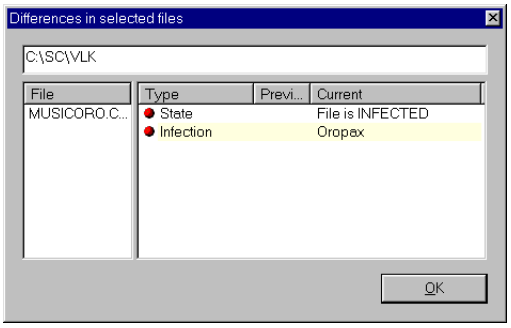
8.16 The popup menu on the Result page

- The "Repair ..." command will try to return the executable files to their original state and remove the virus from OLE document (see "File processing in AVAST32 program" chapter),
- The "Move/Rename ..." command enables you to move the suspicious files to another folder or to rename them (see "File processing in AVAST32 program" chapter),
- The "Delete ..." command allows to remove the infected files (see "File processing in AVAST32 program" chapter),
- The "Accept" command will tell the AVAST32 program to accept the changes in the files (see "File processing in AVAST32 program" chapter),
- The "Ignore" command allows to ignore the result of file testing, and remove it from the Result list (see "File processing in AVAST32 program" chapter),
- By "Copy" command you will copy selected results to the clipboard. It is also possible to use "Ctrl + C" shortcut,

- The "Print" command will print the selected results on available printer. You can also use "Ctrl + P" shortcut. The layout of the printed pages will be similar to the Result list,

- The "Save as" command allows you to save the complete result list to the file. By choosing this command a dialog box allowing to enter the name and target folder of the file would appear. You can also use "Ctrl+ S" shortcut for displaying this dialog,

- The "Details" command is used to display the dialog (fig. 8.17) with detailed information on the reason, why the file has appeared in the list. It provides information about the file selected, as to its state, attributes, date of creation and the last modification and, of course, the length of the file, and possibly also the name of the virus which infected the file. All this information is displayed on the original state of the file (it is stored in the internal database) as well as for the current state of the file, in which it is situated on the disk. Also the "Alt + Enter" shortcut can be used to display the dialog.



8.17 "Details" dialog

- The "Virus information" command serves for displaying detailed information about the virus which infected the selected file. By choosing this command the program will be switched to "Viruses" page and the information on the appropriate virus will be automatically found in the virus list,

- By "Select all" command you will select all items shown in the Result list. You can also use "Ctrl+A" shortcut for selecting the files,

- The "Select none" command serves for deselecting of all selected items of the list. No item will be selected after this operation. The "Ctrl+N" shortcut will do the same,

- The "Invert selection" command will invert the selected and unselected items in the list. The selected items will be an unselected, and unselected items will be selected after this operation. The "Ctrl+I" shortcut can be also used to perform this operation,

- The "Results list" command will switch the displaying of results to file list style. For every file there is full path to the file in "Name" column. The state of the file is described in "Result" column. The operation performed on the file is shown in the "Operation" column. Displaying as "Results list" is set as default,

- By "Explore results" command the displaying of results will switched to the style very similar to the control of the "Explorer" program. There is a tree structure of the folders in the left part of the window and file list displaying always the content of current folder on the right. The suspicious files are inserted to the tree control according to

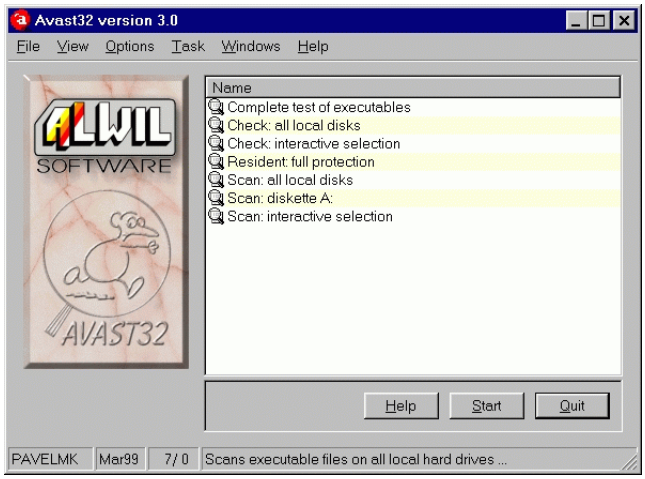
their real path. It means that if the tree contains a folder, this folder (or an inserted folder of its) is sure to contain the suspicious file.

- the ”Floating sheet “ command will open the results sheet in the separate window.

9 Version 2.0 Simple user interface

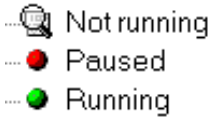
Simple user interface version 2.0 (fig. 9.1) contains the list of available tasks and several control buttons.

List of available tasks contains tasks, which can be used by user in current time.



9.1 Simple user interface version 2.0

There is an icon (fig. 9.2) next to the file name of each task showing its current state. If the task is not running, it shows this icon (task "Not running" in Figure). If the task is running, there is a green ball (task "Running" in Figure) next to the task name. If the task is paused the ball is red (task "Paused" in Figure).



9.2 Icons describing task status

The left button is used for the starting or stopping of the task run. Its meaning will always change depending on the active task, i.e. the task which is highlighted on the list of the tasks available. If the active task is not running, the button bears the name "Start" and is used to start-up the task. If, on the other hand, the task is running, the button bears the name "Stop" and is used to stop the task.

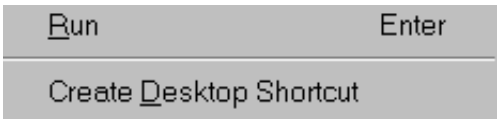
The task can also be started or paused (but not stopped) by your activating it first, and then pressing the "Enter" key, or by double-clicking with the left button of the mouse on its name.

By using the "Exit" button you will end the activity of the AVAST32 program. At the same time also, all of the non-resident tasks will be stopped.

By clicking the "Help" button the Help of AVAST32 program will appear.

The operations with tasks can be performed either by the popup menu or via the "Task" menu, which is available in the main program menu. Both these menus offer absolutely the same items allowing to perform the appropriate operations.

The shortcut menu (fig. 9.3) is called by pressing the right button of the mouse on the task name. Its regular contents, however, depends on the current state of the task. The function selected will be performed with the task on the name of which the mouse button has been pressed.



9.3 Shortcut menu

The popup menu can contain the commands as follows:

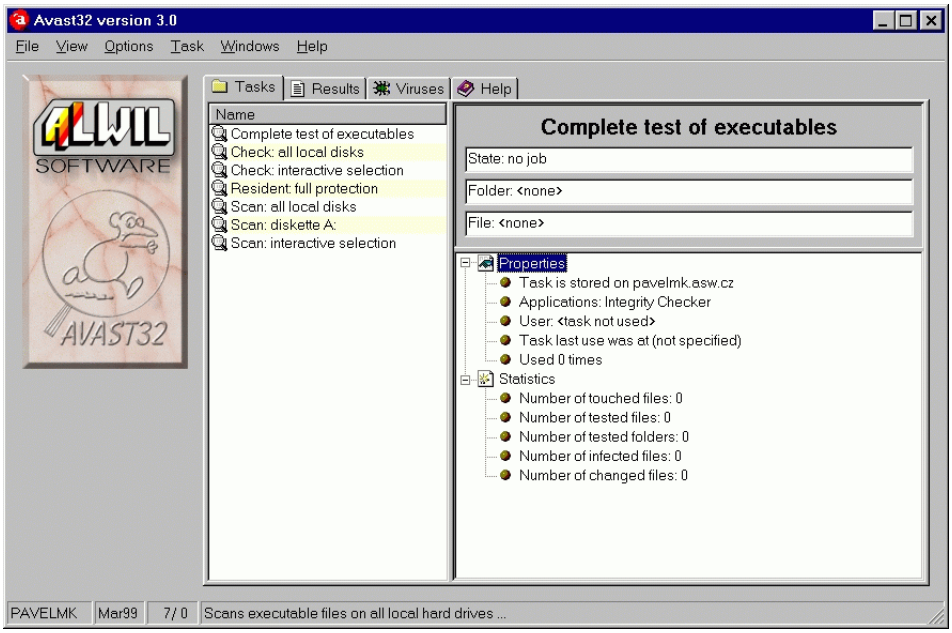
- the "Run" command will start-up the task. It is only available for the tasks that are not running at the moment,
- the "Stop" command will stop the task. It is only available for the tasks that are running or paused at the moment,
- the "Pause" command will pause the task run. It is only available for the tasks that are running at the moment,
- the "Create Desktop Shortcut" command will create a shortcut to the task on the desktop. Such a shortcut can then be used for the direct start-up of the task, without having to start AVAST32 first. This command is always available in the popup menu.

10 Version 2.0 Enhanced user interface

The Version 2.0 Enhanced user interface (fig. 10.1) contains the user-friendly interface for advanced users who already used the AVAST32 program version 2.0. The interface is structured on several pages.

”Task“ page

The page is divided into two parts. The left part contains the list of the tasks available, as it was described in the case of the Version 2.0 Simple user interface. Its using and characteristics, except for the popup menu, are fully identical.



10.1 Version 2.0 Enhanced user interface, ”Task“ page

The information on the status of an active task is situated in the text box in the upper part. The first text box is the ”State:“ indicating the current state of the task. Three states are possible: the task has not been started (”<no job>“), the task has been started (”RUNNING“), the task has been started, but at the time being its run has been paused (”<paused>“) or task has been finished (”done“).

The complete path to the folder which is currently tested is indicated by the second (in sequence) text box - ”Folder:“, while the last text box contains the name of the file which is being tested. If the active task is resident, only the information on the task state is displayed.

The characteristics and statistical data relating to the progress of the task are arranged in the tree control, which is situated under the text boxes mentioned. Unpacking the appropriate item you will gain access to regular data. It can be done by clicking on the sign before the item name using the left button of the mouse.

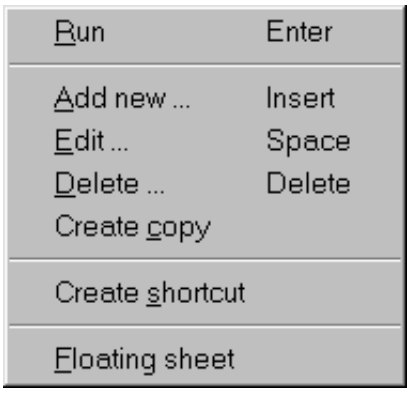
The information relating to the task owner, tests performed during the task run, date of creation and date of the last utilization of the task will be found in the "Properties" item. In this item you will also find the information on the total number of task start-ups since its creation.

The last item is "Statistics" which informs the user on the number of the files found, files tested, files tested for the presence of viruses, files in which their integrity was checked, the files which were not tested, files infected and on the number of the viruses found. All the items are related to the active task.

If the active task (i.e. the task which is selected on the task list) is currently running, the information is updated in real time, and thus the user is kept informed on its progress.

Popup menu

Similarly to the Version 2.0 Simple user interface, also the Version 2.0 Enahnced user inteface contains the popup menu (fig. 10.2),which will be displayed after pressing the right button of the mouse on the name of appropriate task. Besides the commands for starting-up, stopping and cancelling the task it contains the commands described below.



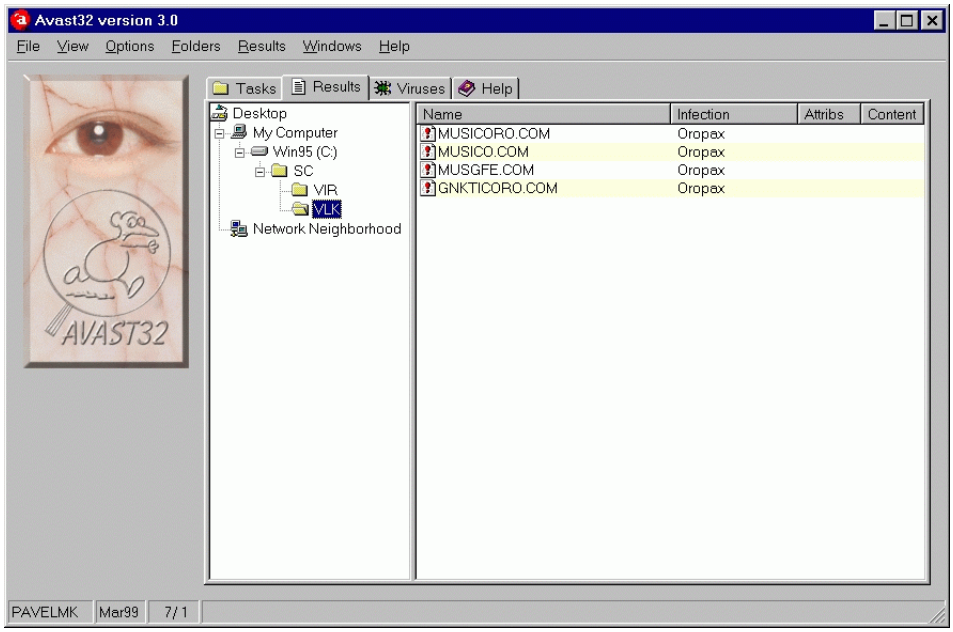
10.2 Popup menu

- the "Run" command will start the task. It is only available for not running tasks,
- the "Stop" command will stop the task. It is only available for running tasks or paused tasks,
- the "Pause" command will pause the task run. It is only available for the tasks that are running at the moment
- the "Create Desktop Shortcut" command will create a shortcut to the task on the desktop. Such a shortcut can then be used for the direct start-up of the task, without having to start AVAST32 first. This command is always available in the popup menu,
- the "Add new ..." command is used for the creation of new tasks,
- using the "Create copy" command it is possible to create an exact copy of the task in question. The new task will contain a fully identical setting of all parameters, as the task selected. However, the name of the new task will have the form "<selected task name>.number of copy".

- the "Edit ..." command enables the user to modify the setting of the task parameters. The modification of the task is done in the entirely same environment as the task creation.

- the "Delete" command is used to delete the appropriate task from the list of tasks and at the same time also from the hard disk. After selecting it the user will be asked, whether he is serious about the deletion of the task. After the pressing of the "Yes" button the task will be irrevocably deleted from the list of available tasks and from the hard disk of the computer,

- the "Floating sheet " command opens the active sheet (in this case "Task" sheet) in the separate window .



10.3 "Results" page

The "Results" sheet contains the results of all the tasks which contain virus scanning or integrity checking. The control of this sheet is very similar to the control of the "Explorer" program.

The task results are summed up to the unique tree of the folders, thanks to which the user is well informed as to the results of all the tasks, which have been performed since the start-up of the program. However, only the files that indicates the virus infection or that have been changed somehow since the last check, will be inserted into the tree by AVAST32. In other words, here you will find all suspicious files.

Also the new files will be inserted on the tree control, more exactly said, it concerns those files which have not been found by AVAST32 in its internal database of the files, you will also find here the names of the files which have been deleted or moved. The boot sectors of the disks and the memory are dealt with in the same way as files, which means that in case of their changes they will be inserted to the tree control as well. They will be inserted directly to the folder "My computer". The suspicious files are inserted to the tree control according to their real path. It means that if the tree contains a folder, this folder

(or an inserted folder of its) is sure to contain the suspicious file. If you want to learn the contents of some of the folder, activate it, and in the right part of the sheet you will see the suspicious files (if there are any).

The icon illustrating the action which has been performed with the file will be situated before the name of each file.

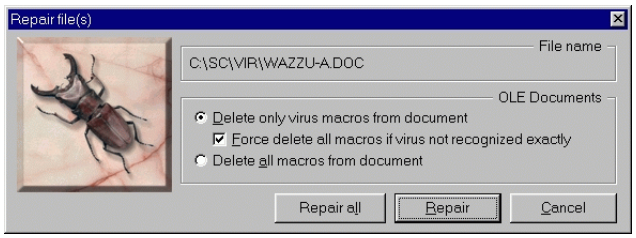
For further description of the result page see Chapter Results pages of Enhanced user interface.

11 File processing in AVAST32 program

The files can be processed by AVAST32 program on the several places in the program. It can be done immediately after finding the virus by resident or nonresident task or after the test, during the task result processing. The number of available commands may vary depending on the selected user interface. All the commands are available from Enhanced User Interface.

11.1 Repairing files

The ”Repair ...“ command will try to return the files to their original state. When you select it, a dialog (fig. 11.1) allowing to repair the file would appear. If the file being corrected is an OLE document, the user is enabled to preset some parameters.



11.1 Repairing files

Through the radio button ”Delete only virus macros from the document“ it is possible to preset that only the macros, in which a virus has been found, should be removed from the document. The other macros will remain untouched.

The radio button ”Delete all macros from document“ will cause that all the macros will be removed from the OLE document, whether they contain a virus or not.

The default setting is to remove only those macros that contain a virus. Checking the box ”Force delete all macros if virus not recognized exactly“ you will set to the program that if the virus has not been recognized with full exactness (in the case of some macroviruses the detection is very difficult), all the macros are to be removed from the document.

If a file which does not contain an OLE document is to be corrected, AVAST32 will try to correct the file by using the method based on the integrity checking. The truth is that AVAST32 maintains its internal database of files, into which it records important information on the status of individual files, and with the help of checksums, also on their contents. With using this information AVAST32 will try to repair the file selected. It is possible to repair up to ninety-five per cent of the files infected. AVAST32 is able to determine at one hundred per cent precision, whether the file has been repaired or not.

It follows from the previous text that if you want to repair the files successfully, you will need a periodically updated database of the files on your disks. This database must be maintained, in other words, it is necessary to perform integrity checking from time to time,

and to record authorized changes in the files into the internal database of the "Accept" command.

The algorithms used for the repairing of the files in AVAST32 are exclusively able for the repairing of the files infected by a virus. Thus they cannot be used for the renewal of rewritten or edited files. The presetting of the controls of the dialog is displayed for the files that do not contain any OLE documents.

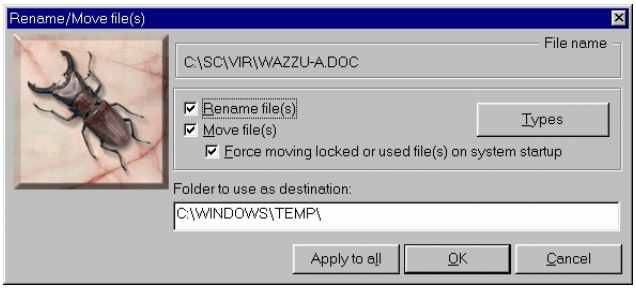
By pressing the "Repair" button the file repairing process itself will be started-up.

By pressing the "Repair All" button the repairing process of all selected file will start.

Using the "Cancel" button you will close the dialog, and the selected files will not be manipulated.

11.2 Renaming and moving files

The "Move/Rename ..." command enables you to move the suspicious files to another folder or to rename them. The command will display the dialog, which is shown in the Figure (fig. 11.2).



11.2 Renaming and moving files

The check box "Rename file(s)" enables you to change the extension at the marked files. The files renamed this way will be distinguished from the others and in case of the executable files you will also prevent their accidental running. It would lead, in case that the file in question contains a virus, to the infecting of the computer (if it has not happened yet). The existing extension will be replaced with the preset one at the given file. The proper name of the file will remain unchanged.

If the program finds an unknown type of the file during the renaming, it will inquire the user about how the extension of the file found is to be changed. The program will remember the extension entered, and when it finds a file of the same type next time, it will automatically use such an extension.

By checking off the box "Move file(s)" you will activate the moving of the files marked to the folder selected. The name of the folder, into which the files marked are to be moved, and the path to it, will be written to the text box "Folder to use as destination:".

If the moving of the files is activated, it is possible to determine, by checking off the box "Force moving locked or used file(s) on next OS startup", that if it is not possible to manipulate the file at the given moment (e.g. it is used by another application), it is

possible to postpone its moving till the next start of the operating system. Thus it cannot happen that you would forget to move the file - the program takes care of everything by itself.

The default is that both the renaming of the files and their moving including the possibility of postponing it till the next start-up of the operating system is activated.

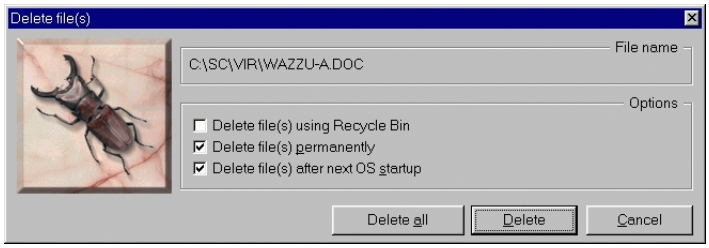
After pressing the "OK" button the file will be renamed or moved in the selected way.

After pressing the "Apply to all" button all the marked files will be renamed or moved in the selected way.

The "Cancel" button will close the dialog.

11.3 Deleting files

The "Delete ..." command allows to remove the infected files. When selecting it, you will see the dialog (fig. 11.3) in which the user can select the ways of deleting files.



11.3 Deleting files

The "Delete file(s) using Recycle Bin" check box determines that the marked files will be deleted by being moved to the recycle bin. Thus it is possible to restore the files deleted at any time. If you use the operating system Windows NT version 3.51, then this radio button will be inaccessible for you and you will have to use the following procedure.

The "Delete file(s) permanently" check box enables the direct files deleting from the disk, without any possibility of restoring them.

By the check box " Delete file(s) after the next OS startup" you may determine that if it is not possible to manipulate the file at the moment (e.g. it is used by another application), it is possible to postpone its being deleted till the next start-up of the operating system.

After pressing the "Delete" button the file will be deleted in the selected way.

After pressing the "Delete All" button all the marked files will be deleted in the selected way.

The "Cancel" button will close the dialog.

11.4 Accepting files

The ”Accept“ command will announce to AVAST32, that you know about the changes in the files, and that it should not report them any more. The files treated this way will disappear from the list of suspicious files.

In fact, this command will record the current state of the files into the internal database, which means that it will act as the starting state at the next check.

11.5 Ignoring files

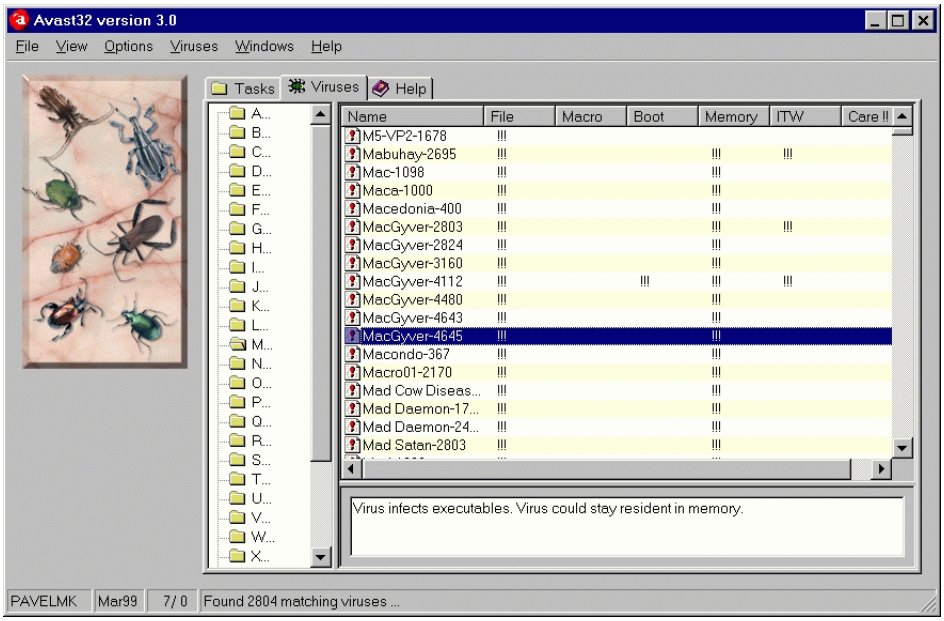
The ”Ignore“ command allows ignoring the file change. You can tell to the program, that you don't want to process the file anyhow. Such a file will disappear from the list of suspicious files and remain untouched.

12 Common functions of user interface

12.1 ”Viruses“ sheet

If you are interested in more detailed information about all viruses, that AVAST32 currently recognizes, click on the name of ”Viruses“ sheet. This sheet contains a complete list of all the basic types of viruses.

