HOW TO USE

THE AVAST32 ELECTRONIC MANUAL

This manual is an electronic reference book designed to be seen and used on a computer. The type is large to make it easy to read. In addition, the images are designed to be sharp and clear when the page is viewed at "100% Zoom." For more on how to use this manual, see 5.3.4 "Help" Tab.

- The AVAST32 Help Contents (see AVAST32 Help Contents) is actually hypertext linked to each chapter and subchapter. This means that you can go to the AVAST32 Help Contents, use your left mouse button to click on a page number, and go there. You'll know it is a hypertext link if it is blue text.
- There are also hypertext links for most cross-references. That means when you find text that says "see Appendix A: Contact SecureNet" you can click on it and go there. This hypertext link is also blue text. Once you get there, come directly back with the "Go Back" button (see 5.3.4.2.4 Help Movement Buttons).
- Cut and paste text or make it bigger or smaller (5.3.4.2.3 Help Text Buttons).
- AVAST32 Help operates like a VCR. Buttons move you forward and back through the text. There are also buttons that, once you have gone somewhere, will step you back to your starting point (5.3.4.2.4 Help Movement Buttons).
- Find any "text" in the help files. Click on the "Find" button to find any menu command, phrase, or word, use your left mouse button to click on the "Find" button. If you don't find what you need, there is a button to find what you are looking for again (see 5.3.4.2.7 Help Find & Search Buttons).
- Print pages from AVAST Help (see 5.3.4.2.1 Help Printer Button). Page numbers start at "1" and continue without a break until the last page. To print a page and the next five pages, enter "Print Range: Pages 5 to 10" in the Adobe Acrobat "Print" dialog. Also, for best printing results, CHECK (✓) or turn "ON" the "Shrink to Fit" check box.

Remember, blue hyperlinks text won't show on a printed page. Also, set your page size to "100% Zoom" and the images will be sharp on your monitor. If you want to do this, go to 5.3.4.2.6 Help Size Buttons.

START HERE

AVAST32 HELP CONTENTS

- End AVAST32 Help Contents -

CHAPTER 1

WELCOME TO AVAST32

Thank you for purchasing AVAST32. Experts consider AVAST32 to be one of the best the antivirus solutions available for Windows 95 and NT. AVAST32 includes several software products which, if used properly, can reduce or eliminate the risk of a virus infecting your computer. Thus, AVAST32 is one of the best insurance policies you can buy to protect your valuable information!

AVAST32 accurately detects, disinfects, and blocks up to 95% of the viruses that can infect files on your computer. One reason is that it includes a resident scanner that maintains a continuous, real-time vigil over your computer as you work. It watches for changes in your files, comparing what it sees against an updateable catalog of virus mugshots. It then blocks any suspicious behavior before it can do any damage.

AVAST32 can help you block every virus entry point. For example, it is one of the only antivirus products on the market today that can keep Microsoft Word free of "Macro" viruses. It can do this because it looks at documents as well as software applications. It also stops "Boot" viruses at your disk drive by checking over diskettes as you insert them in your computer.

It is also easy to use. The AVAST32 control panel gives you instant access to any component, whether you are a new user or a network administrator. You have the choice of selecting an easy or expert set of controls with the "Simple" or "Expert" User Interfaces.

The last and best part of AVAST32 is that SecureNet Technologies offers a complete technical and customer service solution. Any time you run into a problem you cannot handle, need the newest catalog of virus profiles, or are just curious about something that is happening, please get in touch with us. For more information, see Appendix A: Contact SecureNet.

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1.1 System Requirements

In order to successfully install and operate AVAST32, you will need the following:

- IBM PC or 100% compatible using Windows 95 or Windows NT
- 80386 or better microprocessor
- 8 MB RAM for Windows 95 or 16 MB RAM for Windows NT
- 12 MB free space on hard drive – 10 MB for the program itself and 2 MB more for the installation process
- Windows 95 or Windows NT 3.51 or higher
- CD-ROM or high-density disk drive for installation
- Optional: Mouse and Internet Connection