Similarly to all other sheets, this one is also divided into two parts. On the left the user has the possibility to select the first letter or digit of the virus name, about which he would like to learn more detailed information. The viruses, the names of which start with the character selected, will appear together with their characteristics in the right part of the sheet.



12.1 ”Viruses“ sheet

Viruses can spread out basically in the following ways: as a part of an executable file, as a macro of a certain document (”macroviruses“), or by rewriting the boot sector (the sector which is read when initializing a system) of a disk.

The first three columns provided for after the virus name correspond to all the above listed ways. Thus, if a column at the virus in question contains ”!!!“ (three exclamation marks), it means that this virus infects the computer system using that given way.

The ”Memory“ column says whether the virus may be present in the operation memory of the infected computer on a long-term basis (it is called resident).

The next column contains the information on whether the virus is situated on the ITW list, which is the list of the most frequent viruses.

The last column marked "Care !!" (three exclamation marks) informs you about the dangerous nature of the virus. If you should find the marking "!!!" (three exclamation marks) at a virus, you had better not alter with it. The viruses marked this way are very difficult to remove from computers, or they may seriously damage your data. The removal of such viruses should be done by somebody who is really experienced!

If you mark a virus on the list situated in the right part of the "Viruses" sheet, its brief characteristic will appear in the text box in the lower part. It actually concerns a understandable listing of the contents of particular columns as they are described.

The left part of the "Viruses" sheet contains, besides alphanumeric and other characters also two special items. By using the "ITW" item it is possible to display in the right part of the sheet a list of all viruses from the current VPS file, which are found on the ITW list.

In a similar way also the "Care !!" item is working providing that the most dangerous viruses will appear on the list in the right part of the sheet. Since it is necessary to explore the entire VPS file in order to find the viruses from the two above named items, their displaying can take some time.

No more detailed description of the all known viruses, their activities and special features is available. It is neither achievable, nor useful to find out all and every detail with regard to each virus especially due to their huge amount. The individuals who are interested in more detailed information on a certain virus are asked to contact the staff of our company who will be glad to provide them with the information required.

12.2 "Help" Sheet

Sheet "Help" contains the complete help of AVAST32 program.

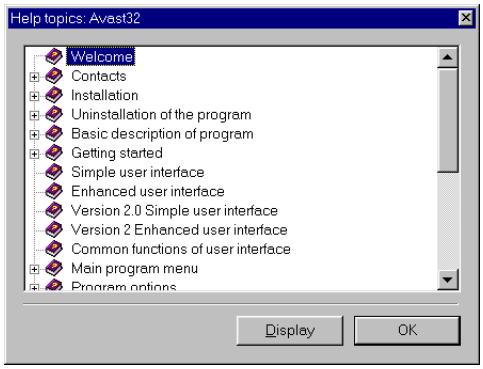
In case of any problems with the program we ask you to look into the Help of the AVAST32 program first, and only when you do not find there what you are looking for, contact our technical support.

For controlling the help use the buttons in the upper left corner of "Help" sheet.

The meaning of the buttons is following:

There is a button (fig. 12.2) for displaying the Help topics (fig. 12.3) on the left. By clicking on it a window containing the list of help chapters would appear.

12.2 "Help topics" button



12.3 Help topics of AVAST32 program

If you would like to view the appropriate chapter, select it and click on the "Display" button, or double-click on the chapter name with left mouse button. If don't want to view any chapter click on the "OK" button or press "ESC" key.

The button (fig. 12.4) will get the help one page back. It gets the help window back to the page, from which you get on the current page. This way it is e.g. possible to return to all the pages of the Help, which have been listed so far.

12.4 "One step back" button

If you have returned one step back, using the previous button you may, alternatively, go forward by one step by this button (fig. 12.5).

12.5 " One step forward" button

By pressing this button (fig. 12.6) you can go to the previous page of help. The button allows browsing the help backwards.

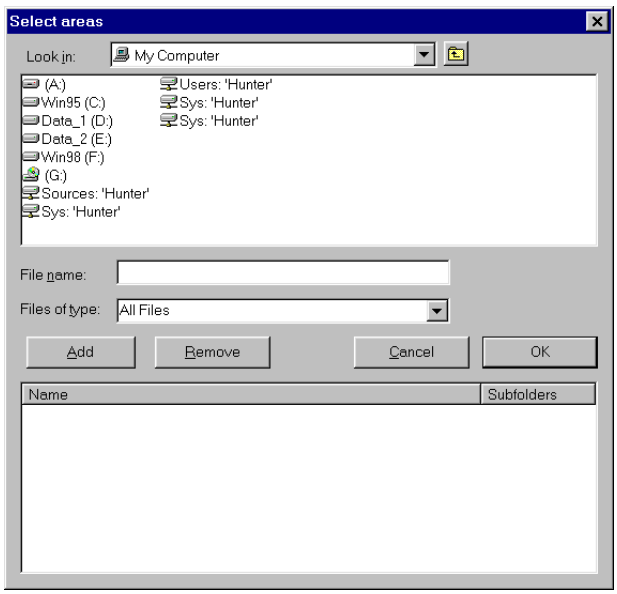
12.6 "One page backwards" button

Via thisbutton (fig. 12.7) you will be taken to the next page of the help. The button allows browsing the help forwards.

12.7 "One page forwards" button

12.3 Selecting tested areas

AVAST32 program requires, in a few places, the specification of which areas, i.e. files, folders, possibly if the entire disks are to be tested. Therefore it contains the dialog (fig. 12.8) which facilitates this activity. It enables the users to select also more folders or disks at the same time, whereby it makes the work with the program much easier.



12.8 Selecting tested areas

The upper part of the dialog is practically the same as in the case of the standard dialog designed for the opening of the files, which forms a part of the operating system. Here, in the common way, the user selects the required file, folder, or possibly the entire disk, which he wants to select, and by pressing the "Add" button he will add the selected item into the list in the lower part of the dialog. This way the user will proceed until the list contains all the areas, which need testing.

If you made a mistake during your selection, or if you simply do not want to test any of the selected areas, simply remove it from the list. It can be removed by your first selecting it, and then by pressing the "Remove" button you would remove it from the list of the selected areas. The appropriate operation will not be performed with any area removed from the list.

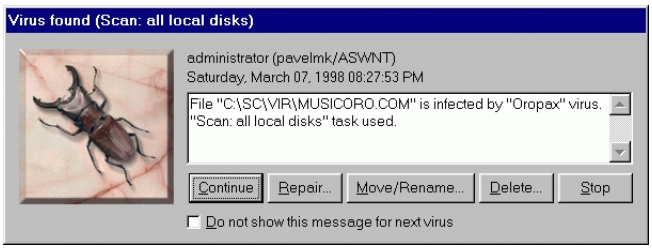
Next to the name of the area is written if its subfolders should be tested too. If you would like to change this setting, click on name of the area with left mouse button. Test of subfolders is enabled by default in newly added areas.

If you have selected all of the areas required, by pressing the "OK" button you will start-up the performing of the operation in question. If you press the "Cancel" button (or

if you close the dialog in any other way), the performing of the operation selected will be canceled, and the files selected will be ignored.

12.4 Finding virus message

If a virus has been found during the operation of a task, AVAST32 will display a warning message (fig. 12.9).



12.9 Finding virus message

The text provided in this message and the available buttons of displayed dialog may vary depending on used interface, setting of testing parameters and user's rights.

By using the "Continue" button you will inform to the program that it should continue the testing. The file infected can be treated later on the Results page.

The "Repair ..." button serves for immediate repair of the infected file. (See "File processing in AVAST32 program" chapter for details). After repairing the file you may continue the testing.

The "Move/Rename ..." button enables the user to move the infected file to another folder and/or to change its extension. (See "File processing in AVAST32 program" chapter for details). After the file has been moved and/or renamed, the testing will continue.

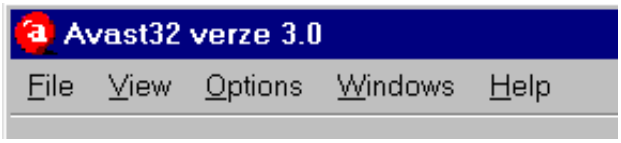
The "Delete ..." button is used to delete the infected file from the disk. (See "File processing in AVAST32 program" chapter for details). After the file has been deleted, the testing will continue.

Via the "Stop" button you will end the testing that found the virus.

By checking off the box "Do not show this message for next virus" you will inform to the program that if it finds another virus during the run of the current testing, it should not display the appropriate warning message anymore. All the infected files found while continuing the scanning will be possible to process later on the Results page. This box is not checked off by default.

13 Main program menu

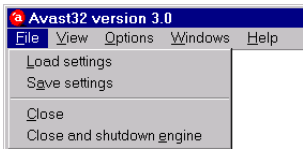
The common feature of all user interfaces, except Simple user interface, is main program menu (fig. 13.1). It can be found under the main window bar and it is available any time when program is running.



13.1 Main program menu

13.1 File

The menu "File" (fig. 13.2) allows to store or load the configuration file, and exit the AVAST32 program.



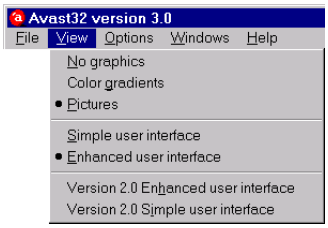
13.2 "File"

The "Save settings" menu item allows you to store the program settings to the configuration file.

Via menu item "Load settings" it is possible to restore this settings from a file.

While using these menu items you have the option to customize the name of configuration file.

By selecting "Close" item you will close the run of program, but the program engine would stay active. It allows the remote control of your Avast32 program and virus scanning to other users with appropriate rights. Via "Close and shutdown engine" item you will close both program and program engine. You computer will be inaccessible for remote testing then.



13.3 "View"

13.2 View

The first group of items from the "View" (fig. 13.3) menu serves for switching among the graphic elements of AVAST32 program.

There are the following options:

- "No graphics": no pictures will be displayed. It is good for saving some space on your desktop,
- "Color gradients": the gradient with AVAST32 title will be displayed in the left part of the window,
- "Pictures": pictures will be displayed in left part of the program window.

To select the certain graphic element click on the appropriate item. The current graphic element is marked with a ball.

The next items, "Simple user interface", "Enhanced user interface", "Version 2.0 Enhanced user interface", "Version 2.0 Simple user interface" are used for switching among interfaces of AVAST32 program. The current interface is marked with a ball.

13.3 Options

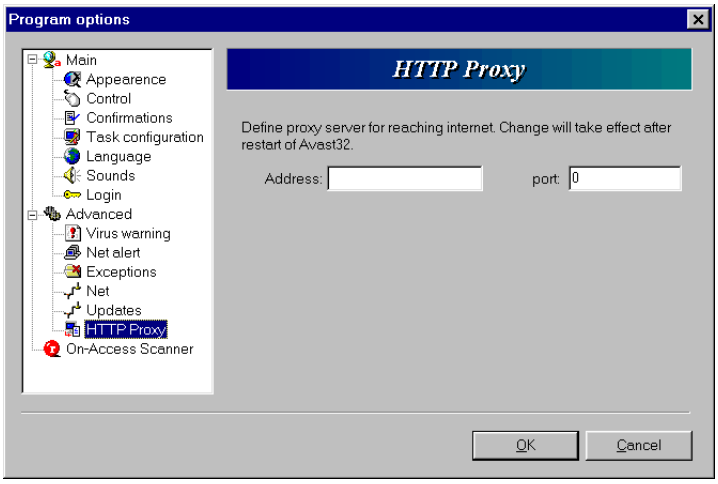
Use the menu items from the "Options" (fig. 13.4) menu to customize AVAST32 program and its component behavior.

"Program options" "User manager" "Change password" "Scheduled tasks" "License" "Default settings"

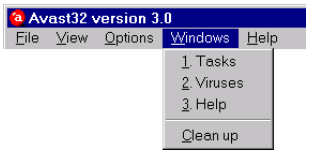
13.4 Windows

The "Windows" (fig. 13.5) menu item contains a list of opened windows of AVAST32 program. By clicking on window name you will be switched to that window.

The "Clean up" menu item serves for adjusting the content displayed in AVAST32 program window. If there are some unreadable items in the window (they are not displayed whole), it is possible to ensure theirs readability by clicking on this item.



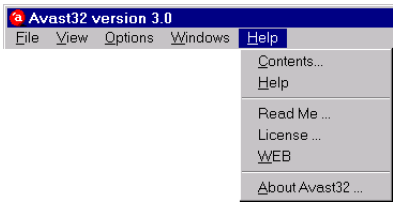
13.4 "Options"



13.5 "Windows"

13.5 Help

The "Help" (fig. 13.6) menu item allows to display the detailed information about the program including the complete help.



13.6 Help

Via the "Contents" menu item a floating window with table of contents will be displayed.

By selecting the "Help" menu item a context help of AVAST32 program would appear.

The "Read Me" menu item servers for showing the README.TXT file in a window.

By clicking on the "License" menu item the window containing the license agreement will appear.

By choosing the "WEB" menu item an ALWIL Software web page would appear in the internal internet browser of AVAST32 program.

The "About AVAST32" item from this menu is intended for displaying information about the AVAST32 program.

You should pay attention to these information, because you may need some of them when you call our technical support for help.

You can find these information here:

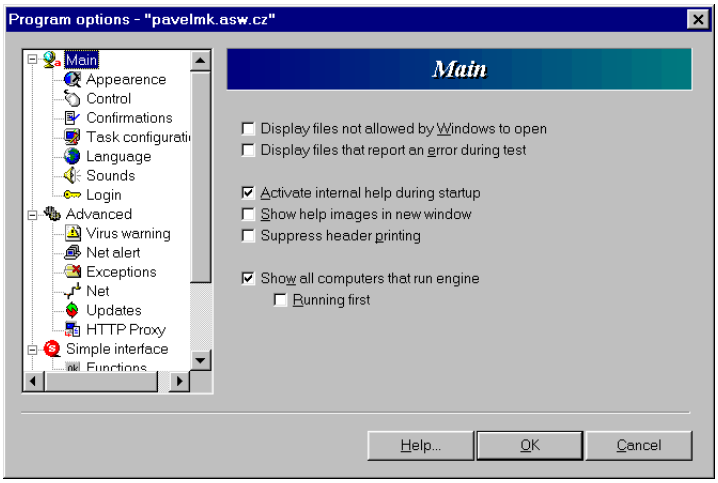
- copyright information,
- distributor,
- AVAST32 and its components version information, including detailed build number,
- operating system information and available physical memory,
- VPS file (virus database) version and its build information.

AVAST32 program version information can be found also in the second column of status bar in main program window.

14 Program options

14.1 ”Main“ page

The ”Main“ page (fig. 14.1) serves for setting of main parameters of AVAST32 program



14.1 ”Main“ page

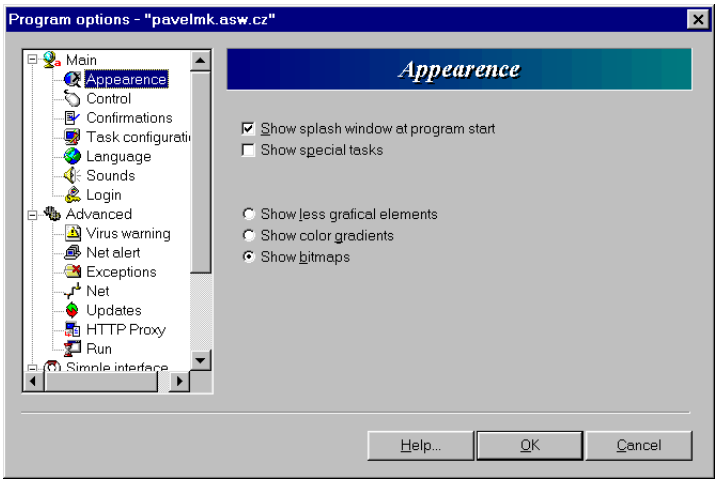
”Show all computers that run engine“ check box enables displaying of all available computers with running program engine.

”Display files not allowed by Windows to open“ check box enables displaying of tested files results even for files which testing hasn't been allowed, e.g. has been used by another application during the test.

”Display files that report an error during test“ check box determines that even files, which reported an error during its testing, will be displayed in the test results.

”Activate internal help during startup“ check box serves for the automatic lunch of the Help file of AVAST32 after its start. If you have enough memory and use the help a lot it is recommended to leave the check box checked. The box is checked by default.

By checking ”Suppress printing of header“ check box you cause that during the printing of results a header containing computer name, date and page number will not be printed.



14.2 ”Appearance“ page

14.2 ”Appearance“ page

On ”Appearance“ page (fig. 14.2) you can set how the Avast32 program will look like.

By checking ”Show splash window at program start“ box you enable showing splash window during AVAST32 start-up. If this window upsets you or you would like to slightly speed up program start do not check this box. This check box is checked by default.

By checking ”Show special task“ check box the following tasks will be also displayed in the task list: ”Explorer extension “, ”Screen Saver“ and ”Setting of Simple user interface“. And their modification will be allowed directly from the program then.

By checking the ”Show less graphical elements“ check box no pictures will be displayed. It is good not only for saving some space on your desktop, but also to speed the program up a bit.

The ”Show color gradients“ check box displaying of the color gradient with AVAST32 title will in the left part of the window.

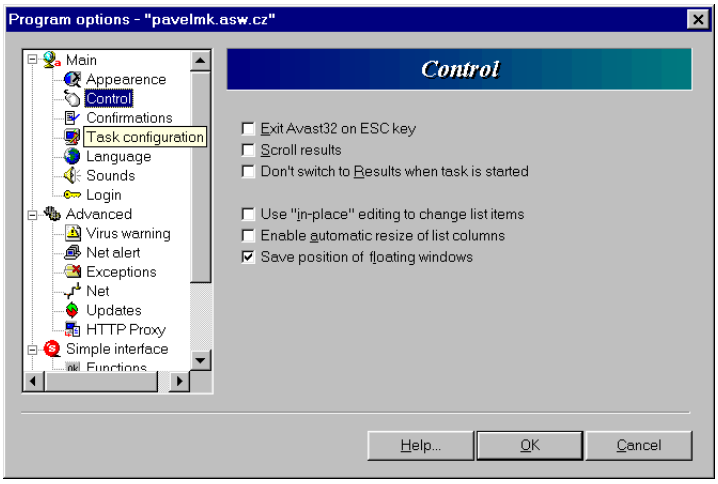
The ”Show bitmaps“ check box will activate the displaying of the pictures in the main window of AVAST32. The pictures illustrate the activities performed and make work with the program more pleasant.

14.3 ”Control“ page

The ”Control“ page (fig. 14.3) serves for setting of parameters of AVAST32 program control.

”Exit Avast32 on Esc key“ check box defines if it would be possible to close AVAST32 program by pressing ESC key. This is suitable for experienced users who prefer shortcut keys. Not checking this box prevents inexperienced users from involuntary program exit. It is not enabled by default.

Check box ”Scroll results“ enables automatic scrolling of items in the results list.



14.3 "Control" page

By checking box "Don't switch to Results when task is started" the program will not switch Results when the task is started and will stay on task page.

Check box "Use in-place editing to change list items" determines that "in-place" editing can be used. This function allows direct item modification after left mouse button click on chosen item as you now from Windows 95/98 or Windows NT. Otherwise a special dialog will be used the item editing.

By checking box "Enable automatic resize of list columns" program will automatically change the size of list columns depending on the size of program main window to ensure all columns are readable.

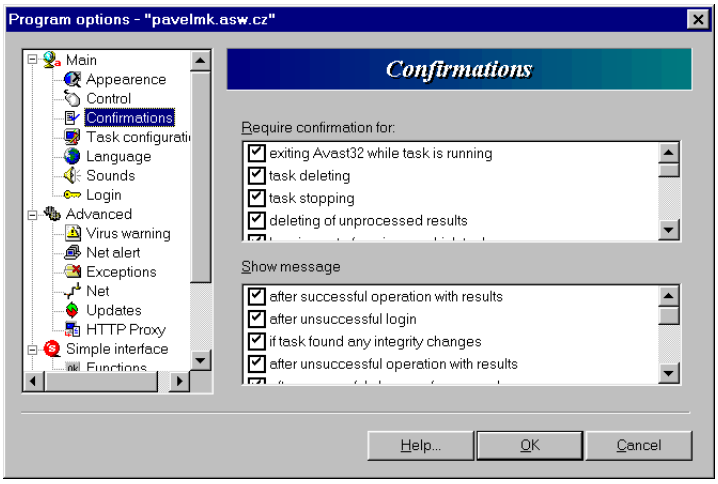
Check box "Save position of floating windows" sets that program will save the position of floating windows and on the next program start, windows will be displayed exactly the same as they were displayed on program shutdown.

14.4 "Confirmation" page

On "Confirmation" page (fig. 14.4) it is possible to set that program will ask you for the confirmation of certain operation or display the message informing about the operation just finished.

If you would like to enable the confirmation of certain operation check the appropriate check box. Chose selected items from a list displayed under the "Require confirmation for" title:

- exiting Avast while task is running
- task deleting
- task stopping
- deleting of unprocessed results
- logging out of computer on which task runs
- user interface switch while task runs
- user interface switch when there are results
- deleting group
- deleting user



14.4 ”Confirmation“ page

- resident task stopping
- interrupting Integrity database creation
- resetting default setting
- deleting serial number

If you would like to display the message informing about the operation just finished, check the appropriate check box. Chose selected items from a list displayed under the ”Show message“ title:

- after successful operation with results
- after unsuccessful login
- if task found any integrity changes
- after unsuccessful operation with results
- after successful change of password
- after disconnecting from engine
- when old virus database detected
- when serial numbers were updated

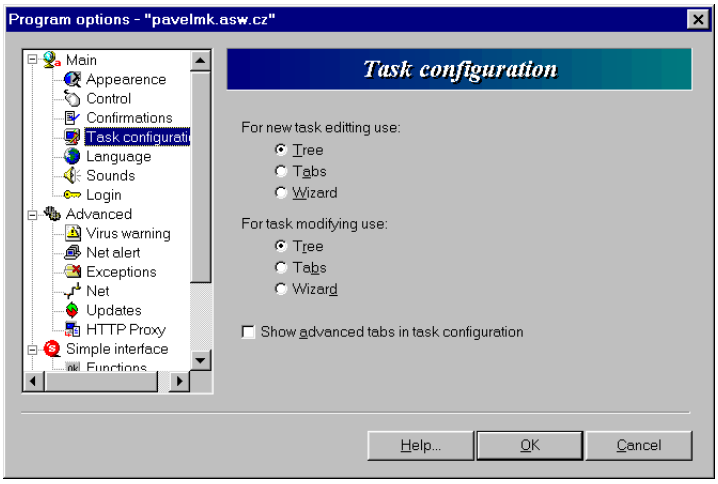
14.5 ”Task configuration“ page

On the ”Task configuration“ page (fig. 14.5) can be set how the new task creation or existing task modification will be controlled. The program offers three ways of controlling of task setting. It is controlling via tree, tabs and wizard. The possibilities of configuration are the same in all cases.

Via the appropriate radio button select the controlling of new task creation. Click on the chosen item: tree, tabs or wizard.

By the appropriate radio button select the controlling of existing task modification. Click on the chosen item: tree, tabs or wizard.

If the user uses the Wizard, he is led by the program when creating a new task. He gradually passes through the entire process of the task creation, sheet by sheet, and he is setting the controls on regular sheets. The user can move to the next sheet at any time when he is satisfied with the settings. He can also move to the following sheet or return



14.5 "Task configuration" page

to the previous sheet by using the "Next >>" and "<< Back" buttons. It is also possible to cancel the creation of the new task at any time using the "Cancel" button or the "Esc" key. The task can also be created only on the basis of the preset parameters by the "OK" button. In this case the default values will be used for the parameters which are not preset.

We recommend the use of the Wizard especially for the users who are only learning to work with the AVAST32. Its usage is easy, and it practically excludes any failure in respect to some important parameter. In this way the user can learn particular options of settings as well as their layout on individual sheets.

If the use of the select controlling via "Tabs" all of the sheets available would be situated in the classical property sheet. This enables the user to move directly to the sheet containing the necessary controls without having to go through all the previous sheets. In the same way as in the case of using the Wizard, it is possible to cancel the creation of a task by using the "Cancel" button or, alternatively, to ask for the creation of a task by using the values preset using the "OK" button when the parameters which have not been entered will be defined by default.