1.2 Stop! Read This before You Begin to Install.

Please follow our instructions for installing AVAST32. We have included a special AVAST32 Install Program on the AVAST32 Installation CD-ROM or diskettes. The AVAST32 Install Program doesn't just copy the program files to your hard drive, it also makes necessary changes to your operating system and sets up the automatic launching of resident protection when you reboot your computer. Here are a few hints on using AVAST32:

- AVAST32 works only on Microsoft Windows 95 and NT. It does not work with Windows 3.1, DOS, or the Macintosh operating system.
- If you have the diskette version, create of a backup copy of each of the original diskettes before starting the installation. To do this, you will need the same number of high-density diskettes (marked as HD on the case) as the AVAST32 installation set. Once you have backed up the original diskettes, use the copies to install and keep the original diskettes in a safe place.
- If you have installed an earlier version of AVAST32 on your computer, please UNINSTALL it before installing the new version. While the AVAST32 installation program will always try to uninstall the older version of itself before installing a new version, a manual uninstall is better. For more information about this, see 1.3 Uninstall AVAST32.

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- To install AVAST32 on a computer running Windows NT, you must have administrator's rights. If you do not, the installation program will warn you and refuse to install the program. In this case, contact the administrator of your network.
- Install Adobe Acrobat Reader BEFORE you install AVAST32. Otherwise, the AVAST32 installation program will warn you that Adobe Acrobat Reader is not present on your hard drive and you will have to cancel the installation. The Adobe Acrobat Reader installation program AR32E30.EXE is on the AVAST32 CD-ROM in the ACROWIN folder. After you have installed Adobe Acrobat Reader, you can continue with the AVAST32 installation
- Unless you have a good reason for doing otherwise, install AVAST32 and Adobe Acrobat Reader in the separate default folders recommended by the installation process. This assists with upgrading, uninstalling, and adding additional modules to the software program later. It also prevents the installation of two or more unrelated software packages in the same folder.
- Last, protect the AVAST32 CD-ROM or AVAST32 diskettes from damage. After you use them, put it back its protective case or diskette envelopes. If the CD-ROM or diskettes are damaged, the program cannot be installed.

1.2.1 Start the AVAST32 Installation Process

Installing AVAST32 is actually quite easy. The following pages show you how to install on a Windows 95 computer or on a computer running Windows NT. If you have any trouble, see 1.2.3 Help! Troubleshoot for more information. If you follow the directions, you will find AVAST32 ready to use the next time you reboot your computer.

- Step 1: Remove all your floppy diskettes and CD-ROMs and insert the AVAST32 Installation CD-ROM into your CD-ROM drive or the first AVAST32 Installation diskette in your diskette drive.

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- Step 2: Use the left mouse button to click the “Start” button. After the Windows 95 or NT menu appears, choose the “Settings” menu and then the “Control Panel” menu command (Fig.1) to open the “Control Panel” window.