The property sheet is likely to be used by more experienced users, because of its faster service. The user will only set what he needs, and then he can directly go on to creating a new task (this way of work is not, however, recommended for less-experienced users). The property sheet is convenient in particular for the modification of the parameters of a task which already exists.

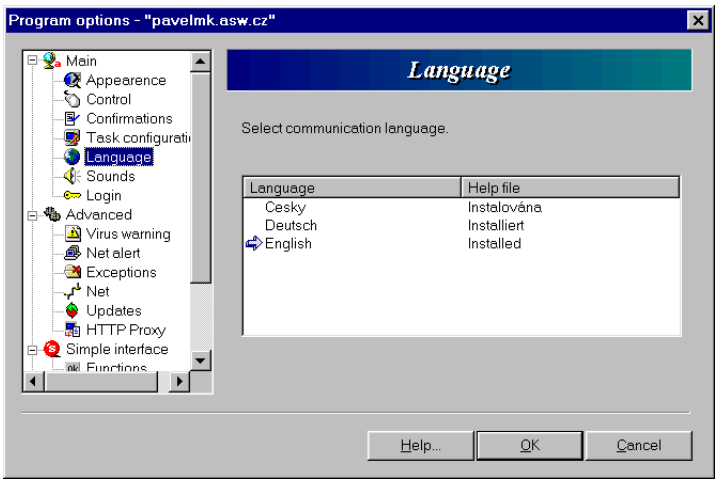
The controlling via "Tabs" is the same as controlling via "Tabs" with the only different that for switching between pages the tree control in left part of the window is used. Each item in the tree represent a page with settings. The item is selected by clicking on the name of the item with left mouse button.

The modification of the parameters of existing tasks is made in the same environment as the creation of new tasks. The only difference is that, if you press the "Cancel" button when modifying the task parameters, the values of all parameters will be left unchanged, and of course, the task itself continues to exist as well.

Check box "Show advanced tabs in task configuration" enables displaying of advanced tabs in task configuration. If the check box is not check, only the necessary parameters for the correct task functionality are offered.

14.6 ”Language“ page

”Language“ page (fig. 14.6) allows switching among the languages supported by AVAST32 program.



14.6 ”Language“ page

The languages are named in the list in first column on the sheet. The currently using language is marked with green ball, the others with blue one.

The second column of a list informs user about availability of help file in appropriate language, i.e. if the help file has been installed or not. For language change in AVAST32 program click on the appropriate language with the left mouse button.

By default the language chosen during the installation process is preset.

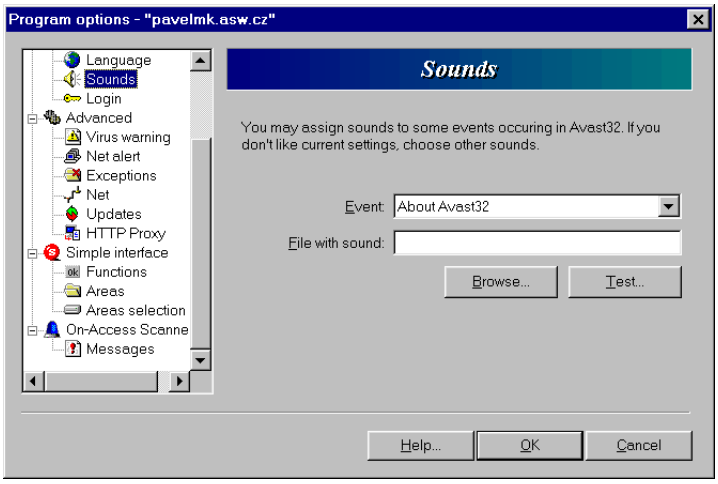
14.7 ”Sounds“ page

Avast32 program on the ” Sounds“ page (fig. 14.7) allows to assign sounds to certain events.

Among the events that can be accompanied by sound belong the following events:

- About AVAST32
- AVAST32 application exit
- AVAST32 application started
- Task finished
- Task started
- Virus was found

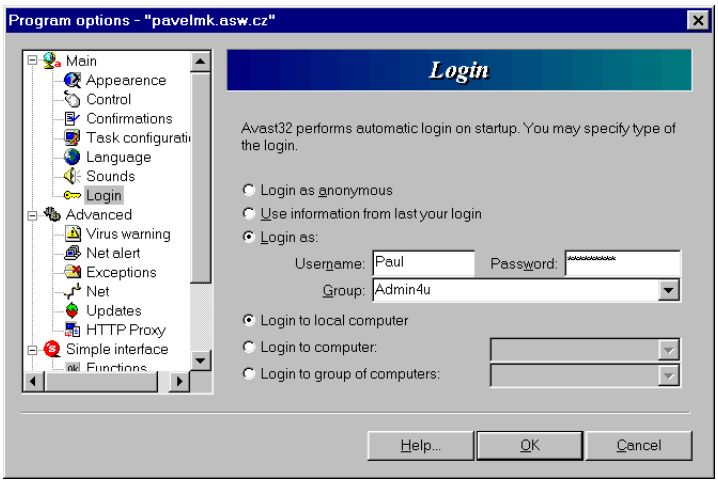
If the current sound setting doesn't suit you, you can assign the other sounds to the program events. From ”Event“ combo box choose the event on which you would like to change the sound. Into the ”File with sound“ text file enter the path to appropriate sound file or browse it via ”Browse“ button. You can test (play) the selected file by clicking on the ”Test“ button.



14.7 ”Sounds“ page

14.8 ”Login“ page

The AVAST32 program allows the automatic login under specified name and password on its startup. It is possible to specify the login type by radio buttons on the ”Login“ page (fig. 14.8).



14.8 ”Login“ page

By checking the ”Login as anonymous“ check box the user will be logged as anonymous user.

Via the ”Use information from your last login“ check box you tell to the program to use for login the information about name and password from the last successful login.

The ”Login as“ check box allows to specify the user name, password and group for login.

To the ”Username“ text box enter the user name, which should be used for login.

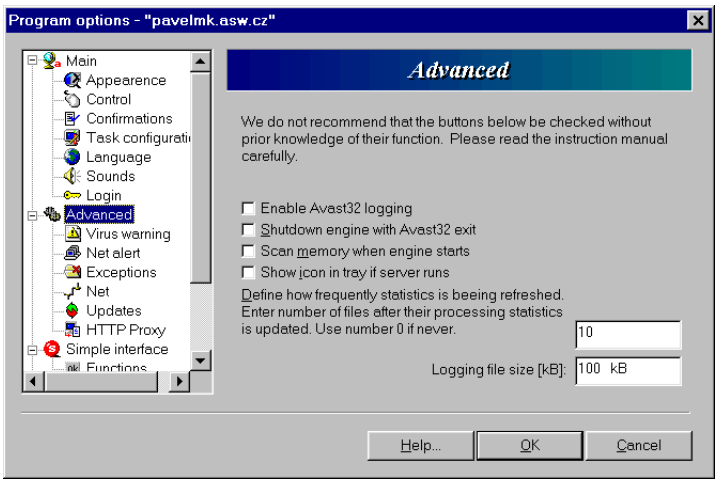
Into the ”Password“ text box is necessary to enter the valid user's password.

If the user belongs to some group, it is necessary to select the valid group from the "Group" combo box.

The user's rights in system will be adjusted on the user's login, according to his allocated rights.

14.9 "Advanced" page

"Advanced" page (fig. 14.9) allows the setting of advanced parameters of AVAST32 program.



14.9 "Advanced" page

The "Enable AVAST32 logging" check box enables logging. It means in Windows 95/98 that all activities performed with AVAST32 will be written into the "AVAST32.log" text file, which will be created in data folder of AVAST32 program. Information on found viruses and users working with this program will be logged as well.

Under the Windows NT the program will try to write logging information into the system log file. You can view this file via "Event Viewer" program which can be started from "Programs/Administrative tools" folder. If the program is unable to write to this mentioned file it will write logging information in the same way like in Windows 95/98.

The use of logging is suitable especially in the network environment where it is possible to check the activity of individual users.

By checking box "Shutdown engine with AVAST32 exit" the program on its exit will shutdown the program engine and the computer will not be accessible for remote scanning then. This setting will also have influence on speed of starting the program again. Because the program will have to reload the program engine, it will be starting longer.

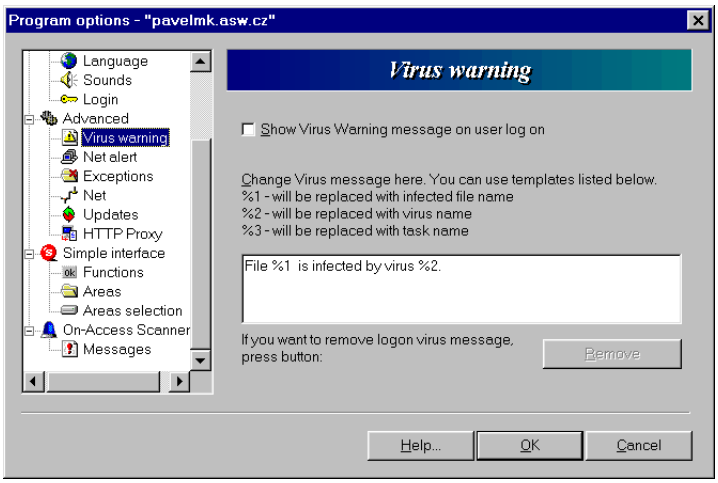
"Scan memory when engine starts" check box sets that the memory on the program engine start will be scanned. It is a time demanding operation and it is not recommended to enable it under the Windows NT. The memory scanning is disabled by default.

"Refresh frequency of statistics" text box defines refresh frequency of statistics. Enter number of files after their processing statistics is refreshed. If you don't want a statistics enter number 0 here.

"LOG file size (kB)" text box sets the maximum size of LOG file in kB.

14.10 "Virus warning" page

On "Virus warning" page (fig. 14.10) it is possible to set if warning message could displayed after user logging on to the system.



14.10 "Virus warning" page

The "Show Virus Warning message after user log on" check box is designed for enabling the warning message to be displayed after the user's log on into the system. The warning message will only be displayed if a virus has been found during the last start-up of the computer. Thus the user is kept informed that he is working with an infected computer. The box is not checked by default.

"Virus message" text box allows the user to enter the proper text of the report. With help of the formatting marks it is possible to enter even variable parameters into it, as the file name, task name, etc. The appropriate formatting mark will then be replaced with a regular name. The meaning of the formatting marks is as follows:

%1 - infected file name,
%2 - name of the virus which infected the file,
%3 - name of the task which the virus appeared.

If for example the task "FindVirus" has found the virus "OneHalf" in the "C: \PROGRAM.EXE " file, and the text to be inserted will have the form "Warning! Virus%2 has been found in the file%1. Used task%3.", the resulting message will read: "Warning! Virus OneHalf has been found in the file C: \PROGRAM.EXE. Used task FindVirus.".

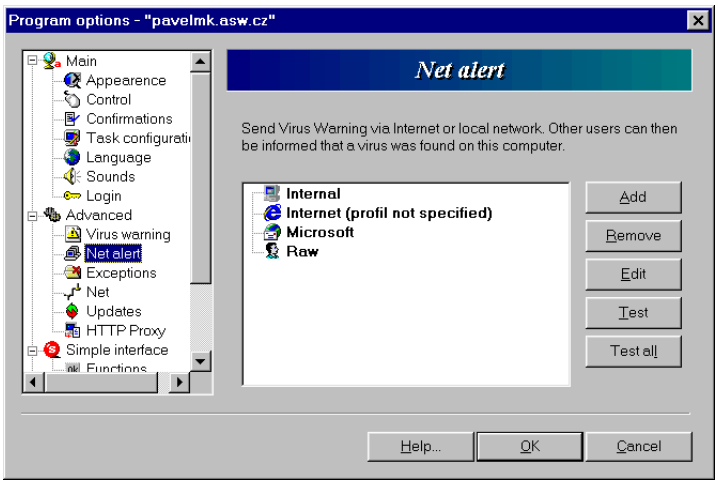
By default the text box contains the message in the form:

File%1 is infected by virus%2.

By clicking on ”Remove“ button it is possible to remove the entry about virus from the INI file, where the information about found virus is stored. After removing this entry the warning message will not be shown until next virus is found.

14.11 ”Net alert“ page

The ”Net alert“ page (fig. 14.11) contains the controls for the setting of the parameters of sending warning messages over the network. In case of finding a virus the AVAST32 allows sending warning message about the possible danger to the computers accessible over the network and thus prevent from wide spread of the virus.



14.11 ”Net alert“ page

It is possible to add the name of computer, which the warning message should be send to into the list of selected computers. By clicking on the ”Add“ button a shortcut menu with available protocols will appear:

- ”Internet“ item determines that computer to which warning message will be send is specified by standard address. The SMTP (Internet Mail) protocol will be used for message delivery,
- by ”Microsoft“ item you tell the program that appropriate computer is available via Microsoft Mail,
- ”Raw“ item allows the user to enter whatever address including protocol specification which should be used. E.g. ”SMTP:novak@aaa.cz“ address of this protocol is the same as ”novak@aaa.cz“ address of ”Internet“ protocol and the like,
- ”Internal“ item assign that computer for sending virus alert will be available via local network.

After selecting appropriate protocol an item ”Edit for valid address or name...“ will be added to the list. Right click on the item for edit. When finished press ”Enter“ key.

Computer names entered by user can be changed at any time - after click with left mouse button on appropriate name you will be able to edit it.

After pressing "Browse" button a list of computers available via local network will be displayed. Search the list and click on appropriate computer and press "OK" button for adding to the list or press "Cancel" for no changes.

For deleting the computer from a list press on it and click on the "Remove" button or just press the Delete key.

You can change parameters of listed computers here. Click on "Protocol" column for protocol change. From shortcut menu choose new protocol. You can change name/address in the similar way, after left click on the name an edit will be allowed.

If you are not sure about the delivery of a warning message, you can test the "connection" by using the "Test" button. A testing message will be send to each of the selected computers.

If you will be sending messages via other protocol than "Internal", it is necessary to enter profile name which should be used, and its password if necessary to appropriate text box.

For sending or reading network messages under Windows NT "Alerter" and "Messenger" services must be enabled ("Control panel", "Services" item). I you do not have the required permission contact your system administrator.

If you are using Windows 95/98 and you would like the network messaging to be working you need "WinPopup" program to be running on the workstation you would like to send message to.

A warning message can come to a selected computer several times. It is not a fault of the program, but a matter of the system. The number of the message copies sent depends on the number of the network protocols installed.

By checking the "Send alert to current domain" box you will set the sending of a warning message reporting that a virus has been found to all the computers which will be connected at that given moment to the current domain.

By checking "Send alert to this computer" check box the net alert message will be also send to this computer.

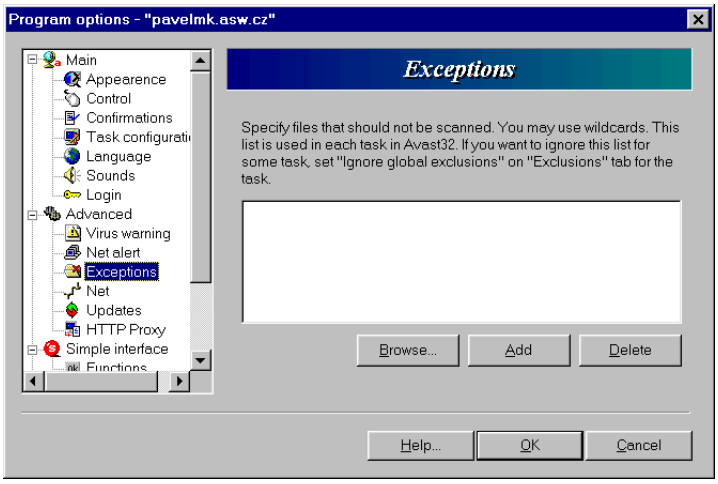
14.12 "Exceptions" page

The files selected on the "Exceptions" page (fig. 14.12) will not be displayed in results, when an error occurs during the scanning. An example of such a file can be PAGEFILE.SYS in Windows NT or WIN386.SWP in Windows 95/98.

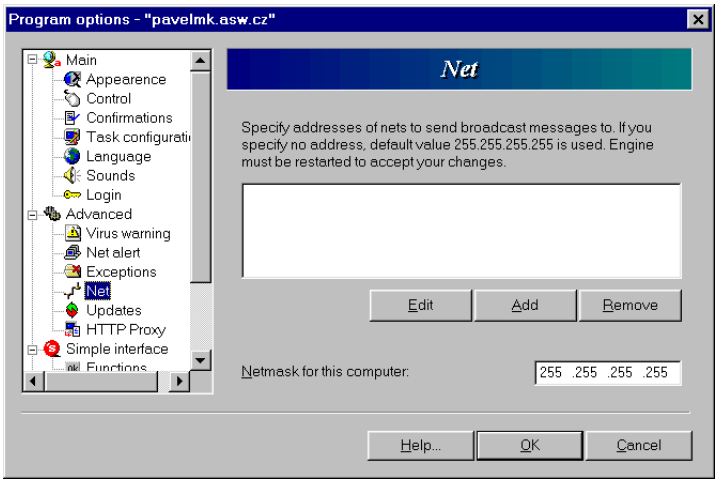
The files can be added via "Add" button where you can also use wildcards in the file name. Or you can browse the files via "Browse" button. If you would like to remove some file from the list select it and delete it by clicking on "Delete" button.

14.13 "Net" page

On "Net" page (fig. 14.13) you can specify the masks of nets with which will AVAST32 communicate. The nets, which should informed about that on this computer is AVAST32 program engine running.



14.12 ”Exceptions“ page



14.13 ”Net“ page

For entering the mask click on the ”Add“ button and in displayed dialog enter the mask number.

More masks can be added again via ”Add“ button. If you would like to remove some mask, selected it and delete it via ”Remove“ button.

If you specify no mask, a default value 255. 255. 255. 255 will be used.

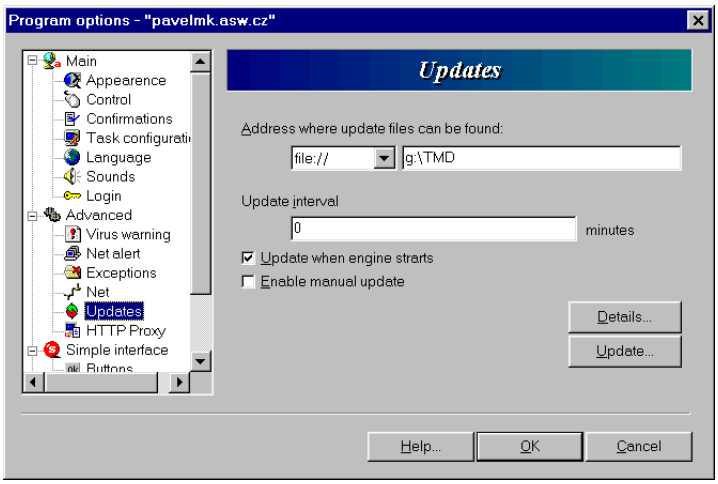
Then is necessary to set net mask for this computer. This can be done via editing the values displayed in the ”Netmask for this computer“ text box in the lower part of the page. The address entered to this text box determines the mask of a net, to which is this computer connected.

To take effect these changes you have to restart the program engine.

14.14 ”Updates“ page

The information about the files needed for the automatic update can be found in the chapter ”AVAST32 program update - Automatic update“

The ”Updates“ page (fig. 14.14) allows you to set the parameters of automatic updates of AVAST32 program.



14.14 ”Updates“ page

Use just this main update page for setting the updates, if you have all the necessary files prepared in one directory or you don't want e.g. to use different update intervals for each type of update. But if you have the update files in several directories or you would like to set everything for each update type in details then click on the ”Details“ button.

Enter the full path to the files, which contain the update of AVAST32 program to the ”Address where update files can be found“ text box.
(eg. C:\TMD\,\\server:\share\TMD\)

The address has to begin with the protocol by which the update will be obtained, select the apropriate type from a combo box:

- file:// - the file is available on the local computer or local network,
- ftp://- the file is available on the FTP server,
- http:// - the file is available on the HTTP server,

To the ”Update interval“ text box enter the number in minutes indicating the interval of program update. If you leave the text box blank or enter the 0 (zero), update will not be performed.

The ”Update when engine starts“ check box ensures the program update on the AVAST32 program engine start.

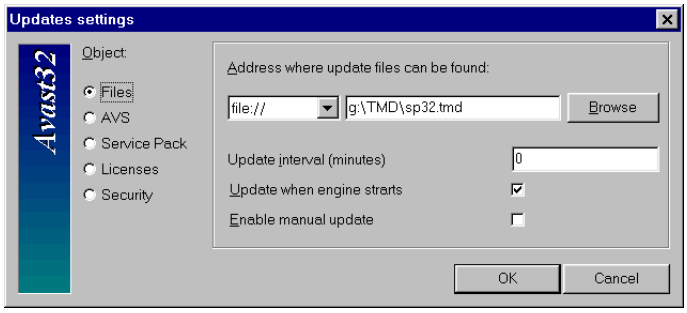
By checking the ”Enable manual update“ you determine that it will be possible for users without administrators' rights to update the AVAST32 program manually.

By clicking the ”Details“ a dialog allowing the detailed setting of AVAST32 program update would appear.

The ”Update“ button serves for performing the manual update.

Detailed update setting

Select the type of update via the radio button in the left part of a dialog (fig. 14.15). You can choose the following:



14.15 Detailed update setting

- Files - the complete update of AVAST32 program, including the virus database update file - SP32.TMD
- AVS - update of VPS virus database update file - VPS30.TMD
- Service Pack - partial update of AVAST32 program update file - MINISP.TMD
- Licenses - licenses update update file - ASW32L.DAT
- Security - security update (definitions of users and groups) update file - ASW32S.DAT

You can set the path to each update file, the way in which update will be obtained and the update interval. You can enter the address (path) directly into the text box or browse the file via the ”browse“ button.

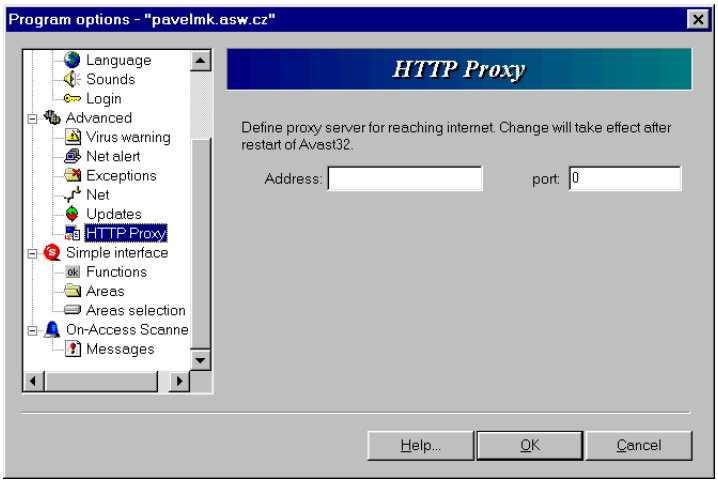
14.15 ”HTTP Proxy“ page

If you use a HTTP proxy server to access the internet, it is necessary to set its address and port. This setting can be done just on the ”HTTP Proxy“ page (fig. 14.16).

Enter the name or number of address of HTTP proxy server to the ”Address“ text box.

Enter the port number of HTTP proxy server to the ”port“ text box.

The change in setting will take affect after AVAST32 program restart.



14.16 "HTTP Proxy" page

14.16 "On-Access Scanner" page

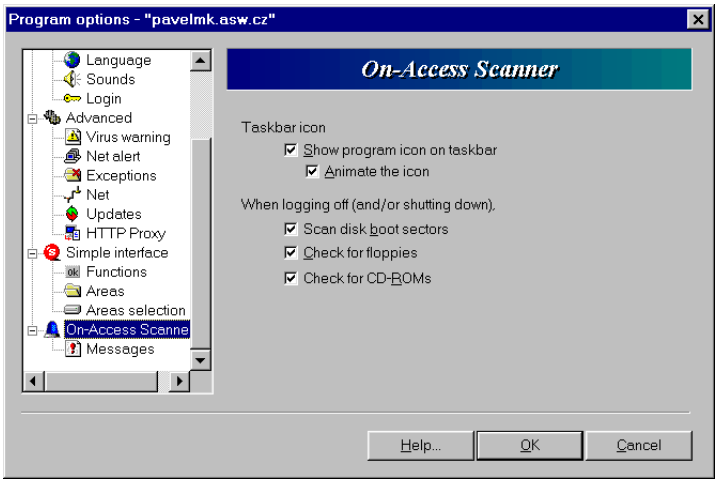
The "On-Access scanner" page (fig. 14.17) allows to set the parameters of resident protection.