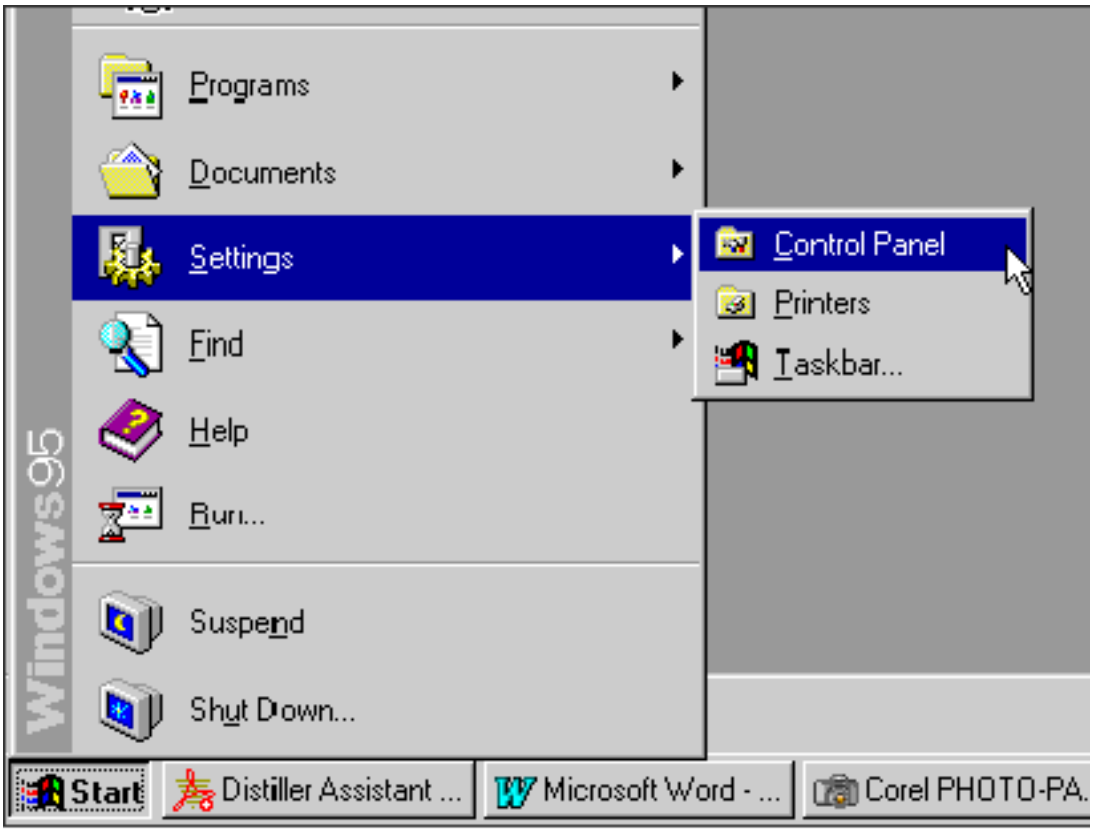

Fig. 1: “Control Panel” Menu Command

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- Step 3: When the “Control Panel” window appears, use the left mouse button to double-click the “Add/Remove Programs” icon (Fig. 2).

Fig. 2: “Add/Remove Programs” Icon

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- Step 4: When the “Add/Remove Program Properties” dialog appears, use the left mouse button to click the “Install...” button (Fig. 3).

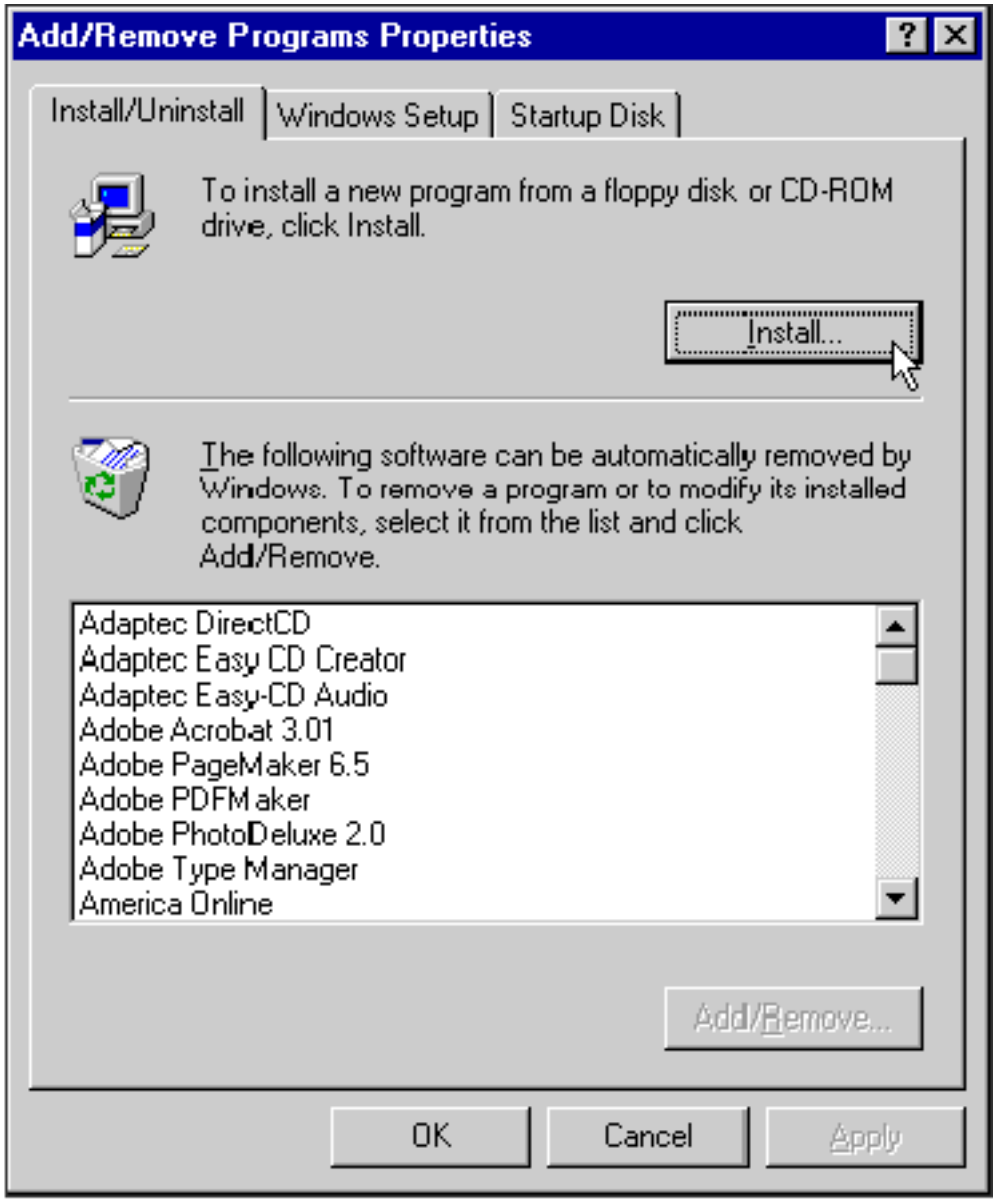

Fig. 3: “Install...” Button

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- Step 5: When the “Install Program from A Floppy Disk or CD-ROM” window appears, use the left mouse button to click the “Next” button (Fig. 4). Your computer will automatically find the AVAST32 Installation Program on the CD-ROM. When it has done that, use your left mouse button to click the “Next” button.