By checking box "Show program icon on task bar" the program icon of resident protection will be shown on task bar when the resident protection is running. It allows you the modification of resident protection after clicking on this icon with left mouse button.

"Animate icon" check box enables icon animation of resident scanner.

By checking box "Scan boot disk sectors" all boot sector of drives will be scanned at logging off or on system shutdown.

"Check for floppies" check box determines that scanned at logging off or on system shutdown a diskette drive is tested for diskette presence.



14.17 "On-Access scanner" page

Into the "Show at most X messages at a time" text box is possible to enter number of maximum displayed messages from resident module. Choose the number from 1 to 20.

Into the "Show for X seconds" text box is possible to enter number indicating the time for which the resident module message will be displayed. Enter the number from 1 to 100 seconds.

15 Security features of AVAST32

15.1 System of users´ rights

As AVAST32 is expected to be used in network, it is likely that an activity of some users will have to be restricted. This is supported by the system of users´ rights. The rights are of two kinds - personal rights and task rights.

This system is not the same as Novell or Windows NT, i.e. if the user is logged to the Windows NT as an administrator it doesn't mean that the user is logged to the AVAST32 program as adminstrator, too.

Personal rights are following:

- Administrator: the user having the administrator's rights is not required to have other rights, everything is enabled,
- Remote login: enables to log in the remote computer with running engine of AVAST32 program,
- Task creation: enables to create a new task,
- File repair: enables to repair an infected or modified file,
- File rename: enables to rename an infected or modified file,
- File delete: enables to delete an infected or modified file,
- File accept: enables to accept changes in modified file,
- Boot sector repair: enables to repair an infected or modified file to repair modified boot sector.

Task rights:

- Task configuration: enables to configure a created task,
- Task owner modification: enables to change the owner of a task,
- Task deletion: enables to delete a task,
- Task view: enables to view task on the list of accessible tasks,
- Task run: enables to run accessible task,
- Resident protection run: enables to run resident protection,
- Remote computer´s task run: enables to run a task on the remote computer,
- Task stop: it allows to stop running task,
- Resident task stop: it allows to stop running resident task,

There are three sets of the rights: Rights applicable for the owner, rights applicable for the group and rights applicable in other cases.

15.2 Users and groups

Avast32 defines the terms of user and group. These are entities with some rights disposal. The user may but does not have to belong to some group. The user who belongs to the group takes over rights of the group. The check on the rights is run as follows:

When operating with a task, the user name and group name are compared to the user name and group name of the task owner. If they coincide, the rights applicable for the owner are checked with the required operation. If the group name coincides only the rights applicable for the group are checked, otherwise the rights applicable in other cases are checked. The required operation is executed if the user has the right to execute it, otherwise the execution of operation is denied and an error message appears.

After the installation these users and groups are created:

Groups: ”Anonymous“

Users: ”Anonymous“, ”Administrator“

15.3 Rights allocation

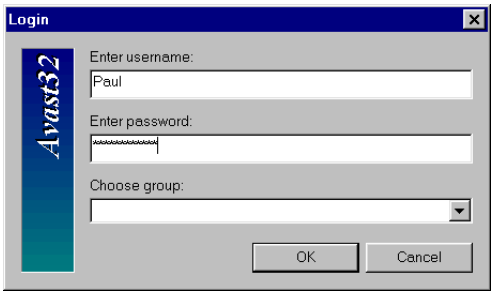
Every user is given the rights during the login of AVAST32. During the start of AVAST32 the automatic login is carried out, on the first run of AVAST32 the user is logged in as ”Anonymous“ of the ”Anonymous“ group.

Parameters of automatic login can be changed by settings on ”Login“ page in the program options.

15.4 Login to the computer

The user logs in the local computer automatically on AVAST32 program start. Parameters of automatic login can be set on ”login“ page in the program options.

If you want to log in another computer with running executable core of Avast32 which is accessible over network, choose the computer from the list of accessible computers on the ”Tasks“ page in Enhanced User Interface, right-click on the computer name and choose ”Login“ from the menu shown. Login dialog (fig. 15.1) will appear.



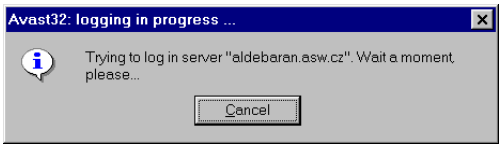
15.1 Login dialog

Insert the user name in the ”Enter user name“ text box.

Insert the correct user password in the ” Enter password“ text box.

If the user belongs to some group, it is necessary to choose the correct group in the ”Choose group“ combo box.

If you are satisfied with the information inserted, click "OK" button or press Enter. Report (fig. 15.2) of the login will appear.



15.2 Login in progress

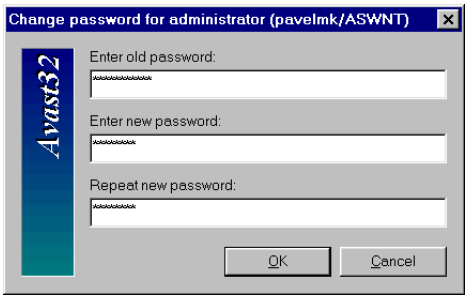
If the user has appropriate rights and entered information was entered correctly, the remote computer´s login will be enabled.

If the information was entered incorrectly or the user does not have the access rights to the remote computer the remote computer´s login will be denied and Report (fig. 15.3) will appear.

15.3 Access denied

16 Password change

The password change of the user currently logged in can be done via the ”Change password“ (fig. 16.1) item from the ”Options“ menu in main program menu. By choosing this item a dialog allowing the password change would appear.



16.1 ”Change password“ dialog

There is a user's name and the group he belongs to displayed in the window title bar.

If you would like to change the password you have to enter the current password to the ”Enter old password“ text box.

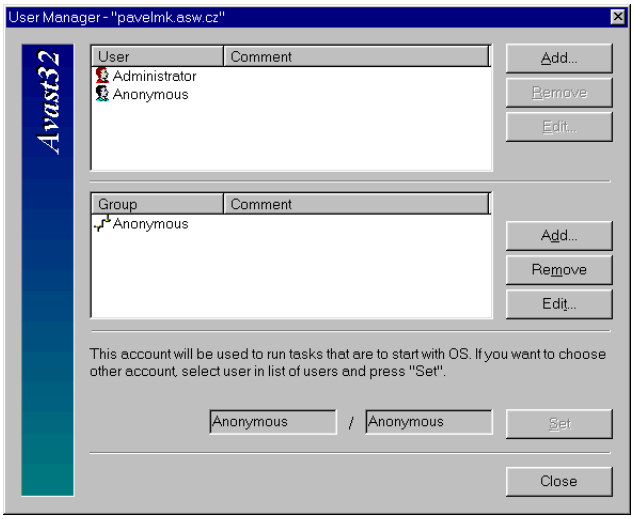
Then it is possible to enter the new password into the ”Enter new password“ text box and to the ”Repeat new password“ text box to ensure the password has been entered correctly.

Press the ”OK“ button to confirm the password change, or press ”Cancel“ for closing the dialog without changes.

If all the passwords have been entered correctly, the password change will take effect. If any of passwords has been entered incorrectly, an error message would appear and the user will be asked for correction of the password.

17 User Manager

The "User Manager" (fig. 17.1) enables to set security options used by AVAST32 program. User manager enables to set users and groups that use AVAST32 program. It is possible to set the access possibilities for each user, tasks each user will be allowed to run, whether the editing of tasks will be allowed etc.



17.1 "User Manager"

"User Manager" is run from "Options" in the main menu of the program. Only users logged in as Administrator will be allowed to run "User Manager", other users will be denied.

After running "User Manager", a window containing the list of users and groups will appear. The add, remove and edit buttons are available next to the list.

17.1 "Groups" setting

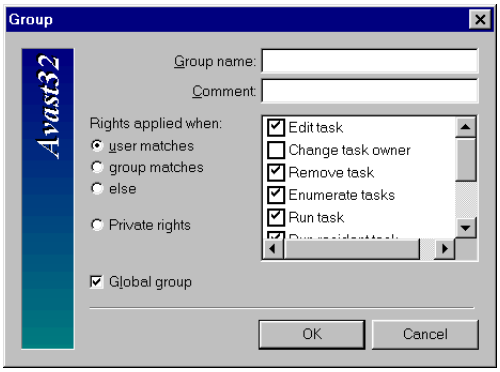
If you want to add an item to the "Group" list click on the "Add" button next to the "Group" list. Window (fig. 17.2) will appear enabling to create a new group.

Write the selected name to the "Group name" text box in the upper part of the window, you can write discretionary commentary on the lower row.

Using the radio button, choose which rights you want to change, to do the change check on or off an appropriate check box.

Rights applicable for the owner, group and rights applicable in other cases.

- Edit task
- Change task owner



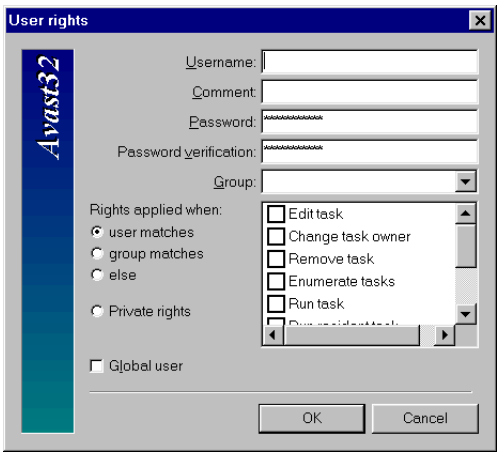
17.2 "Groups" setting

- Remove task
- Enumerate tasks
- Run task
- Run resident task
- Run task on remote computer
- Stop task
- Stop resident task

Personal rights:

- Administrator
- Remote login
- Create task
- Repair file
- Remove file
- Rename file
- Repair boot sector
- Accept file

By checking the "Global group" check box you ensure that the created group will be distributed over network to other computers on which AVAST32 is installed and thus it will be possible to use this group on other computers, too.



17.3 "User" setting

17.2 ”User“ setting

If you want to add an item to the ”User“ list click on the ”Add“ button next to the ”User“ list. Window (fig. 17.2) will appear enabling to create a new user.

Write ”User name“ in the upper part of the window, you can write discretionary commentary on the lower row.

Insert a new password to the ”Password“ and ”Password verification“ text boxes.

Choose the group in the ”Group“ combo box to which the user will belong.

After that modify the user rights listed in the list. Using the radio button, choose which rights you want to change, to do the change check on or off an appropriate check box.

Check the ”Global user“ check box to ensure that the information about the created user will be distributed over network to other computers on which AVAST32 is installed and thus it will be possible to use this user on other computers, too.

17.3 Choosing an user account for starting the tasks on the operating system start

On the User Manager main page, in the bottom part of the window it is possible to set the user, under which account, the tasks being started with operating system will be started (e.g. Resident protection). The ”Anonymous“ user from the ”Anonymous“ group is selected by default. If you would like to change this setting, select a new user from the user list in the upper part of a window and press the ”Set“ button.

Click on the ”Close“ button for saving the changes and closing this dialog box.

18 AVAST32 program update

18.1 Manual update(standalone computers)

Start the UPDATE32.EXE file from the root directory of the CD to update the virus database. Or if you have downloaded the current virus database (AVAST32.VPS file) from Internet, just copy the AVAST32.VPS file to the directory, in which AVAST32 program has been installed (Program files\ALWIL Software\AVAST32\by default). Then restart the Windows to ensure the AVAST32 program will start using the new virus database.

Update of the whole program, including the virus database is started by SETUP.EXE file from AVAST32 directory on the CD. The installer will guide you through the update process. Then restart the Windows to finish the update process.

You can also use the AUTORUN.EXE program for updating the virus database or the whole program. This program usually starts automatically on inserting the CD into the drive, or you can start it the manually from the root of the CD. Then follow the on-screen instruction to complete the appropriate type of update.

18.2 Automatic update (network computers)

The AVAST32 program can be regularly automatically updated via the special files. The following files are used: SP32.TMD, VPS30.TMD, MINISP.TMD, ASW32L.DAT, ASW32S.DAT and the associated files with the same name, but with the TM extension, where the time identification of the given TMD file is stored.

The SP32.TMD and SP32.TM files serves for the complete update of AVAST32 program including the virus database. These files released monthly and are available on the distribution CD in the TMD directory.

The VPS30.TMD and VPS30.TM files are used for update virus database (VPS file) of AVAST32 program. These files are usually released monthly or more often if it is necessary as a reaction on spreading of dangerous virus. The update VPS32.TMD file always contains the whole virus database. So if e.g. you missed the one update, you can update the database just by the latest VPS file and it is not necessary to update from all the files you missed. The files are available on the Internet and the distribution CD in the TMD directory.

The MINISP.TMD and MINISP.TM files serves for the partial update of AVAST32 program itself. These update files are released only in case, that some problem appears in the program and it is necessary to react quickly than the usual monthly update. These files are then available on our web pages.

The ASW32S.DAT and ASW32S.TM are used for the update of security - definitions of users and groups in AVAST32 program. These files can be created via the Enhanced user interface of AVAST32 program in the following way: Start the "User manager" via the "Options" item from the main program menu. Make the appropriate settings here. Only the users and groups with the "Global" flag will be used for the automatic update. If you would like to include the certain users or groups to the update, check the "Global user"

check box on the "User" setting page and "Global group" check box on the "Group" page. Then is necessary to ensure that the settings have been written onto the disk, the program engine should do that after some time of idleness. You can check this by checking the time of the last modification of ASW32D.DAT and ASW32D.TM in the DATA subdirectory, where AVAST32 program has been installed (Program files\ALWIL Software\AVAST32\by default). If even after the waiting nothing happens, close the AVAST32 program from Enhanced user interface, via the "File" menu and select "Close and shutdown engine".

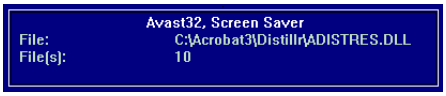
The ASW32L.DAT a ASW32L.TM files serves for the license update. These files are also stored in the DATA subdirectory, where AVAST32 program has been installed. The setting of the license is performed via the "Options/License" item in main program menu.

It is necessary to copy the ASW32S.DAT, ASW32S.TM, ASW32L.DAT, ASW32L.TM files from DATA subdirectory to some other directory. The update can't be done just by sharing the working directory of AVAST32 program for the workstations to download the files from there. AVAST32 has its files locked during the work, so no other application can use them.

The setting of automatic update itself is done in the Enhanced user interface of AVAST32 program via the "Options" menu, "Program Options" item on the "Updates" page

19 Screen Saver

AVAST32 program contains also screen saver, which allows you to scan viruses in time when computer is not engaged, when you are not working on it. Virus scanning works on the background of screen saver chosen by user, so the look of screen saver is fully controlled by user.



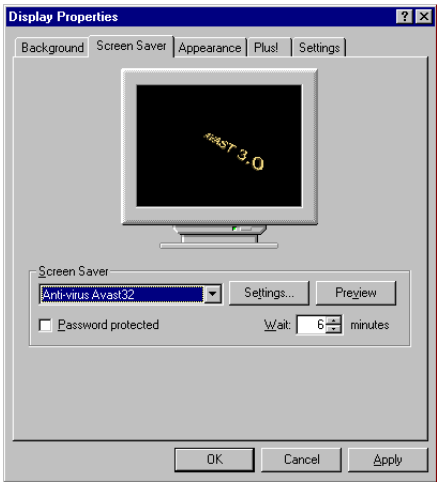
19.1 Screen Saver window

About test progress is user informed via window moving on the screen (fig. 19.1). It contains information about just tested file and the number of already tested files. In case the virus is found the test is stopped and message about virus detection is displayed in the window.

The window can be in several colors. If color depth of display is set to low number of colors (less then 65536) the background is white and the text is black, if virus is found background will be black and the text white. If color depth is set to high colors the text will be white and background blue or red (if virus is found).

If you would like to use AVAST32 screen saver, click on "Start button" in the Windows taskbar. From folder "Settings" choose "Control panel" item and then click on "Display" icon in window which will appear. Dialog box of display setting will be shown. Click on "Screen saver" sheet (fig. 19.2) there.

If you use Windows 95/98 choose "AVSS30" item from "Screen saver" list box. Under Windows NT choose "Anti-virus AVAST32" from the list.



19.2 "Screen saver" sheet

To the "Wait:" text box write the time in minutes after which screen saver should be activated if there is no user activity (key press, move with mouse and so on).

After pressing "Settings..." button it is possible to set the parameters of screen saver.

If you would like to see how the screen saver would be working click on "Preview" button.

If you are satisfied with screen saver setting, confirm it with "OK" button and next time the screen saver will be started virus scanning will be running too.

19.1 Screen Saver setting

The screen saver can be set directly in the AVAST32 program in enhanced user interface if a displaying of special tasks is enabled. The task list on the "Tasks" sheet contains the "Screen saver" item then.

You have to be logged in as Administrator to be able to perform the changes in setting.

By clicking on this item with left mouse button (or selecting the "Edit" command from popup menu) it is possible to make the appropriate settings.

You can get to screen saver properties if you click on "Display" icon in "Control panels". In displayed dialog switch to "Screen saver" sheet and click on "Settings" button.

Screen saver page

The window, where changes of screen saver (fig. 19.3) are made, contains property sheet with sheets of controls:

The "Screen saver" sheet contains basic controls for screen saver setting.

This sheet contains combo box allows choosing screen saver, on which background the viruses will be scanned. The appropriate screen saver can be selected from a list, which will appear after clicking on arrow on the right part of the box. If no screen saver is chosen or selected one is not available, program will try to find other suitable screen saver.

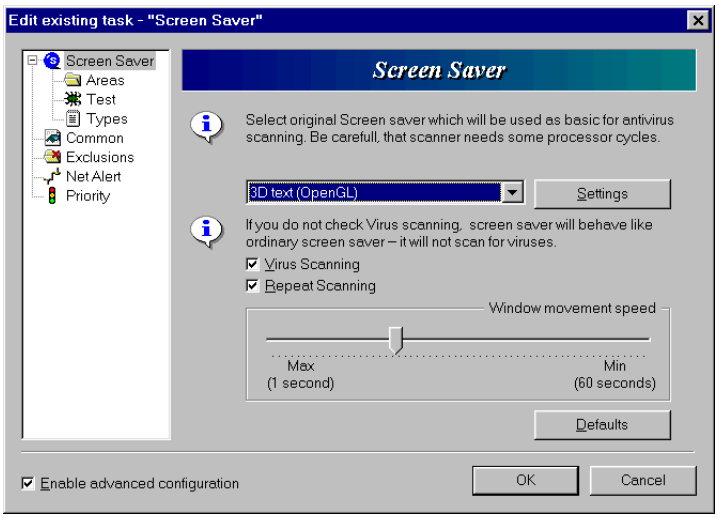
The "Settings..." button allows to set parameters of screen saver selected via above described combo box. Its function depends on chosen screen saver.

By the "Defaults" button user can set all controls to its default values. "Screen saver" sheet is available at whatever setting of screen saver.

The "Virus scanning" check box allows virus scanning by AVAST32 program screen saver. If the check box is not checked, viruses will not be scanned. Virus scanning is enabled by default.

By checking "Repeat scanning" box you will cause that after scanning of all selected areas the scanning operation will be repeated. It is enabled by default.

Scroll bar in "Window movement speed" box allows to set how fast the window of AVAST32 program screen saver will be moving around the desktop. The default value is 5 seconds.



19.3 Screen saver parameters settings

The "Areas" page determines areas where the screen saver will be scanning viruses. (See "Description of task pages" chapter for details).

The "Test" page serves for setting the parameters of virus testing. (See "Description of task pages" chapter for details).

The "Types" page allows to set types of files, which will be scanned. (See "Description of task pages" chapter for details).

On the "Common" page the common parameters of the task are set. (See "Description of task pages" chapter for details).

The "Exclusions" page (fig. ??) allows the user to set disk areas which should be excluded from the testing. (See "Description of task pages" chapter for details).

On the "Net alert" page is possible to set, that in case of virus detection, message will be sent to other computers. (See "Description of task pages" chapter for details).

The "Priority" page determines priority of testing thread. (See "Description of task pages" chapter for details).

20 Tasks

20.1 What is a Task

The basic element with which the AVAST32 program works is the ”task“. This term means a detailed description of all tests that will be performed after the start-up of a task. In case of individual tests it is possible to also set afterwards a sequence of parameters which will define the task behavior with more precision.

Each task must have its name and must contain some tests. The test can be represented, for example, by the scan of files on the hard disk for the presence of viruses, or system monitoring which is performed from time to time. A task can perform even several tests at the same time; e.g. it is possible to test for the presence of a virus and to perform the integrity checking at the same time.

All the tasks that are accessible at a given time are listed in the task list, which is included in all user interfaces except the Simple one.

If the task is started on the remote computer, the test will be scanning the content of remote computer. So if you start the ”Scan: interactive selection“ task on the remote computer, the task will ask you to browse folders to scan, you will be already browsing the folder stored on the remote computer.

20.2 Supplied tasks

A part of the installation of the AVAST32 program is also formed by several tasks that have already been created, and that enable the user to use the program immediately after its installation. Particular tasks will be described in following paragraphs.

Task ”Scan: all local disks“

The task will scan all the executable files and the OLE documents on all of the local hard disks of the computer in question. In the case that the AVAST32 finds a virus, it will announce this through a warning message and an audible alarm (if the sound card is installed in the computer). The task will announce every virus found. Also the compressed files and operating memory of the computer are to be tested. The system area of each of the disks will be checked as well.

Task ”Scan: interactive selection“

The task will completely run the same tests for the presence of viruses as the previous task, but before the test itself the user will have the possibility to select which areas are to be tested. It is of course possible to select several areas at the same time. At the selected folders it is possible to determine whether you also wish to scan the subfolders.

Task "Scan: diskette A:"

This task performs the same test as the two previous tasks, but they are done on the diskette in the drive A:. We recommend running this task for all potentially infected diskettes. In particular it concerns the diskettes, which were used in other computers or by other users. Also the system area, i.e. the boot sector, will be scanned on a diskette.

Task "Check: all local disks"

The task will check whether some executable files situated on all local hard disks have been changed since the time of the last check. The contents of the files will only be checked if a parameter has been changed since the last check, e.g. such as attributes, size of the file, etc. The results will be recorded in a well-arranged tree control. The task will also check whether a change in the system areas of the disks checked appeared since the last check.

According to text above, the changes in the files can only be checked between two integrity checking. The result of the first run of the task will be the message that all the files on the disk check "have been added". Therefore it is necessary to record the status of the files onto an internal database, so that in the case of the next integrity check it will be possible to compare the current status of the files with the previous ones.

Task "Check: interactive selection"

The task will perform the same test as the previous one, but it will ask the user for the areas to be checked. Also in the case of this test it applies that if the results are to be usable, it is necessary to fill the database of the files first.

Task "Resident: full protection"

The protection performed by this task is based on two facts. If a virus is about to infect the computer, it must be run first (i.e. the control must be passed to it), and therefore it is advantageous to scan all the executable files and all the boot sectors of the diskettes inserted. The other presumption is that the virus is performing an activity in the computer: it writes into a file to be run, into the boot sector of diskettes or it even tries to re-format a certain part of the disk.

All of the above described activities are checked by this task, and in the case of an attempt to perform a potentially dangerous operation it first inquires of the user, whether such an operation can be performed. Without his authorization it will not be possible to perform that operation. If this task and its protections are to be effective, you must let it run!

Task "Complete test of executables"

At first the task will check whether some executable files on all local hard disks have been changed since the time of the last check. The task will also check whether a change in the system areas of the disks checked appeared since the last check. If the task will find any change, it will scan the file or system area for the presence of known virus.

Special tasks

They are tasks of special meaning in AVAST32 program. There are tasks: ”Explorer extension “ and ”Explorer extension“.

20.3 Creation of new tasks

If the supplied task doesn't suit you it is, of course, possible to create new task in compliance with your needs.

New task can be created via Enhanced user interface only. If you use the Simple interface, switch to Enhanced user interface. Switch to ”Tasks“ page and right click on tasks list here. Choose ”Add new...“ from the shortcut menu.

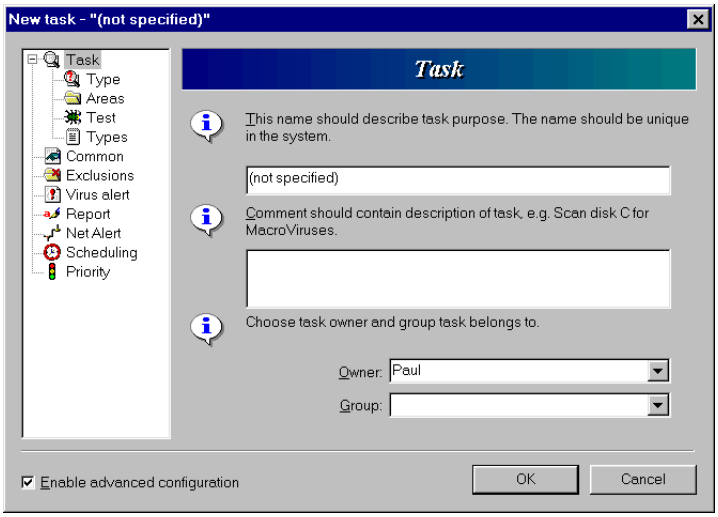
A detailed description of the procedure for the creation of new tasks you will find in the ”Description of task pages“ chapter.

21 Description of task pages

The following text deals with the description of individual pages with controls. Always the description of all the controls situated on the page and their defaults are provided. The figures accompanying individual pages show the pages when the Tree control is being used. When the Wizard or Tab is used, the appearance of the window is different nevertheless the controls and their meanings are the same.

21.1 ”Task“ page

On the ”Task“ page (fig. 21.1) the program requires that the name of the task being created be entered. It should be as appropriate as possible and, to avoid possible confusion, it should not be identical to any name of the already existing tasks, even if the program is capable to work also with tasks having the same names. If you fail to enter a name, no new task will be created. The text field contains ”(not specified)“ as a default.



21.1 ”Task“ page

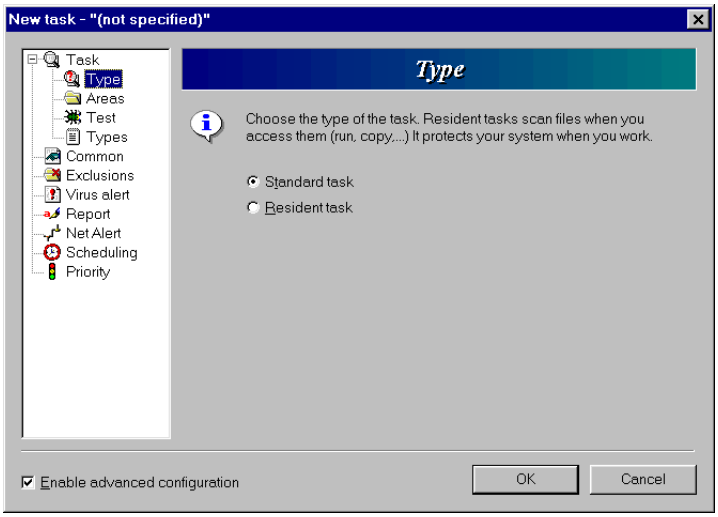
It is possible to enter a brief task commentary the next text box. This item may stay emty.

Via the ”Group“ combo box set the group which the task belongs to.

Via the ”Owner“ combo box set the owner, which the task belongs to.

21.2 ”Type“ page

On the ”Type“ page (fig. 21.2) the user chooses if created task will be resident or standard. By selecting ”Standard“ radio button the created task will be standard (not resident). For the creation of resident task select the ”Resident“ radio button. After selecting the radio button the options of further task settings will be automatically adjusted. Standard task is selected by default.



21.2 ”Type“ page

21.3 ”Resident“ page

This page is available only for configuration of Resident task.

The ”Resident“ page (fig. 21.3) contains a list of available providers of resident protection. The number of items shown in the list depends on the program version you use. The list contains ”Standard Shield“ by default. This item is also selected as default one.

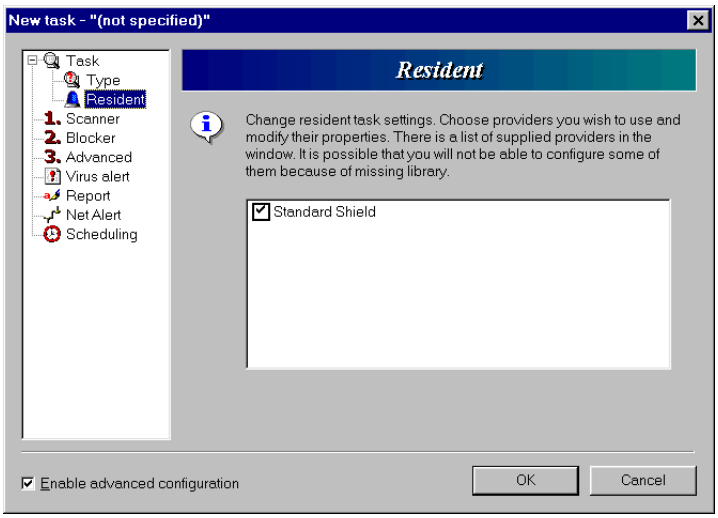
21.4 ”Scanner“ page

This page is available only for configuration of Resident task.

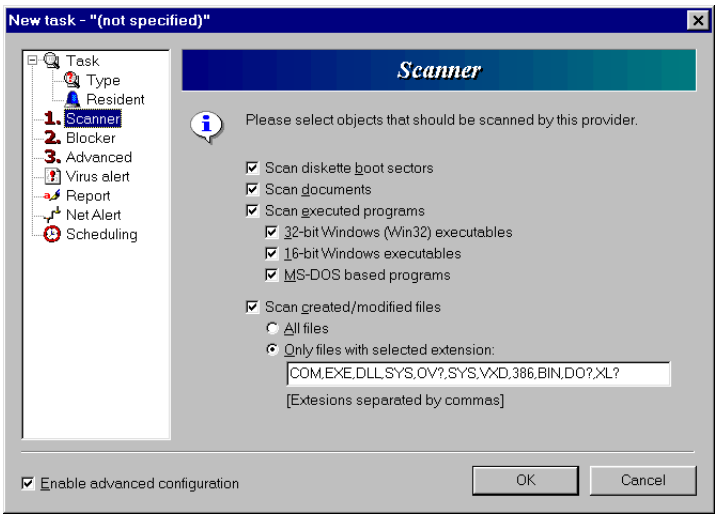
The ”Scanner“ page (fig. ??) contains controls used for the more detailed specification of the objects to be scanned.

At each attempt of running a program or opening a document AVAST32 will scan them first and whether or not they are infected with a known virus. If not, the file will be run, in the other case the user will be announced.

However, the files containing the OLE documents will be scanned only in the case when they are opened with help of the OLE functions. With the standard operations with the files, as to their copying, etc. the document will not be scanned.



21.3 "Resident" page



21.4 The "Scanner" page of resident task

The executable files and the OLE documents are scanned at the moment when their run or their opening with help of the OLE functions are required. It implies that the speed of the task run can only be slightly reduced at the start-up of the scanned application or at the opening of an OLE document - but not during the proper work with the started application or with the opened document.

It is possible to check the OLE documents, 16-bit applications for Windows 3.1x, MS-DOS applications and, of course, 32-bit programs. Whether the appropriate type of the file is to be scanned or not you will specify by checking off the appropriate check box:

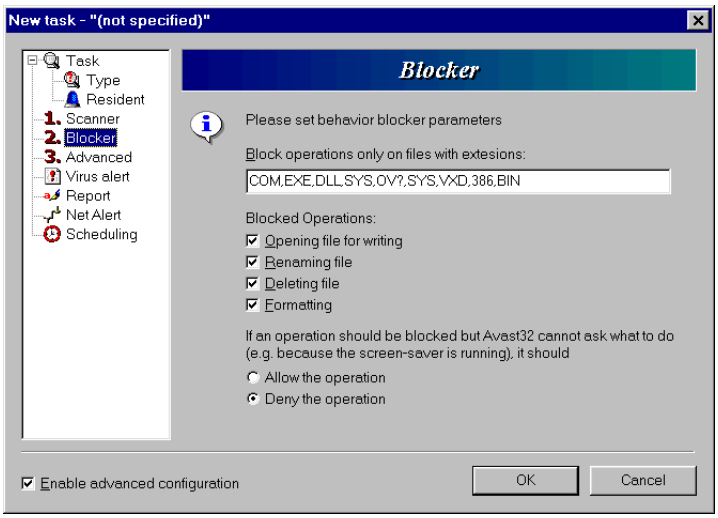
- Scan diskette boot sectors
- Scan documnets
- Scan executed programs
- 32-bit Windows (Win32) excutables
- 16-bit Windows excutables
- MS-DOS based programs

If you would like to scan files not only at the file opening, but also already during the file copying, check the "Scan created/modified files" check box. And via the radio button determine whether all the files will be scanned or only files with selected extensions. If you would like to modify the selected extensions, click to the text box and do the modification. Extensions separate by commas.

21.5 "Blocker" page

This page is available only for configuration of Resident task.

The "Blocker" page (fig. 21.5) contains the controls for setting of the blocking of potentially dangerous operations. At any attempt to perform such an operation the user will be advised, and the operation will be performed only with his approval.



21.5 The "Blocker" page of resident task

At this approach, however, the user can often be disturbed by useless inquiries, and therefore AVAST32 offers a possibility to select only the operations that are to be monitored.

Firstly choose the file extensions which should be monitored. The chosen extensions enter into the text box and separate them by commas.

By checking the "Opening file for writing" check box AVAST32 will monitor the opening file for the writing, thereby a new virus can be detected, while it attempts to write into the executable file and spread itself this way in your computer.

The "Renaming file" check box serves for setting of checking the rename file operation.

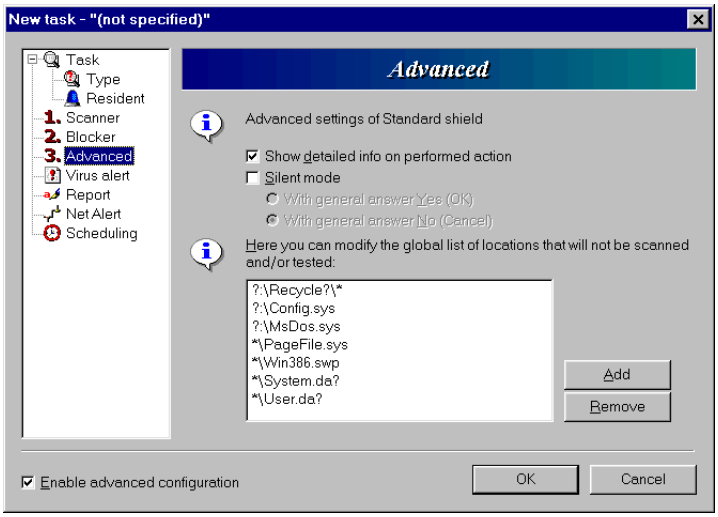
By checking the "Deleting file" check box AVAST32 will be monitoring the file deletion.

In the case that AVAST32 needs to display a dialog about the blocked operation and is unable to display the message (e.g. because the screen saver is running or the user in not logged to the computer), it will make decision automatically. By the "Allow the operation" or "Deny the operation" radio buttons set if AVAST32 should allow or deny the performed operation.

21.6 ”Advanced“ page

This page is available only for configuration of Resident task.

The ”Advanced“ page (fig. 21.6) contains the controls for setting of advanced parameters of the resident ”Standard shield“ protection.



21.6 ”Advanced“ page of resident protection

The ”Show detailed info on performed action“ check box determines whether the user would like to be informed about the performed resident operations. If the check box is checked, an information about the resident operation just being performed will be shown in the left bottom part of a Windows desktop. If the check box is not checked, there will be no information, which is a default setting.

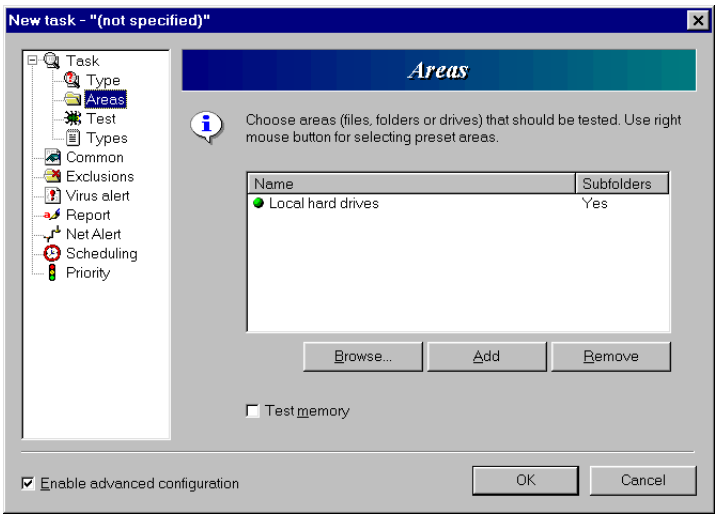
By checking the ”Silent mode“ check box, the resident part of AVAST32 program will not display any message a will automatically continue with the answer, which can be selected via radio button ”With general answer Yes (OK)“ or ”With general answer No (Cancel)“. This setting is especially suitable for servers, where is no person present, which can react on messages being displayed by resident protection.

On this page you can also set the areas, which will not be tested. If you would like to add another item to the list click on the ”Add“ button and enter the file or folder including the full path. You can also use the wildcards. If you would like to remove some item from the list, select it and click on the ”Remove“ button.

21.7 ”Areas“ page

The ”Areas“ page (fig. 21.7) enables the user to preset which disks or folders are to be tested by the newly created task. Thus it is possible to determine exactly just those areas that are to be checked and accelerate the task operation by excluding the areas, the testing of which is useless.

All the tested areas are displayed in the list on this page. It is possible to add an area through the popup menu. It contains the preselected areas ”Local hard drives“,



21.7 ”Areas“ page

”All drives“,”All hard drives“, ”Remote drives“, ”Removable drives“, ”Diskette A:“, ”Disk C:“,”CD-ROM“, ”Boot Disk“ and ”Add in runtime“. The last item means that before the start-up of the task the user will be asked about other areas to be tested together with those specified in the list. By checking off the area in the popup menu it will appear also in the list of the areas to be checked.

By means of the ”Process subfolders“ checking item of the popup menu you can specify whether in a selected area also all the inserted folders are to be tested. If the folder is not checked off, only the files situated in the folder or disk selected will be checked - the folders which are possibly inserted will not be tested. The item can be preset for each of the tested area separately. The testing of the subfolders is enabled by default.

The ”Browse“ button enables you to select directly those areas which are to supposed to be tested. Having selected it you will see the standard dialog which enables you to select even more areas at the same time. The areas selected in this dialog will be put into the list.

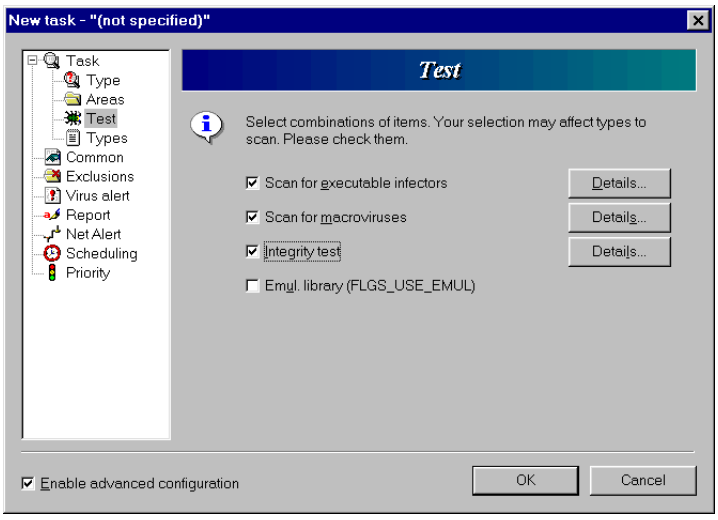
The ”Add“ button or ”Insert“ key is used for entering the area directly from a keyboard. After its entering, the ”Edit this file/folder name template in this box...“ item will be added to the list of the tested areas, and its editing will be possible. Once you have entered the area, press the ”Enter“ key. It is also possible to use the wildcards ”*“ (asterisk) and ”?“ (question mark) and to specify more folders at the same time.

Areas entered by user can be changed at any time - after click with left mouse button on appropriate area you will be able to edit it.

If you want to remove an area from the list, select it with the left button of the mouse first, and then click on the ”Del“ button or press ”Delete“ key. Preselected areas can also be removed from the list by canceling their being checked off in the popup menu.

21.8 ”Test“ page

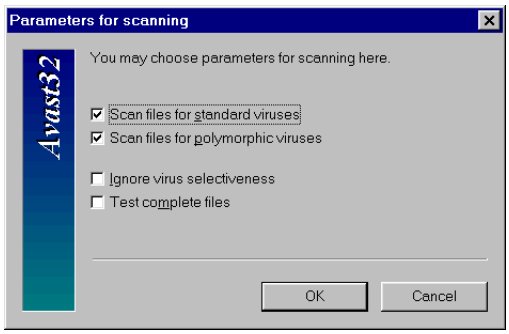
The ”Test“ page (fig. 21.8) contains the controls through which the proper test of the task is to be defined. It is possible to preset that the task will perform even more tests at



21.8 "Test" page

the same time. Having not selected even a single test, you will not be allowed to create any new task.

Check box "Scan for executable infectors" enables scanning for the presence of known viruses. It means, anyway, that all known viruses will gradually be searched for in each of the selected files and their possible presence will be announced to the user. The search for viruses is activated by default. By clicking on "Details" (fig. 21.9) button next to this item it is possible to set further details.



21.9 "Scan for executable infectors" details

Check box "Scan files for standard viruses" determines if the standard viruses will be tested. (It is enabled by default).

Check box "Scan files for polymorphic viruses" determines if the polymorphic viruses will be tested. (It is enabled by default).

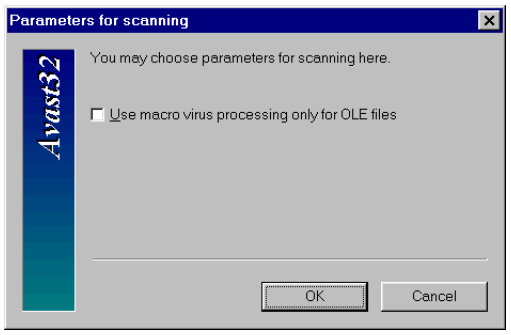
The check box "Ignore virus selectivness" is used to activate the scan of the files for the presence of all viruses in the database. If the box is not checked off, the files are only tested for the presence of viruses that are attacking the file type in question. It means that if the file is of the COM type, it will not be tested for the presence of viruses attacking only the files of the EXE type, etc. By checking off this box you will ensure that the files are

tested for the presence of all the viruses, regardless to the type being infected. This box is checked off by default.

The check box "Test complete files" determines, whether the entire files are to be scaned for the presence of viruses. If the box is not checked off, the AVAST32 will scan only some of the file areas. It is convenient in particular from the point of view of the task. The program is based on the fact that the overwhelming majority of viruses infected files adding to the end of the files or rewriting of their beginnings, and thus it is usually useless to test the entire file. This box is checked off by default.

The check box "Scan for macroviruses" enables the scanning for microviruses. Macroviruses are the viruses which spread through OLE document macros (e.g. MS Word document or MS Excel sheet).

By clicking on "Details" (fig. 21.10) button next to this item it is possible to set further details.



21.10 ["Scan for macroviruses" details

Check box "Use macro virus processing only for OLE files" restricts the macrovirus testing on OLE documents only.

The "Integrity test" check box is used for the activation of data integrity tests. The test will check anyway for each of the selected files and whether it has been changed or not, then in case of its change the test will try to determine the way in which the changes have been made. The box is checked off by default.

By clicking on "Details" (fig. 21.11) button next to this item it is possible to set further details.

Check box "Ignore ARCHIVE attribute" disables testing of ARCHIVE attribute change.

Check box "Do not test file content" disables testing changes in file content.

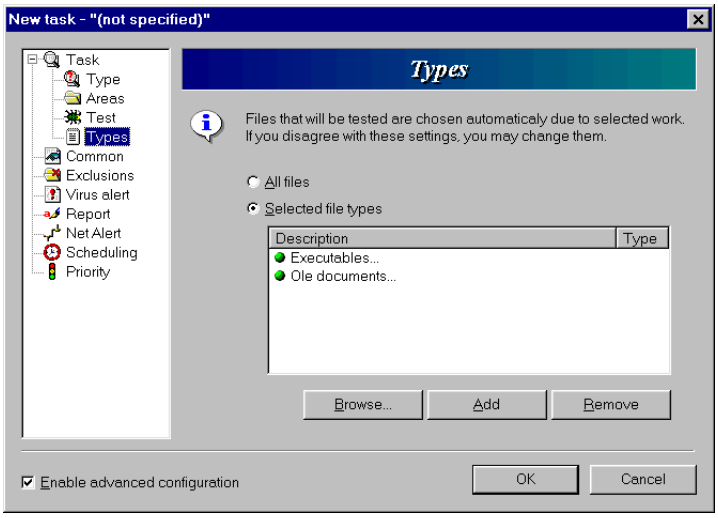
Check box "Test content and security only in changed files" enables content testing if file has been changed.

The "Scan changed files" check box enables testing for known viruses in changed files.

21.11 [”Integrity test“ details

21.9 ”Types“ page

The ”Types“ page (fig. 21.12) is designed for the determination of the types of files which are to be tested in the areas selected. In most of cases it is not necessary to test all the files, because viruses attack only some of them. It is for example useless to test the text files (files with the TXT extension), because even if there was a virus in them, the operating system will not allow it to start the text files, and thus the virus will never become active. By reducing the number of files to be tested you will make the progress of the task faster.



21.12 ”Types“ page

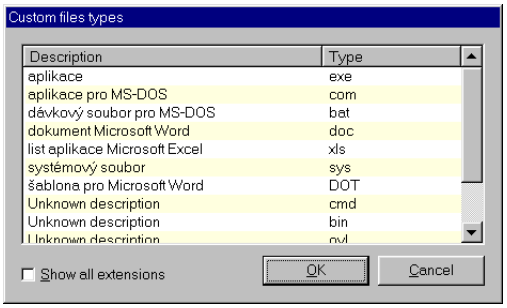
”All files“ radio button enables testing of all files.

By choosing ”Selected file types“ radio box the testing of files listed on this page is enabled.

The list contains a brief description of the type of the files, and possibly also its extension. The file extension can also contain the wildcards, as ”*“ (asterisk) and ”?“ (question mark), the meaning of which is the same as in the case of the use in any other place in the operating system.

The adding of another type to the list of the tested types is possible through the popup menu. It will be displayed after pressing the right button of the mouse on the list of the types. The first three items of the popup menu are the preset types, by the checking off of which the type in question will be placed also to the list of the types. It concerns the following items: "All files types" - the test of all the types selected will be activated, "Executables" - only the executable files will be tested (including the libraries), and the list item "OLE documents" activates the test of the documents created by using OLE technology. If their checking off has been canceled, they are also automatically removed from the list of the types tested.

It is also possible to add the types from the database of known types to the list of the types. This can be done by using the "Browse types ..." command in the popup menu. If it is selected, the dialog (fig. 21.13) containing the database of the known types of files will be displayed. It can contain either the most important types of the files or, after checking off the "Show all extensions" box, it will contain all the known types of the files. If you want to include a type into the list of the checked types, first make it active, and then press the "OK" button. After pressing the "Cancel" button the dialog will be closed and the list will remain unchanged.



21.13 "Custom file types" types

The "Add template" command is used to enter the type of the files selected directly. After selecting it the user is enabled to write the type extension. After writing it and pressing the "Enter" key the new type is added to the list.

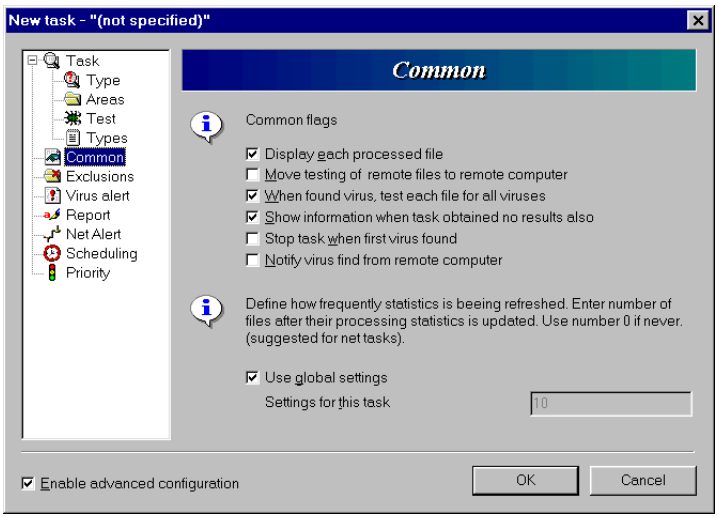
Types entered by user can be changed at any time - after click with left mouse button on appropriate type you will be able to edit it.

Firstly the file type of selected file is tested when the task is running. If the file is listed in the list on this page all operations will be performed with it. Otherwise the file will be skipped. The program (executable) files and OLE documents are tested by default.

21.10 "Common" page

On the "Common" page (fig. 21.14) the common parameters of the created task are set.

Check box "Display each processed file" enables displaying of all tested files in status windows during task processing. This item is enabled by default



21.14 "Common" page

By checking box "Move testing of remote files to remote computer" the testing of remote files will be performed on remote computer if the program engine is running there. This item is disabled by default.

Check box "When found virus, test each file for all viruses" enables testing of all files on all virus type when virus has been found.

By checking "Show information when no virus was found" check box AVAST32 will display message when the scan task is done, even if no virus was found. This is enabled by default.

The "Stop task when first virus found" check box determines that, if a virus is found the task will be immediately stopped.

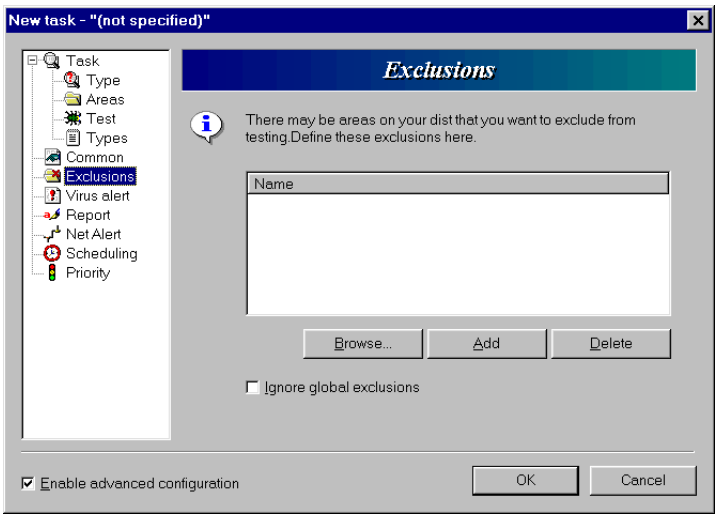
The "Notify virus found from remote computer" check box ensures that, if task started on remote computer will find a virus, a message informing about the virus will be displayed on the remote computer.

On this page it is possible to define refresh frequency of statistics. You can enter number of files after their processing statistics is refreshed to the "Settings for this task" text box. If you don't want a statistics enter number 0 here. If you want to use global settings of this parameter check the "Use global settings" check box.

21.11 "Exclusions" page

The "Exclusions" page (fig. 21.15) allows the user to set disk areas which should be excluded from the testing

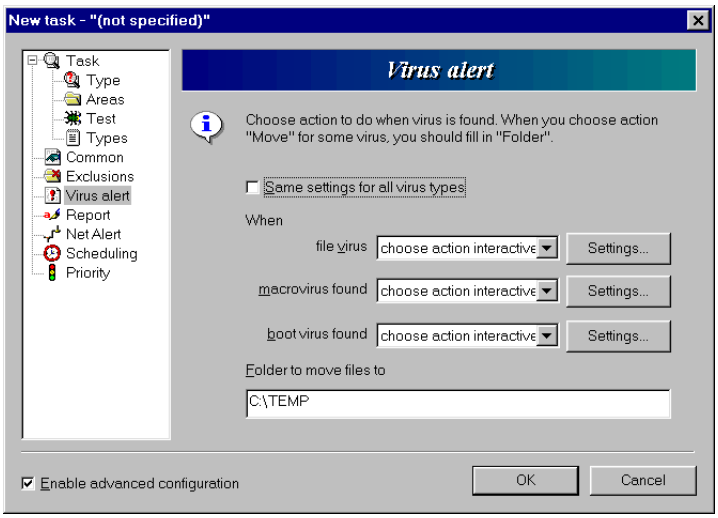
By checking box "Ignore global exclusion" the program will ignore the global exclusions set in Exception page on program option page.



21.15 ”Exclusions“ page

21.12 ”Virus alert“ page

On the ”Virus alert“ page (fig. 21.16) it is possible to set what Avast32 program should do if the virus is found.



21.16 ”Virus alert“ page

Check box ”Same settings for all virus types“ determines that the following settings will be applied to all virus types. If this check box is not checked it is possible to set the parameters of actions for each type of the virus.

The action which Avast32 program will perform after finding the virus can be selected from the list in ”When virus found“ combo box. The list offers these options:

Continue

The program will continue without any action.

Remove it

The program will try to remove the virus automatically using the date stored via integrity checking. By clicking on "Setting" button it is possible to set details on removing the macroviruses.

Through the radio button "Delete only virus macros from the document" it is possible to preset that only the macros, in which a virus has been found, should be removed from the document. The other macros will remain untouched.

The radio button "Delete all macros from document" will cause that all the macros will be removed from the OLE document, whether they contain a virus or not.The default setting is to remove only those macros that contain a virus.

Checking the box "Force delete all macros if virus not recognized exactly" you will set to the program that if the virus has not been recognized with full exactness (in the case of some macroviruses the detection is very difficult), all the macros are to be removed from the document.

Rename/move file

The program will move to another folder or rename the suspicious files. By clicking on "Setting" button it is possible to set details:

The check box "Rename file(s)" enables you to change the extension at the marked files. The files renamed this way will be distinguished from the others and in case of the executable files you will also prevent their accidental running. It would lead, in case that the file in question contains a virus, to the infecting of the computer (if it has not happened yet). The existing extension will be replaced with the preset one at the given file. The proper name of the file will remain unchanged.

If the program finds an unknown type of the file during the renaming, it will inquire the user about how the extension of the file found is to be changed. The program will remember the extension entered, and when it finds a file of the same type next time, it will automatically use such a extension.

By checking off the box "Move file(s)" you will activate the moving of the files marked to the folder selected.

If the moving of the files is activated, it is possible to determine, by checking off the box "Force moving locked or used file(s) on next OS startup", that if it is not possible to manipulate the file at the given moment (e.g. it is used by another application), it is possible to postpone its moving till the next start of the operating system. Thus it cannot happen that you would forget to move the file - the program takes care of everything by itself.

remove file

The program will delete infected files. By clicking on "Setting" button it is possible to set details.

By selecting the "Delete file(s) using Recycle bin" radio button you will determine that the marked files will be deleted by being moved to the recycle bin. The "Delete file(s) permanently" radio button will start the direct deleting from the disk of the files, without any possibility of restoring them. If the radio button is selected, by using the check box "Delete file(s) on next OS startup" you may determine that if it is not possible to manipulate the file at the moment (e.g. it is used by another application), it is possible to postpone its being deleted till the next start-up of the operating system.

The "Confirm file(s) deletion" check box enables the confirmation on files deletion.

Choose action interactive

The program will display a dialog with options what to do with the virus. By clicking on "Setting" button it is possible to set details. It is possible to set which button will be available: Delete, Repair, Move / Rename, Stop. In the text box it is possible to set the text which will be displayed when the virus is found.

Show message

The program will only display the message when the virus is found. . By clicking on "Setting" button a dialog allowing the message text modification would appear. If the network messaging is allowed, this message will be send to all chosen computers.

There is a text box available, which enables the user to enter the proper text of the report. With help of the formatting marks it is possible to enter even variable parameters into it, as the file name, task name, etc. The appropriate formatting mark will then be replaced with a regular name. The meaning of the formatting marks is as follows:

%1 - infected file name,

%2 - name of the virus which infected the file,

%3 - name of the task which the virus appeared.

If for example the task "Scan C" has found the virus "OneHalf" in the "C: \PROGRAM.EXE" file, and the text to be inserted will have the form "Warning! Virus %2 has been found in the file %1. Used task %3.", the resulting message will read: "Warning! Virus OneHalf has been found in the file C: \PROGRAM.EXE. Used task Scan C.".

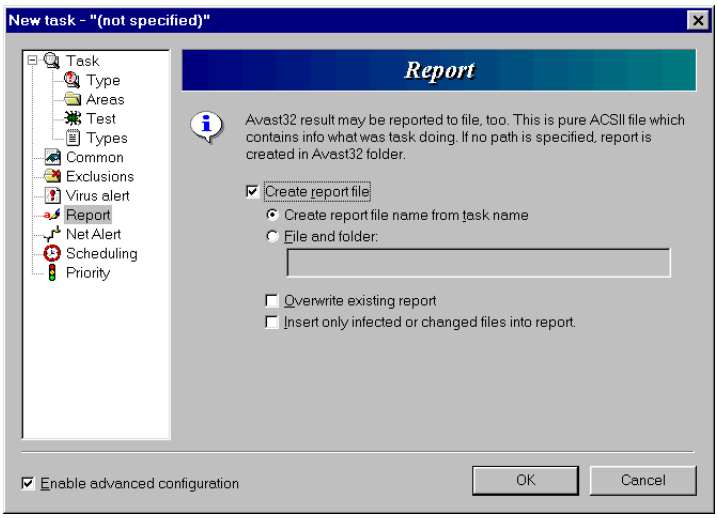
By default the text box contains the message in the form:

File %1 is infected by virus %2.

The "Folder to move files to" text box determines to which folder the infected files will be moved. The default path is C: \TEMP.

21.13 "Report" page

During the task progress the AVAST32 program can create a file containing a detailed message on its activity and results. The permission to create such a report and the setting of its name is just the object of the "Report" page (fig. 21.17).



21.17 "Report" page

The message on the task operation is stored in the form of a pure ASCII text to the selected file. It contains the information on the files that were tested, on the viruses found and other important information, including statistics of tests.

The check box "Create report file" enables the creating of the file with a report on the task activity.

By selecting radio button "Create report file name from task name" the file name of the report will be created from the task name with RPT extension.

By selecting radio button "File and folder" you will be allowed to enter the file name and folder for creating a report file into the text box below.

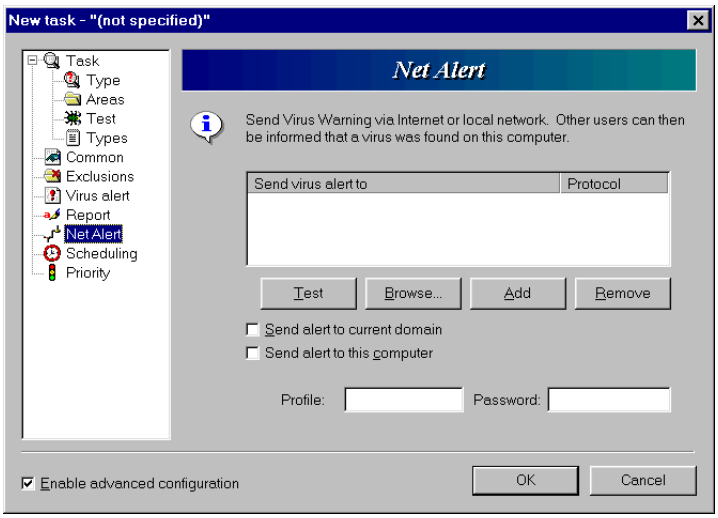
The check box "Overwrite existing report file" advises the program that if a file with a report of the given name already exists, it is to be overwritten. If the overwriting is not enabled, and a file with the report already exists, then the report on the activity of this task will be added to the already existing file.

The check box "Insert only infected or changed files into report" determines that only an infected or changed files will be included into the report file.

21.14 "Net alert" page

The "Net alert" page (fig. 21.18) contains the controls for the setting of the parameters of sending warning messages over the network. In case of finding a virus the AVAST32 allows sending warning message about the possible danger to the computers accessible over the network and thus prevent from wide spread of the virus.

It is possible to add the name of computer, which the warning message should be send to into the list of selected computers. By clicking on the "Add" button a shortcut menu with available protocols will appear:



21.18 "Net alert" page

- "Internet" item determines that computer to which warning message will be send is specified by standard address. The SMTP (Internet Mail) protocol will be used for message delivery,
- by "Microsoft" item you tell the program that appropriate computer is available via Microsoft Mail,
- "Raw" item allows the user to enter whatever address including protocol specification which should be used. E.g. "SMTP:novak@aaa.cz" address of this protocol is the same as "novak@aaa.cz" address of "Internet" protocol and the like,
- "Internal" item assign that computer for sending virus alert will be available via local network.

After selecting appropriate protocol an item "Edit for valid address or name..." will be added to the list. Right click on the item for edit. When finished press "Enter" key.

Computer names entered by user can be changed at any time - after click with left mouse button on appropriate name you will be able to edit it.

After pressing "Browse" button a list of computers available via local network will be displayed. Search the list and click on appropriate computer and press "OK" button for adding to the list or press "Cancel" for no changes.

For deleting the computer from a list press on it and press "Remove" key.

You can change parameters of listed computers here. Click on "Protocol" column for protocol change. From shortcut menu choose new protocol. You can change name/address in the similar way, after left click on the name an edit will be allowed.

If you are not sure about the delivery of a warning message, you can test the "connection" by using the "Test" button. A testing message will be send to each of the selected computers.

If you will be sending messages via other protocol than "Internal", it is necessary to enter profile name which should be used, and its password if necessary to appropriate text box. If you leave "Profile" text box empty, profile entered for usage of all tasks will be used. If even here no profile is entered and you are not using no profile at the moment (you are not running e.g. Microsoft Outlook program) you will be asked for profile name.

If you enter profile on this page and you also enter profile for usage of all tasks, the profile entered on this page will be used (i.e. task profile).

For sending or reading network messages under Windows NT "Alerter" and "Messenger" services must be enabled ("Control panel", "Services" item). I you do not have the required permission contact your system administrator. You need "WinPopup" program enabled for Windows 95/98 messaging.

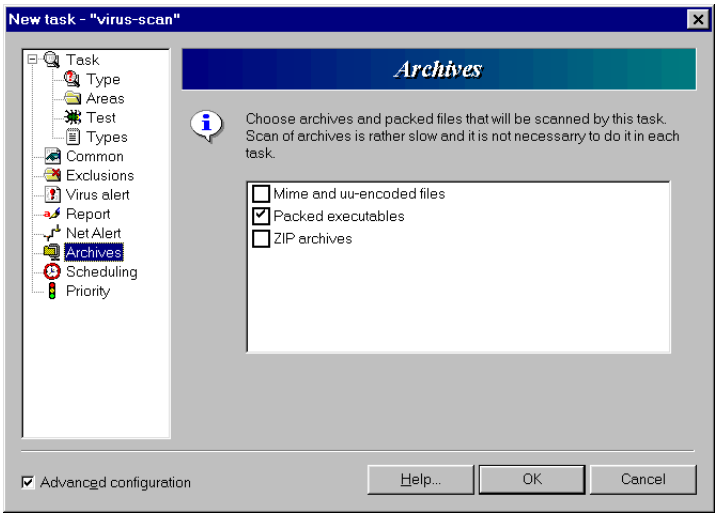
A warning message can come to a selected computer several times. It is not a fault of the program, but a matter of the system. The number of the message copies sent depends on the number of the network protocols installed.

By checking the "Send alert to current domain" box you will set the sending of a warning message reporting that a virus has been found to all the computers which will be connected at that given moment to the current domain.

By checking "Send alert to this computer" check box the net alert message will be also send to this computer.

21.15 "Archives" page

"Archives" page (fig. 21.19) allows to set which archives and packed files will be scanned for the viruses.



21.19 "Archives" page

By checking the "ZIP archives" check box, AVAST32 will also scan the files stored in ZIP files

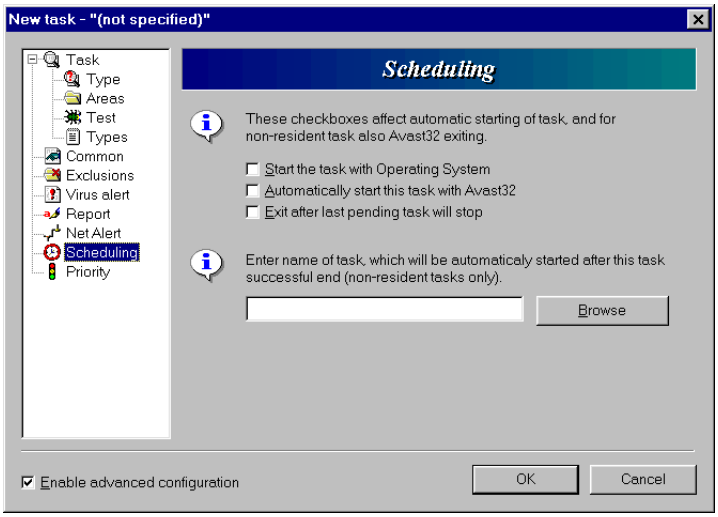
The "Packed executables" check box ensures the scanning of packed executable files.

The "Mime and uu-encoded files" check box enables scanning of mime and uu-encoded files. This encoding is used in electronic mail. This module is primarily designated for cooperation with AVAST32 Firewall Edition and AVAST32 Mail plugin and it provides scanning of electronic mail attachments. This module allows to clean or delete the infected

files, whereas the deleting of the file is implemented as replacing the file with the new file of zero length.

21.16 ”Scheduling“ page

The ”Scheduling“ page (fig. 21.20) contains settings of automatic starting and finishing of the tasks.



21.20 ”Scheduling“ page

By checking off the box ”Start task with Operating system“ the user tells the program that the task being created is going to be started immediately after the user's logging on. This box is not checked off by default.

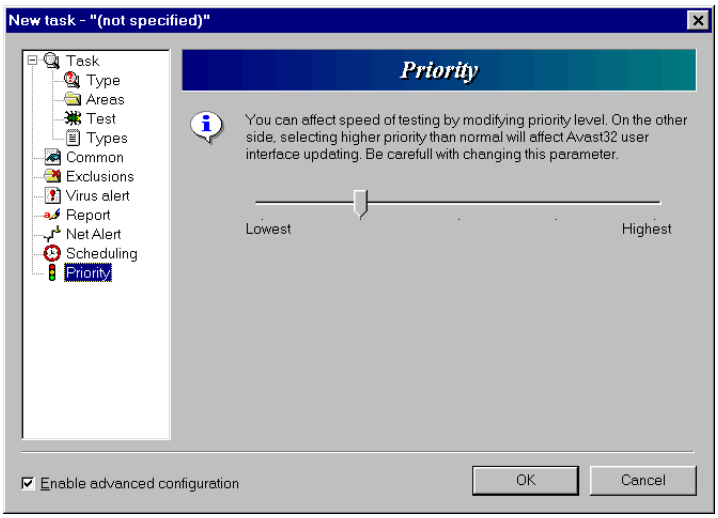
The check box ”Automatically start this task with AVAST32“ starts the run of the task automatically after the start-up of the AVAST32 program. The running of the task with the AVAST32 is disabled by default.

The following two check boxes will influence only the non-resident tasks, i.e. the tasks containing the virus scanning or the integrity checking. Their setting in not allowed by the resident tasks.

The check box ”Exit after last pending task will stop“ activates the automatic closing of the AVAST32 after the end of the last task running. This possibility can be used especially in the case of the tasks which are started otherwise than directly from the AVAST32, e.g. with help of a shortcut on the desktop. The box is not checked off by default

On this page the user can choose a task that will start when the current task is finished.

The name of such a task can be type in the task name box or can be chosen from already created tasks list. If you click on the ”Browse“ button next to the text box tasks list will appear. Text box contains no text by default.



21.21 "Priority" page

21.17 "Priority" page

Every non-resident task makes it possible to preset its operation priority. It means that the user will announce to the operating system, how important the task is for him. The higher priority the task has, the more time of the processor it will get, and thus also the faster it will run. It is necessary to realize that the speed of the task operation depends not only on its priority, but also on the current status of the operating system and on the priorities of all the other programs that are currently running. The default value of the task priority is smaller than the priority of the AVAST32 program itself.

Only this page is used to preset the task priority (fig. 21.21).

It contains only a slider, through the setting of which it is possible to change the priority of the task. The more to the left the slider indicator is, the lower priority the task has, and vice versa. As it concerns intervention into the operating system task planning, we do recommend the change of the position of the slider indicator only for those users who knows what they are doing. The preset priority will be suitable in the overwhelming majority of cases for the normal user. If the preset priority of a task is too high, it may mean that the restoring of the user's environment of the program will be slowed down. It is not a fault of the program, but only a consequence of the fact that the task has a higher priority than the user interface of the AVAST32.

22 AVAST32 program found viruses

If any program of the AVAST32 package has announced you presence of a virus it does not have to always mean that the file is really infected. Firstly ensure that is not a false positive. If it seems to be really a virus, find out the type of virus and accordingly to the type then perform the appropriate action to remove the virus.

22.1 False positive caused by using two scanners running at the same time

If you are using several different scanners at the same time or immediately after each other, it may happen that some of them will announce to you the presence of a virus in the memory. The reason for doing so is simple. Each of the scanners needs to have, at least for a while, the information of viruses non-coded and accessible in the memory. If at the same moment this memory is tested by another scanner, or if this memory is transferred into the virtual memory, and later used without cleaning, it may happen that this information becomes a cause of the false positive.

How to find out whether it is the case of a false positive? It is easy enough, but maybe quite time-demanding. Terminate your work with all the applications, terminate the operating system and turn off your computer by the power switch. Turn it on again and start-up the operating system. Start the scanner that announced you the presence of a virus in the memory. If it does not announce its presence repeatedly, try to repeat the work (running of programs) which you were doing before starting the scanners, and after some moments start testing against viruses again. If even in this case no virus is found in the memory, it is a false positive.

AVAST32 thoroughly cleans all the used memory and what is more, all the information and virus samples it maintains only in a coded form. Only at the moment of testing it decodes the information on a virus, and having used this information it deletes it. It means that at any moment there can be not more than one decoded sample of a virus in the memory.

22.2 False positive caused by immunization of files

There are some antivirus means offering and working with the function which we call the "immunization of files" or with a function which offers the adding of the checksum to the file tested. During the next testing the above mentioned utilities will simply test the added information comparing to the current conditions, and on the basis of the result they can announced a suspicion of the file being infected by a virus. This process is very fast and quite simple for the implementation.

But this relatively simple and fast process is followed by a few crucial problems. Imagine that there are two products working this way and used for the testing of one file. Through their alternating use they will mutually interfere each other, and both the products will report that the file has been changed.

Another problem is represented by the fact that the testing itself of a file will physically change it. If we do not speak about the copyright problems of the original files, we will face the question, whether you can be sure that the program changed continues working in the same way as its original. Probably it will, but there are programs which check themselves before the start-up, and such programs will not work in case of any change. Furthermore, the above lines only apply in the executable files. Any change in the data files is followed by a high risk of a failure of the program that is using these files.

AVAST32 does not modify any tested file in any way. For the reasons of higher safety it even opens the tested file only for reading in order that they should not be spoiled even accidentally. If some of the AVAST32 parts save information about files, they do it into an independent file.

Only in a special case, that is at the removal of the viruses found, the writing into the files occurs, but even in this case this process is performed with a file copy and only after the successful completion the file corrected is written with its original name.

22.3 False positive caused by hoax programs

If it happens to you, that your computer starts to behave unexpectedly, even suspiciously, it need not be any virus, which is behind it. It may be a prank program, installed in your computer by your colleague, or which was presented to you with false or misleading information on its purpose. An example may be the installation of the presentation of "blue" pictures at the computer start-up. People of weaker characters or less experienced users may have problems with placing into original status, and they may consider a similar "prank" to be caused by the effects of an especially treacherous virus.

Nevertheless, it may not be true. And how to recognize a "hoax" from a real virus? It may be difficult as it is not possible to specify the exact borders of these two groups. It is necessary to base your analysis on the particular situation. For example, viruses cannot afford presentations of some graphical images (especially in colors) because such pictures are too large. The most important difference, which, however, is not easy to recognize, is that unlike "jokes", viruses are reproducing.

22.4 False positive caused by a failure of technology or program equipment

Problems with technology, programs installed or with other equipment can be easily changed with a virus infection. For example, the frequent problems, which are confused this way, are the problems with printing or with the hard disk. However, there are very few viruses, which can cause these problems.

22.5 False positive caused by the system principles of Windows

Windows uses such a way of memory administration that it will enable you to use more memory than you have in reality. However, it can cause a false positive because the virus "signatures" which are present in the "physical" memory can appear also on the disk in the "virtual" memory. Then it may happen that you will find a virus e.g. in the WIN386.SWP file (in the Windows NT system it is the PAGEFILE.SYS file). It may also happen quite

often that the "normal" virus will be found in the .DOC file. Also this is the case of a false positive which you can avoid by opening the file in the Word program, selecting "Save as" and saving it under the same name. Attention! Here you must find out, whether it is not a macrovirus.

22.6 Important steps for removing the viruses

One of the most important questions that you must assess is whether you have really saved all important data from the infected computer.

Every removal of a virus brings about the risk of absolute loss of data on your hard disks even in the case that the removal is carried out by a trained and highly experienced expert.

We are sure that you know about the need of saving your data. But be sincere, when did you backup for the last time? And if you do it periodically, did you ever try to restore the saved data in your computer? And even if you comply with both of the conditions, do you have a backup copy of the backup program in any other place than the infected computer? What will you do if the computer will not be accessible anymore?

So, if you do not have any current backup copy, it is high time that you made it. Nothing else can be done, and you must make it bearing in mind that the saved data can contain the virus and that each future start-up of the computer can increase the level of the infection of the system. But you cannot do anything else. A backup copy is really needed, also in the case that the next work could be done by somebody else completely (especially somebody who bears no responsibility for your data).

The next steps:

- finish your work, do not be in a hurry uselessly, but do not delay with other measures either,
- find out as much information on the virus as possible,
- end the work of the operating system,
- turn off the computer through the power switch,
- think over for how long the computer may have been infected and what is the probable source of the infection,
- inform all to whom you may have sent the data or media infected.

If you have performed the above steps, you may continue your removal work. Now you must critically assess your own skills and experience with the computer. If you do not understand computers so much, we do not recommend you to remove the virus by your own forces only. However, if you understand the following explanations, you may try it without any specialized help. How? It is the question that we will try to explain.

Be carefull and avoid the various, so called "would-be experts". If you hear from them e.g. the expression "low level format", run away fast. In fact they may try to destroy you and your data.

Also when you are working in a larger company, contact as the first person your Administrator or the person responsible for computers.

22.7 Combined (multipartity) viruses

Combined viruses are simply those viruses that attack some of the file combinations, disk system areas and memory at the same time. Their removal is the combination of the removal of simple types of viruses in an exactly defined order. The following applies to this order:

- it is not possible to remove a virus from the disk if it is present in the memory,
- when removing viruses from the disk it is necessary to remove first the viruses from the disk system areas,
- viruses in particular files are the last to be removed,

22.8 Viruses that remain installed in the memory

These viruses are not installed only in the memory, but they are sure to be also present somewhere on the disk.

If some "would-be expert" tells you that a virus can be present in the memory without being present somewhere else (on the hard disk, diskette or any other medium of a similar type), contact somebody else. The safety of your data will be much greater.

A virus may be present in the memory and not active at the same time. Imagine the situation that you are copying the infected file from a diskette to a diskette. Also in this case you use the operation memory of the computer and both source and target files are stored in it. It means that the virus can exist in the memory even after finishing the copying operation, simply because there is no reason for cleaning the memory used in the above described way. However, it does not mean that the virus in this form can cause any kind of harm.

At the same time you cannot remove a virus from your computer at the moment when it is present in the operation memory and it is active. The reason is very simple: the virus immediately attacks each program or disk system area which you try to treat. You can do nothing about that. It applies generally that you cannot eliminate a virus in the memory at the time when it is present in it. Of course, there can be some exceptions, but you cannot rely on it.

At the same time we must point out that there are not many viruses developed exclusively for the operating systems Windows 95 and NT and that memory resident viruses are usually viruses the designed for the MS-DOS system, which entered the memory at the start-up of the computer or during the work in the DOS window. If it is at the same time a virus that attacks disk system areas, you can directly move to the chapter dedicated to the viruses of this type. As far as the viruses infecting files are concerned, the solution how to remove the virus from the memory is not complicated.

Boot the system from a system diskette. In fact you may use an arbitrary system diskette from MS-DOS 5.0 and higher. Nevertheless, we recommend you to use a system diskette for the system which you have installed in your computer.

Continue the work depending on the type of virus.

Under the operating system Windows NT there are practically no problems with viruses in the memory. The only viruses that can disturb you this way are the viruses attacking disk system areas.

22.9 Viruses attacking files

The removal of viruses from the files is simple and rather boring work. The main problem is to decide how to remove the virus.

A one hundred per cent sure renewal will only be ensured by restoring files from their backup copies (of course, if you have any backup copy and if this copy is not infected by the same or another type of viruses). It may be simple and reliable to restore the files from the backup copies. If you devote time to creating backup copies periodically, you will find out why it will pay. It is fast and comfortable work.

If you periodically use the integrity checking program and have the current version of the database at your disposal, you can practically be without any worries. AVAST32 will enable you to restore the files which are infected practically by all the viruses (approximately 95 per cent of different types of viruses). The reliability of the renewal is the same as in the case of the restoring of your files from the backup copies, because AVAST32 is checking, whether it has managed to restore the file to the last bit.

If you cannot use anything from the above paragraphs, the situation starts to be more difficult. Yet you do not have to lose any of your programs. Nevertheless, you must have the original diskettes or their copies at your disposal. It, however, means much more work because you must uninstall and again install the infected programs, which brings about a lot of well-known problems connected with the saving of all the tasks and settings which you have invented with so much effort.

Uninstallation of programs is not limited to their simple deletion from the disk. All the "serious" programs for the operating systems Windows 95 and NT (including AVAST32) are capable to be uninstalled, which means more than just to be deleted from the disk only.

If you cannot use this way either, you are facing a problem. Really a serious problem, because the only thing we can recommend to you is to delete the infected files. To tell the truth, there is still one possible variant, which you can use, but its results may be sad enough. It concerns the possibility of removing the viruses from the files by means of some other antivirus program. Such a removal has a big advantage. You cannot find out whether the file corrected is in the same state in which it was before the infection. It is also the main reason for which AVAST32 does not contain any similar property.

22.10 Viruses attacking disk system areas

There are a very large number of viruses which are capable to attack the system area of the hard disks. However, only several of them are the "combined viruses" which are able to infect files and spread with the help of files. Therefore we can say, with a small objection only, that if you have found a virus in the system area of a disk (boot virus), it happened when you were trying to start-up the computer from the diskette. It does not matter whether you managed to do it or not. If there was a virus on the diskette in question, it has infected your computer regardless to the operating system which you currently use.

It is fully useless to think or even persuade somebody that e.g. the virus "J&M" called also "JiMi" entered into your computer by reading data from the diskette only. Simply this is not true, whoever may tell it to you. It is simply nonsense.

An exception is e.g. the virus "OneHalf", which can spread also by means of files, which means that by executing the file infected the computer will be infected. Similar viruses are, however, very, very rare.

Procedure for removal: start up the system from your system diskette and run the following program: fdisk /MBR of the appropriate operating system. It is only important that this diskette should not be infected by a virus. After you have performed these commands successfully, the virus will be removed from the system areas of the disk operating Microsoft Windows 95 and NT

If you manage to start up the operating system, you have practically won. You can make use of the restoring capabilities of the operating system which are built into it, and they will care for the rest. If you, however, do not manage to start up the operating system at all, it is a disaster.

22.11 Macroviruses

They are the viruses which spread through documents. At present these viruses are some of the most frequented viruses in the world. Most often they attack the documents of the Microsoft Word and Excel application, but recently they have started to appear also in other office applications.

The removal can be carried out directly from the AVAST32 environment. Nevertheless, we recommend that you save the virus-infected documents somewhere, remove the viruses from the originals and then test their readability in your programs. If the documents treated this way are O.K., it is possible to delete their virus-infected backup copies. If not, do not hesitate and contact the staff of our firm.

23 AVAST32 program found changes in files

The interpretation of these results is not easy. The reason is not that the program would provide complicated information or codes, but that each of you will get at each start-up of the integrity tests different information, and its processing may differ on a case-by-case basis. For this reason it is not possible to write there a "cookery book" with a general field of application, which could satisfy all the users. We may only provide for a few pieces of general advice, suggestions and procedures, the application of which we recommend you. Nevertheless, the details and particular implications you must derive by yourselves.

23.1 New files

If AVAST32 reports that it has found new files, it may concern several cases. The most easy of them is that it really relates to a new file originating from a legal source. The solution is simple, just accept it, and thus it will be stored in the database of files. What is the legal source, however, it is a more difficult question. For example, a really legal source is represented by the installation media of the program, which you have recently installed. The program mentioned could also have been installed by your colleague or the Network Administrator. If you have good relationships in your firm, then they were sure to have informed you about this matter, and you may decide whether the file is O.K. or not.

It may also concern a temporary file which was created by a program for its need, and such a program is currently using it or it "has forgotten" to delete it. It is probably also O.K., but a file of this type could also create a virus. The decision may be very difficult and it is fully up to you.

Also the use of the "Recycle bin" for the deleting of files will cause that the new files in the appropriate folder will be detected.

Do not be confused by the fact that a new file has arisen in a folder of a well-known name, e.g. in the operating system folder. The authors of viruses know these directories too, and use them with success.

23.2 Changed files

There may really be a large number of reasons for a change in a file. Also the operating system itself lives "its own life" and uses the files very intensively. Each start-up of a program or editing of a document results in a track, which will be detected, and annouced by AVAST32. Here it is your turn to decide, which change is valid and which is not. For example, a change in text files will be caused by you ninety-nine per cent of the time, while a change in the COMMAND.COM file will be caused ninety-nine per cent of the time by a virus. Please, notice that nothing is one hundred per cent sure, which applies to the whole area of virus problems. The other types of files are situated between the two above specified extreme examples. For example, it is really difficult to say about the documents of the Microsoft Word program (*.doc) why they have changed. The cause

may have been you, by simple reading the content, or the "macrovirus" which attacked the document in question.

Nevertheless, it generally applies that if an executable program (extensions exe, sys, dll, bin, vxd, scr,...) is infected, the change is much more suspicious than in the case when a document or data file have been changed. But be careful, even here you may face some exceptions.

23.3 Deleted files

There are not many things to help you. The repairing of such a file is only possible by using special tools of the operating system or backup copies. By the way, when was the last time you made backup copies of your data? Do you really want to rely just on good luck?

23.4 Special cases

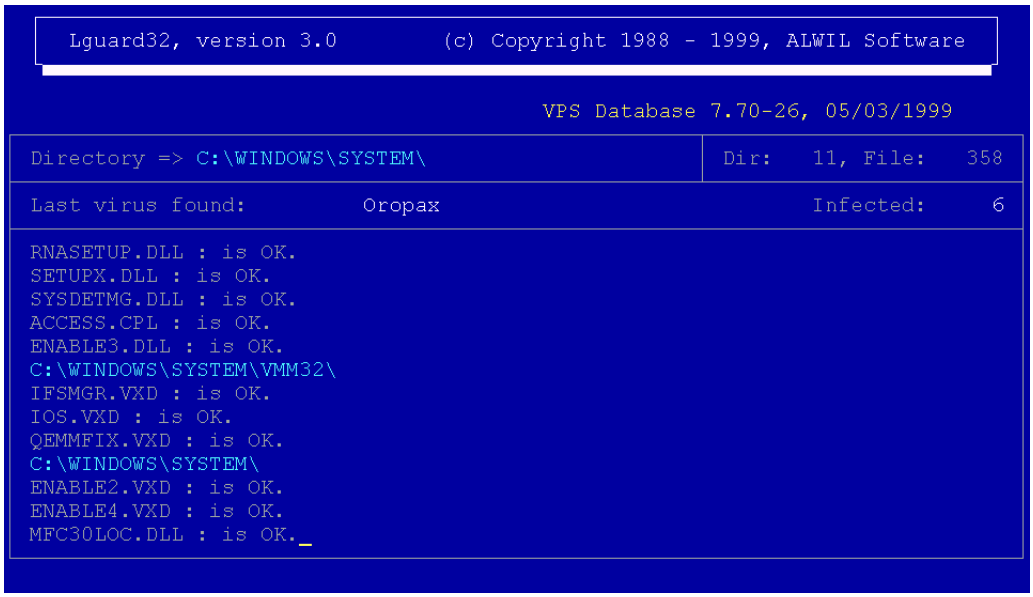
There are several special cases when you will not manage to work with the files. In such a case you will find out that AVAST32 is signaling an error during the work with a file.

In the majority of cases you will not be able to check the file which is currently using another program. This file is locked, and the operating system will not allow you to access it. It applies to both the operating system, that uses the files on behalf of itself, and the working programs. The latter need not be seen on the screen of your computer every time. However, if they are working and using the files, AVAST32 will not be able to check these files.

If you are working with the operating system which supports safety aspects on the level of files, and if you are using the system of files which also supports this characteristic (Windows NT with NTFS), you must have sufficient rights to be able to check individual files. If your rights are not sufficient, the file will remain unchecked.

24 LGUARD32 Program

LGUARD32 (fig. 24.1) program is determined for a known viruses detection, including polymorphic viruses and macroviruses. As both programs AVAST32 and LGUARD32 use the same engine, their detection results are identical. The only difference is that LGUARD32 program is run from a command line only, on the contrary to a friendly user interface of AVAST32 program.



24.1 LGUARD32 Program

The command line of LGUARD32 looks as follows:

LGUARD32 @<task name> | <area name> [<parameter>]

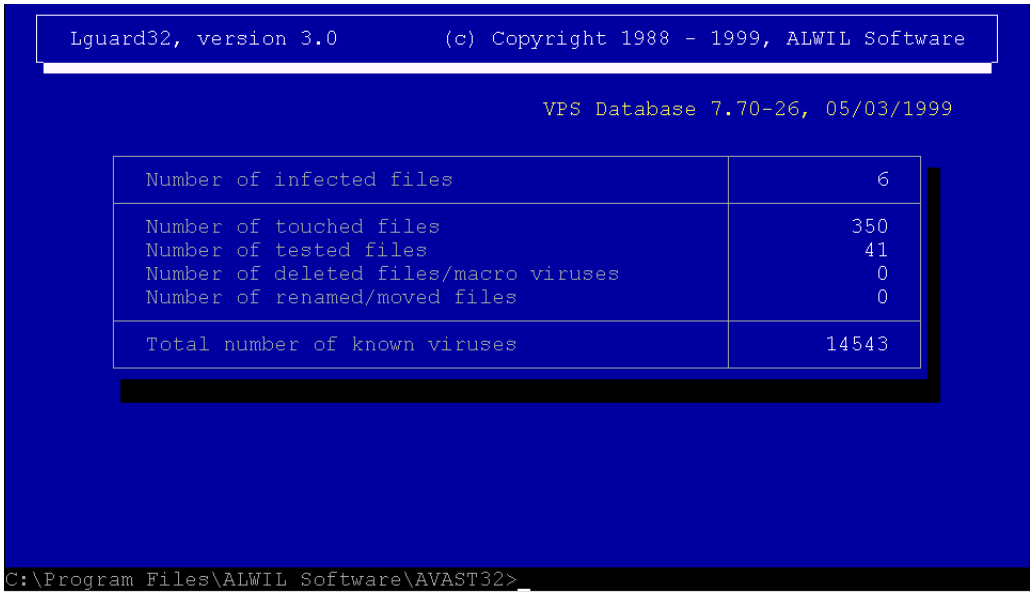
To run an Avast32 task write the character "@" (the "at" sign) and then its name. If the task contains spaces it must be inserted between quotation marks. If not, the program will not perform the task!

If there is no task name the LGUARD32 program will scan the set areas. You can determine how the task will be performed by parameters, similar to operating system parameters.

Examples of use:

LGUARD32 C:\WINDOWS This command runs a program for a Windows folder on the disk C:, all executable programs and OLE documents in this folder will be tested. First memory and sector of the hard disk are tested. Then all files are tested an information of which can be seen on the monitor.

At the end, Results Tab (fig. 24.2) appears on the monitor. The tab includes the summary information about the just finished test informing, besides other, about the number of infected files. Information of number of virus characteristics LGUARD32 program is able to detect is shown, too.



24.2 Results Tab

The /H or /? switch
LGUARD32 program displays help, and exits.

The /V switch
LGUARD32 program displays actual viruses list that it can detect, and exits.

The d:\path parameter
The parameter specifies disk and folder, in which files have to be scanned. If this parameter is avoided, files in the main folder on the current disk are scanned. It is possible to specify more disks at once.

The d:\path\file parametr
The parameter specifies a file which will be scanned. The file must exist!

The . Parameter
The parameter specifies that the current folder on the current disk will be scanned.

The *: Parameter
The parameter specifies that all local disks will be scanned.

The #: Parameter
The parameter specifies that all network disks will be scanned. Program displays en error message if no network disk is found.

The /E [ext1;ext2;...]switch

The switch specifies scanned file extensions.

The /T [A|E|O|D]switch
This switch specifies file type to scan (/TA - all files, /TE - executables, /TO - OLE files, /TD - data files).

The /D switch
With this option, files in subdirectories of a given directory will not be checked. If it is omitted, such files are checked.

The /C switch
This option specifies that the entire content of the files is to be checked. By default only the first and last 8192 bytes of each file are checked, which greatly increases speed. After detecting any virus, the program automatically switches to the mode of testing the whole files.

The /M switch
With this option, only the memory and the disk boot sector will be checked for viruses. No file testing takes place.

The /B switch
The operating memory will not be checked for viruses. If, for example, you are sure that the computer contains no viruses and only wish to test diskettes, this option offers a useful short cut.

The /P switch
The program runs continuously without pause after the disk system area test, without waiting for the user's response when a virus is located. At the end, the results can be obtained from the exit codes or the report file.

The /R [file]switch
A report file will be created listing the viruses found and containing a statistical table. If no filename is specified, the report file LGUARD32.RPT will be saved in the current directory. If /R parameter is followed by a "*", the report file also records the files, in which no virus was found.

The /Z switch
This parameter specifies that the user will have the option to delete the infected files.

For removing macroviruses it is possible to add to /Z another letter specifying the requested operation. If there is M after the /Z only the virus macro will be removed, the A letter ensure deleting of all macros, the F will delete whole file.In this case the program will ask you to give Yes or No reply. These parameters can be used together with /P (no pauses) too. The default action with /Z only deletes virus macros for exactly identified viruses and all macros for virus families.

The /X switch
This switch offers renaming of the suspicious files containing virus character-istics by the user. The first character of extension is after renaming the letter "V" (for instance COM becomes VOM, EXE becomes VXE, etc.)

The /S switch
This switch specifies that the detection of a virus will not be indicated by a beep. By default, detection of virus characteristics is accompanied by a beep.

/W [password|+]switch This switch sets that, when a virus is detected, a user-defined message appears on the screen giving directions for further action. The message is stored in the LGUARD32.MSG file in the same directory as the LGUARD32.EXE program. If a password is specified, it must be given in order to continue the program after discovery of a virus and to interrupt the program. The parameter "+" serves to test the functioning of the message.

The /U [*|adr]switch
On discovery of a virus in the Novell network, a message is sent to a specified network user. If no such user is specified, the message is sent to the "Supervisor" user. The recipient must be authorized to the network and specified as the recipient. A message is also sent to the system console of the network.

The /Q switch
This switch sets that, the program engine will be shut down on LGUARD32 exit.

Exit Codes:

When the LGUARD program completes its operation, it returns an exit code to the operating system. This code may then be tested either by another program or by using the batch file command IF ERRORLEVEL. The LGUARD exit code may only have the following values:

0 program ended normally, no virus found,

1 virus found in memory,

2 virus found on disk but not in memory,

3 program interrupted by user, no virus found so far,

4 error occurred during operation,

5 invalid task name used,

6 invalid switch used,

97 the program tested the displaying of user defined message,

98 program displayed list of viruses it can detect,

99 program displayed instructions for use.

The exit codes thus defined are used especially in command. Use of the exit code and the IF ERRORLEVEL is apparent also from the following example, in which the meaning of the function is indicated by the jump label:

```
LGUARD32 c:
if errorlevel 4 goto error
if errorlevel 3 goto interrupt
if errorlevel 2 goto diskvir
if errorlevel 1 goto memvir
echo ** no virus found on disk c: **
```

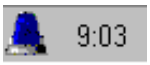
25 Resident protection

In order to protect your computer as much as possible it is better to start the Resident protection even before you start the work to be performed. The task will monitor almost all the activities performed inside your computer. In the case of an attempt to perform a suspicious operation or if the program finds a virus in the program being run, or in the system area of the inserted diskette, it will display a warning message. The task, however, will only prevent the virus from the infiltration into the system, when it is running. At the end of its completion, however, the system is no longer protected.

The resident protection after AVAST32 installation is automatically started after each system restart, so you do not have to run this task manually.

An icon (fig. 25.1) in the right part of the task bar indicates the presence of resident protection in the memory.

It is possible to turn off displaying of the icon - see "Program options" chapter/ "On-Access Scanner" page, "Show program icon on task bar" check box. For most users it is recommended to let the icon visible.



25.1 Icon of resident protection

By clicking on this icon with the left mouse button a main window of resident protection - "Resident console" would appear.

25.1 Resident console

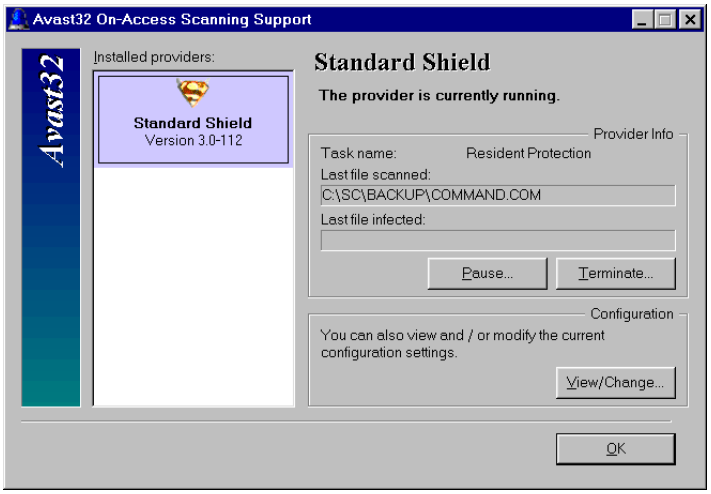
Via this window (fig. 25.2) it is possible to set, pause, resume or stop the resident protection. The window is divided into the several parts. The installed providers of resident protection are displayed in the left part. The "Standard shield" provider is listed by default. In the right part of a dialog can be found the information about provider, the last tested file and the last infected file

The "Pause" button serves for pausing the given provider.

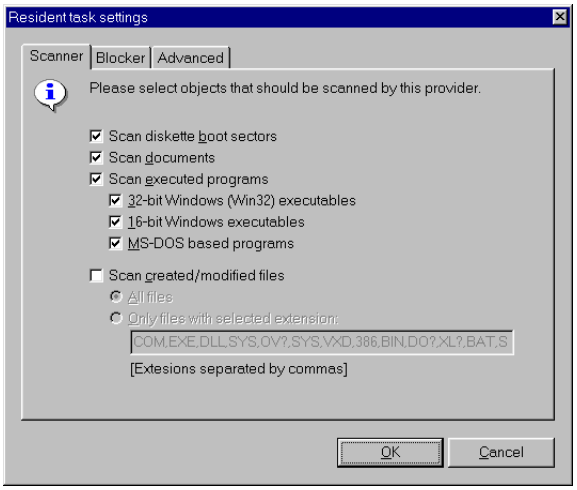
By the "Resume" button it is possible to resume the function of given provider.

The "Terminate" button serves for terminating the function of the given provider of resident protection. After clicking this button the computer won't be protected against the viruses.

The "View/Change" button server for viewing or setting the configuration of the resident protection provider. By clicking on this button, a dialog (fig. 25.3) allowing to set the parameters of resident protection would appear.



25.2 Resident console window



25.3 Resident protection settings

A detailed description of parameters of setting from these pages can be found the "Description of task pages" chapter on the following pages:

"Scanner" page

"Blocker" page

"Advanced" page

For storing the changes in the setting press the "OK" button. For closing this dialog without saving the changes and going back to the main window press "Cancel" button.

The last button of a resident console window, the "OK" button serves for its closing.

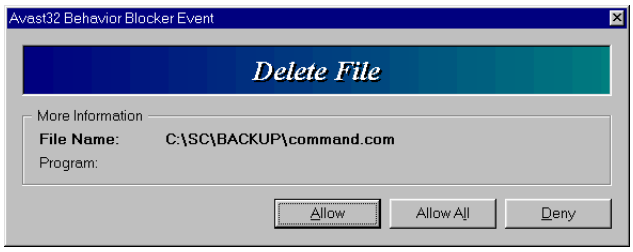
Resident protection can display several other dialogs during its operation. These dialogs announce to the user a dangerous operation within a file, the finding of a virus in the boot

sector of the diskette inserted, or a virus in the program being run or in an OLE document opened using an OLE function. Their description is provided below.

25.2 Reporting dangerous operations

If a resident task which contains in itself the activity of behaviour blocker is started, then all the operations of the operating system are monitored.

At an attempt of performing any suspicious operation the resident protection will display a warning (fig. 25.4) and will delay the performing of the operation in question until the user informs to it what to do.



25.4 Suspicious operation warning

The warning contains a text box with the name of the file, with which the suspicious operation was to be performed. Furthermore, it contains three buttons:

If you click on the "OK" button, the operation will be performed with the file. Other possible suspicious operations with the file will be announced as well,

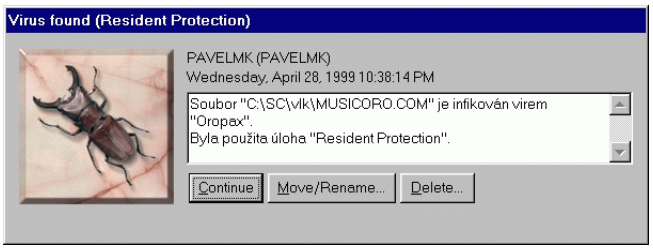
The "OK & Ignore" button will permit the operation in question, and the RGW32 program will not advise the user of any operations with the file in question till its termination and restart,

The "Cancel" button will inform the program that it should restrain the performing of the operation in question. After your pressing it the program will not enable the performing of the operation and, of course, it will also inform the user every next attempt of performing the dangerous operation with the file in question.

25.3 Reporting a bootvirus and virus on file starting or document opening

The resident protection can also scan the programs being run, OLE documents opened with the help of the OLE functions and boot sectors of the diskettes inserted.

If you insert a diskette into the drive, then at the first access to it the program will check the boot sector, whether or not it contains a virus. If it finds a virus, it will display a warning message (fig. 25.5). You can continue to work with the diskette, because for a virus to become active it has to be started-up first, which occurs in case of a boot virus



25.5 Virus warning message

only at the booting of the system. The purpose of the warning message is to advise you of threatening danger.

The warning message will also be displayed, if a known virus has been discovered in an executable program, or if the user attempted to open an OLE document containing a virus. If you click on the ”OK“ button, you can continue your work, but the access to the infected will be denied, so it will prevent the infection of your computer.

25.4 RGUARD32 program

RGUARD32 is a program determined for starting and stopping resident task from a command line.

Parameters:

/l
/login
Displays a login dialog. If it is not inserted, a default login will be performed (with default username/password/group)

/i numeric ip adress
/i DNS computer name
Works with specified computer. DNS computer name is in the same format as it is displayed in the enhanced user interface of AVAST32 program.

/e
/exit
Terminantes running resident task

task name
”Task name“
Starts the task with this name

If there is no parameters inserted like /e, task name, it is only displayed the name of running resident task.

Parameters combination:

<start task> has higher priority than /e

examples:

```
rguard32 /i pavel.abc.cz /l
rguard32 /i 192.150.1.201 /l
rguard32 /i honza /l /e
rguard32 "Resident protection"
rguard32
```

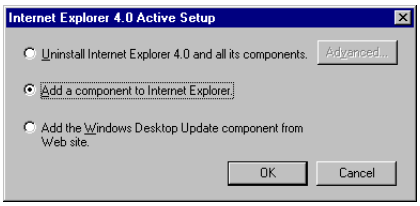
26 Scheduling

The function of scheduling allows to set the automatic starting of selected tasks of AVAST32 program.

The AVAST32 program uses the standard Task Scheduler for scheduling the time of task start. This scheduler is available in Windows 98 by default. You need to install the scheduler to other operating systems (Windows 95, Windows NT). The scheduler installation can be performed via the MS Internet Explorer 4.x active installation.

26.1 The installation on standalone computers

- install MS Internet Explorer 4.x
- after the successful installation, open "Control panel" and click on the "Add/Remove programs" item
- from the applications list, choose Microsoft Internet Explorer 4.x and click "Add/Remove" button
- in the displayed dialog (fig. 26.1) select the "Add a component to Internet Explorer" radio button and click on the "OK" button



26.1 Active installation of Internet Explorer 4

- a web page allowing to add the appropriate components of Internet Explorer application will appear
- check the "Task Scheduler" check box and this page click on "Next" button
- follow the on-screen information to complete the installation
- check the http://www.microsoft.com/ page for more information

26.2 Installation on computers connected to network

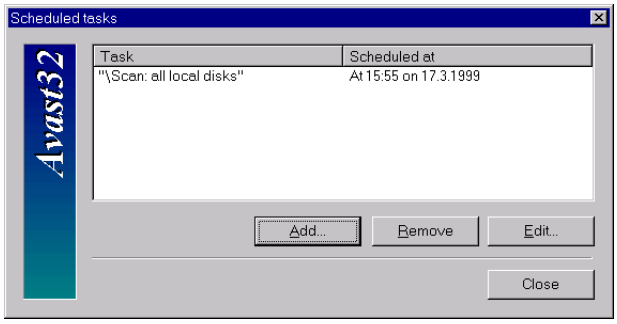
- for the network installation use the Internet Explorer Administration Kit
- check the http://ieak.microsoft.com/ page for detailed information

26.3 ”Scheduled tasks“

For scheduling of automatic task start, we recommend to choose such task, which run automatically and don't ask the user during the operation. The task setting should contain the following:

- On the ”Virus Alert“ page should be set what to do with the infected file, e.g. delete, repair file or continue.
- On the ”Common“ page not checked ”Show information when task obtained no results also“ check box.
- On the ”Scheduling“ page checked the ”Exit after the last pending task will stop“ check box.

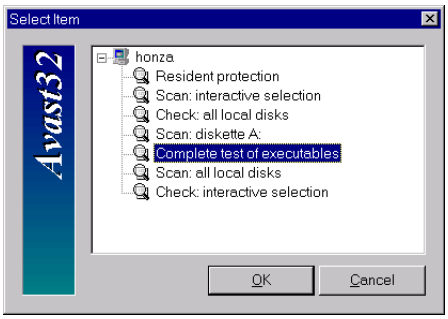
Setting of automatic starting of selected tasks of AVAST32 program, is performed via the”Scheduled tasks“ (fig. 26.2) menu item of ”Options“ menu in main program menu. By selecting this item a dialog allowing to schedule the automatic task start will appear.



26.2 ”Scheduled tasks“

A displayed window contains a list of scheduled task. There is a name of scheduled task shown in the ”Task“ column. The time and date of the scheduled task start is displayed in the ”Scheduled at“ column. Via the buttons situated under the list you can modify the list of scheduled tasks.

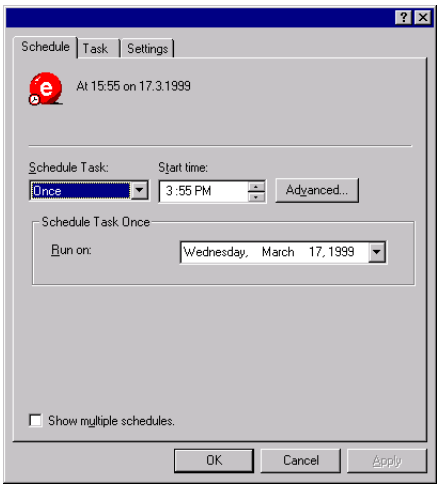
By clicking on the ”Add“ button a dialog (fig. 26.3) containing a list of available tasks will appear.



26.3 Dialog containing a list of available tasks

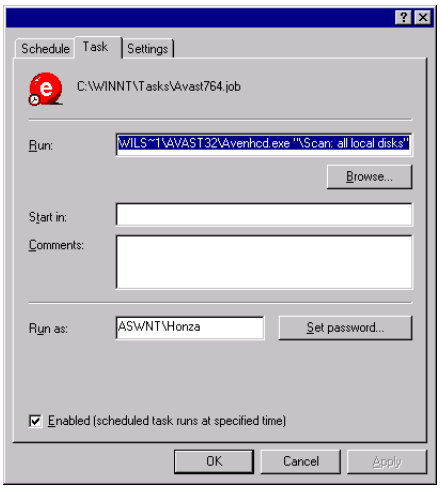
Click on the selected task and press the "OK" button. A dialog allowing to set the parameters of scheduling itself will appear.

"Schedule" page (fig. 26.4) allows to se the precise date and time of a task start.



26.4 "Schedule" page

"Task" page (fig. 26.5) shows the function of the scheduler itself. It is recommended to modify nothing on this page.

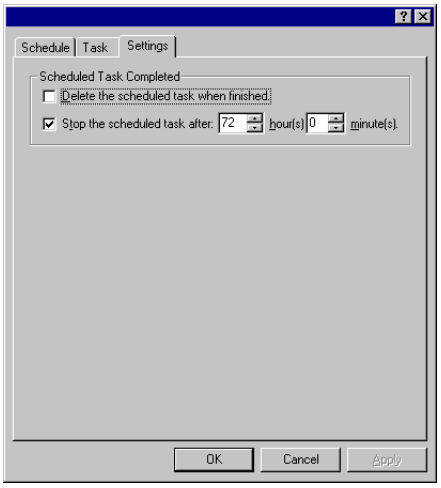


26.5 "Task" page

"Settings" page (fig. 26.6) allows to set some parameters of scheduling in details.

If you are satisfied with the setting, click on the "OK" button. If you don't want to save the scheduling of a task, click the "Cancel" button.

The newly scheduled task will be added to the list of scheduled tasks.



26.6 ”Settings“ page

If you would like to remove a task from a list, select it by clicking on the task name and press the ”Remove“ button.

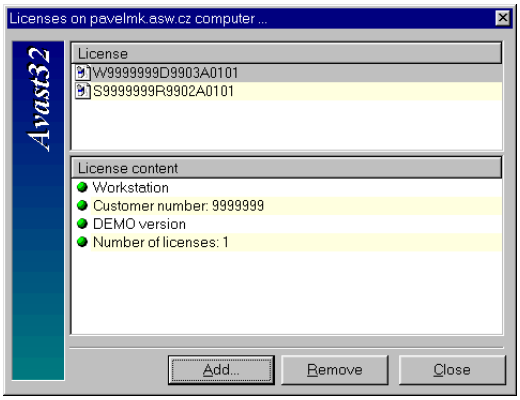
If you would like to modify any task listed in the list, select it by clicking on the task name and press the ”Edit“ button. A dialog offering to set the parameters of scheduling will appear.

The ”Close“ button serves for closing the ”Scheduled tasks“ dialog window.

27 License

The change of license can be performed via the ”License“ (fig. 27.1) menu item from ”Options“ menu in main program menu.

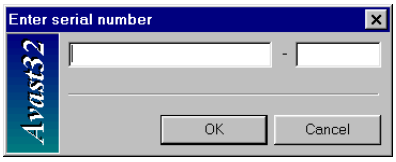
By choosing this item a dialog allowing the license change will appear. You need the appropriate rights for the change of license.



27.1 ” License “ dialog

There are licenses of given computer listed in the upper part of window. By clicking on the serial number in the list, a detailed information about the selected number will appear in the lower part of the window.

Click on the ”Add“ button if you would like to add a serial number. A dialog (fig. 27.2) allowing to enter the new number will appear.



27.2 Dialog allowing to enter the new number

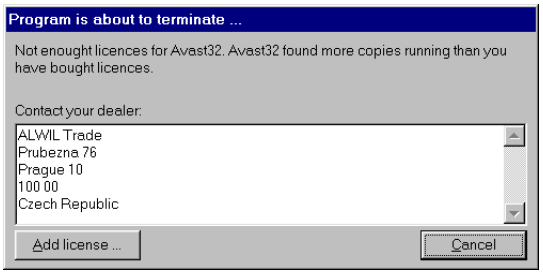
Enter carefully a purchased serial number into the prepared text boxes. For storing the number, click on ”OK“ button. The newly entered number will appear in the list of purchased licenses. If you don't want to store the number, press the ”Cancel“ button.

Via the ”Remove“ button you can remove the selected number from a list.

For closing the ”License“ dialog use a ”Close“ button.

27.1 The number of bought licenses exceeded

In the case you have started the more copies of AVAST32 program than you have bought licenses, a dialog (fig. 27.3) will be displayed on your computer.



27.3 The number of bought licenses exceeded

If you would like to use AVAST32 program on more computers than you have bought licenses you need to purchase the additional licenses. For information about the purchase of more licenses contact your distributor.

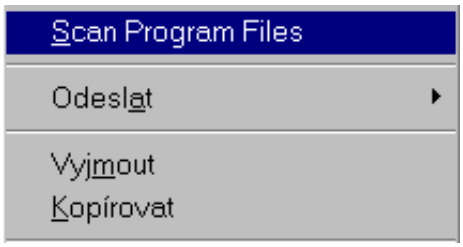
By the "Add license" button you have the opportunity to enter the newly bought serial number via the License dialog. You have to be logged in to the local computer as an administrator to be allowed to do this.

If you don't want to add any new serial number, press the "Cancel" button for closing this dialog.

28 Explorer Extension - QUICK32 program

QUICK32 program is used similarly to AVAST32 and LGUARD32 for file testing on presence of some known virus.

It is mainly used for file scan called by popup menu (fig. 28.1) i.e. in "Explorer" program. In other cases is more useful to use AVAST32 or LGW32 program.



28.1 Popup menu

QUICK32 program is set up by default to test all files for virus presence. Compressed files will be at first scanned in its compressed form, then internally decompressed and scanned again.

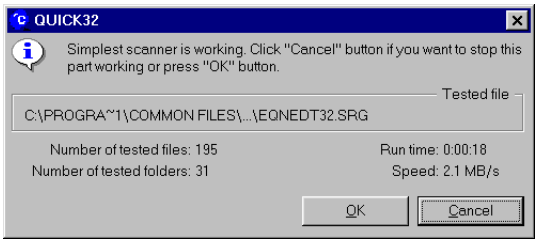
The program informs the user on its progress through a small icon (fig. 28.2) situated in the right part of the task bar.

28.2 Icon of running QUICK32 program

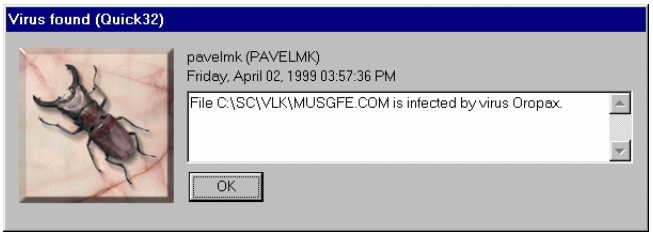
The user is informed about the scanning progress by a dialog window (fig. 28.3), which shows the name of the file being currently scanned.

Via the "OK" button you can close the window, the scanning will continue. If you want to stop the scanning earlier, press the "Cancel" button.

If the QUICK32 program has found a virus, it will inform the user by means of a warning message (fig. 28.4). However, the program will finish after the finding and announcing of the first virus, and that is why the user will only be advised of the first virus in case that the tested folder contains more infected files.



28.3 Information about the scanning progress



28.4 Warning message

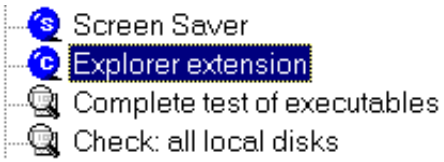
The command line of the QUICK32 program reads as follows:
QUICK32 <name>

The <name> parameter determines name of folder or file, which will be scanned, including its path. In case that as a parameter was entered folder, all its subfolders will be also scanned.

The QUICK32 program does not send any return codes.

28.1 QUICK32 program setting

It is possible to set parameters of QUICK32 program, if you have the appropriate rights, only in enhanced user interface of AVAST32 program (a showing of special tasks has to be enabled, see chapter "Program options"). List on "Tasks" sheet contains "Explorer Extension" item (fig. 28.5) then. By clicking with left mouse button on this item a standard dialog for task configuration will appear. Here it is possible to make the appropriate settings.



28.5 "Explorer Extension" item

A description of the configuration pages can be found in the "Description of task pages" chapter.

29 AVAST32 program command line

The AVAST32 program can be also started directly from a command line. You can start either the program only or you can start directly some antivirus task.

The command line of Avast32.exe looks as follows:

Avast32 <task name or batch file> [/min][/batch][/sim][/enh]

The /min switch
AVAST32 program will be started minimized

The /batch switch
It will start enhanced user interface of AVAST32 program and will tell to it that the given task name is a name of the batch file.

The /sim switch
AVAST32 program will be started in Simple user interface.

The /enh switch
AVAST32 program will be started in Enhanced user interface.

You can enter as many task names or batch files, as you want. If the name contains spaces it must be inserted between quotation marks. If not, the program will not perform the task of the given name!

If you would like to start the task on the remote computer, enter Avast32 <computer name>\<task name> and the appropriate parameters. If there is no computer name stated, the program will search for the local task of the given name.

If you would like to scan for viruses e.g. some folder with AVAST32 program, you can enter Avast32 <path> /sim. A Simple user interface of AVAST32 program will be started and the scanning of the given folder will begin immediately.

If an invalid parameter will be found or any error on the command line will occur, an error message will be displayed and AVAST32 program will start in the same user interface as on the last program start.

30 Program AVAST32 in networks - installation

Installation program of AVAST32 supports so called administrator installation, which is possible to use in installation of program AVAST32 on more computers.You can prepare this installation following these steps:

1. Create a shared directory on the network and copy the index of directory AVAST32, which is located inside the root directory of distribution CD of AVAST32.

2. Now it is possible to make the change of tasks. In specific language subdirectory (eg. CZECH) is located a file ASW32C.DAT, which includes standart predefined tasks. These tasks are created by AVAST32 program itself.

So,if you wish to change the setting of tasks,or create new ones, it is necessary to install AVAST32 on one computer, on which you can perform the changes needed in task settings.

File ASW32C.DAT is,after the installation of program, located in AVAST32 \DATA directory.If you wish to just change the tasks, run the program and perform the changes needed. If you wish to create all of the tasks again, delete the ASW32C.DAT file and run the program. A new file will be created with no tasks. In program then create all tasks needed.A detail description of task setup is in the Description of task configuration pageschapter.

When you will be satisfied wit task settings,terminate AVAST32 program and copy the changed file ASW32C.DAT into the installation directory.

3. It is also possible to change the ASW32S.DAT, which includes setting of groups,users and passwords. If you wish to change the security settings, proceed to next point.

File ASW32S.DAT is,after the installation, located in DATA directory, as is the ASW32C.DAT file.The setting itself is then performed through AVAST32 program using the User manager.

When you will be satisfied with security, terminate the AVAST32 program and copy the changed ASW32S.DAT file into the installation directory.

4. Next it is neccesary to change the INI files.They are raw text files, which can be edited by any available text editor.

File SETUP.INI is located directly in AVAST32 directory. Inside the SETUP.INI file is just switch EnableLangDlg, which enables the user to select, in which language the installation will run.If it will be enabled (default setting) it allow the user to choose his language. Otherwise it is automatically the language in which the operating system runs.

File ADMIN.INI is located in specified language subdirectory (eg. CZECH). This file includes all of the settings of AVAST32 program, even including the setting of automatic update. The meaning of all settings is directly inside the ADMIN.INI an in manual in Setting the program parameters chapter.

5. If everything is changed as you wish, it is posiible to start the installation from the client station. It can be run by user himself or administrator, it could be ran by SMS or under Win9x or AVCHECK program.

More informations about andministrator installation are available in ADMIN.TXT file, which is located in specified language subdirectory (eg. CZECH) in AVAST32 directory on distribution CD.

31 Program AVAST in networks- Remote Administration

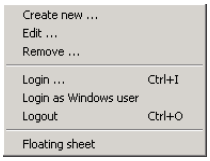
Run the AVAST32 program in enhanced user interface. Login into the program as an administrator (ie. click with right mouse button on local computer icon in Tasks tab, from the selection available select "Logout". Than click again on local computer and from selection avaible select "Login".In the new dialog window use "administrator" as a Username and leave the password blank.Then click the OK button.Now you are logged in as an Administrator into the AVAST32 program and can change all settings of the program.

To have all computers available for remote administration check, whether is the chexk box "Show all computers that run engine" on "Main" page of Settings menu.

Interface is described in chapter "Enhanced user interface / Task Page". Remote administration is then performed by logon on remote computer through "Computer" selection in main menu of the program.Than it is possible to perform all settings and antivirus tests, as if they were on your local computer.

31.1 Groups

If your network is constructed from a larger number of computers, and the list of computers with running engine is then long and is becoming untabular, it is possible to create certain "Groups" of computers and simplyfy the access to the remote machines.



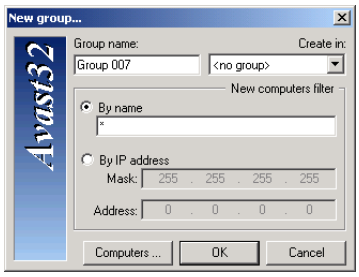
31.1 "Groups" selection

It is possible to create through the "Group" (fig. 31.1) selection, which is located in the main menu of the program. You can than choose the "Create New" selection and a dialog (fig. 31.2) for creating groups will open.

In upper left part of dialog window enter the name of group created. In right part using the combined area you can select a group in which the new grou should be created. This way a tree structure of computer groups with installed engine of AVAST32 can be created. Using the switch "By name" or "By IP adress" will setup a filter,which will be used for adding new computers into the group.

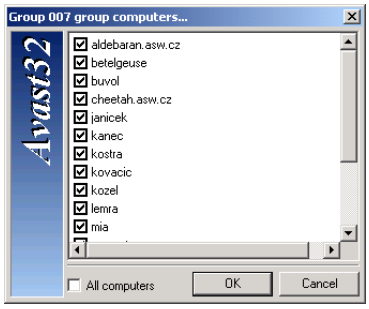
Into the text area "By name" write with the characters available the mask of computer names, which should be added into the group.

If you want to use the IP adress as a filter, enter the text areas "Mask" and "Adress".



31.2 Dialog for creating groups

If you want tu select specifically, which should be added into the group, press the "Computers" button. A dialog (fig. 31.3) will show up allowing a selection by checkboxes. In this dialog window are shown all computers, which are included in this particular group. If you want to show all computers, check the "All computers" checkbox.



31.3 Dialog for direct computer selection

With "OK" button you will save the changes in groups setting, with "Cancel" button a dialog window will be closed without saving the changes.

31.2 Program Update

Specific description of program update can be found in Program Update/ Automatic Update