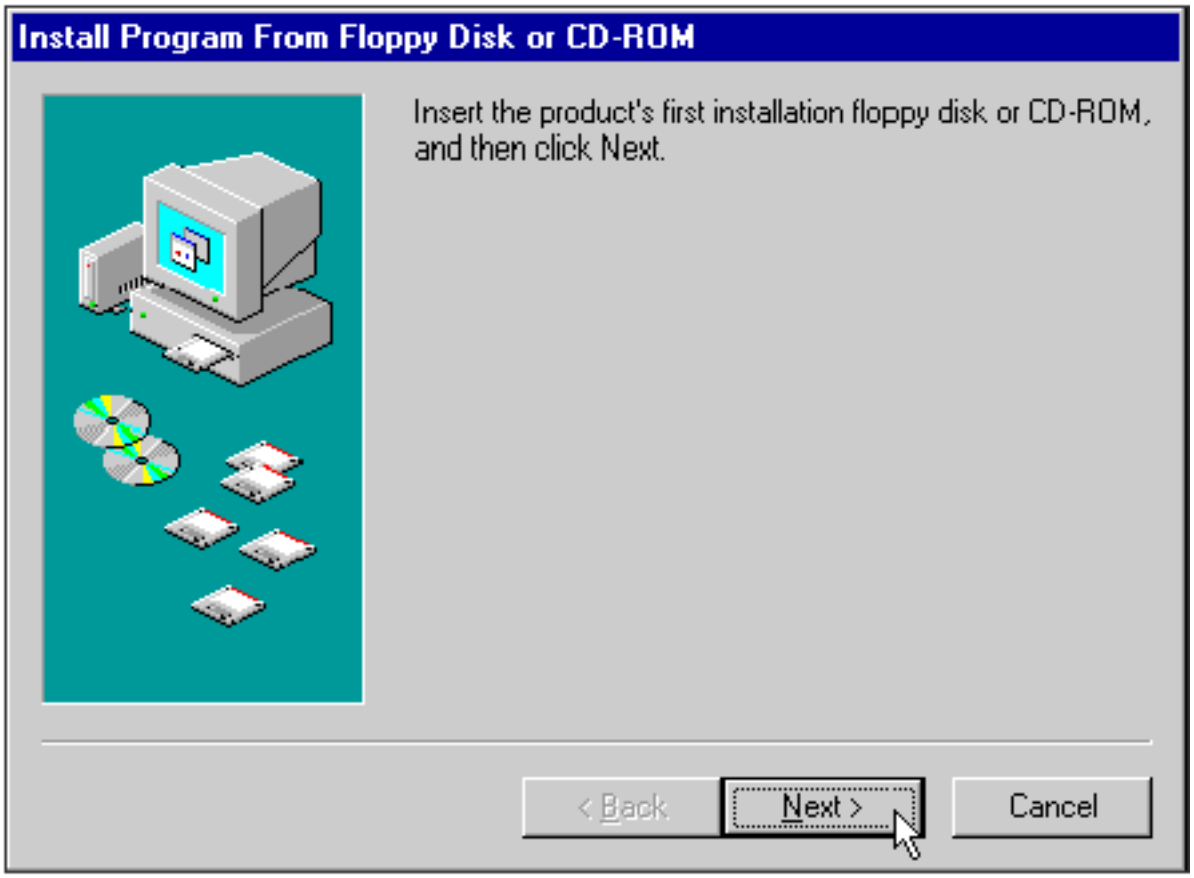

Fig. 4: Install Program “Next” Button

You have now finished the first part of the AVAST32 Installation Process. Your computer is now aware that you plan to install a new software package and it is ready to allow you to install it. The AVAST32 Installation Program will now bring up the InstallShield®Wizard to help you install AVAST32.

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1.2.2 Complete the AVAST32 Installation Process

For the rest of the AVAST32 Installation Process, the InstallShield®Wizard will ask you questions about your name, company, serial number, etc. All you have to do is answer each question as it is appears on your computer screen or click on a button to acknowledge a particular situation. If you decide to "Exit" or cancel the setup, you can do so. However, before you exit completely, AVAST32 gives you a second chance to change your mind and return to the installation (Fig. 5).

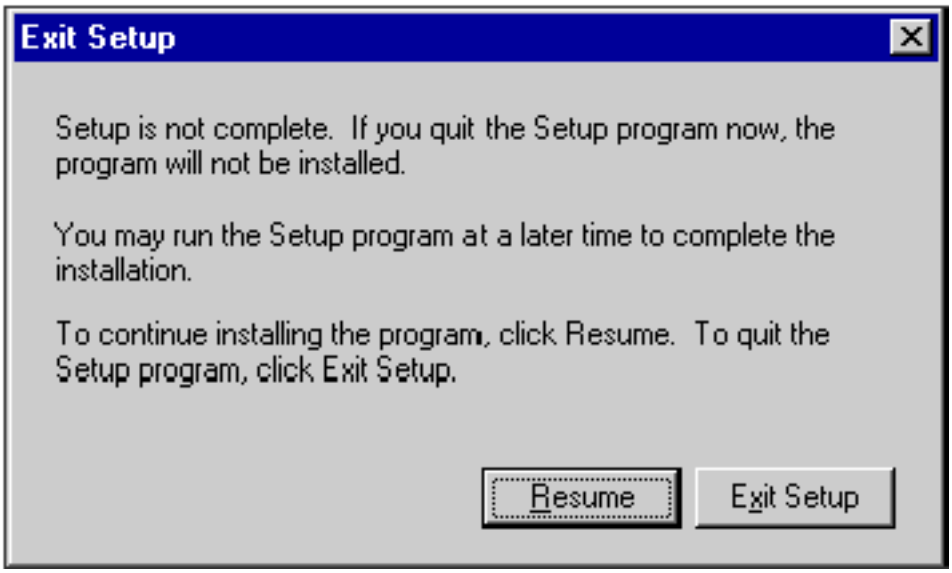

Fig. 5: Resume Installation Process

You can cancel the AVAST32 Installation Process at any time during the installation without causing problems on your computer. If you choose to cancel the installation, the AVAST32 Installation Process returns your computer to its original state before you began the installation.

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- Step 1: When the AVAST32 Welcome window appears in the center of your computer screen (Fig. 6), use the left mouse button to click the “Next” button. This will move you to the next screen.

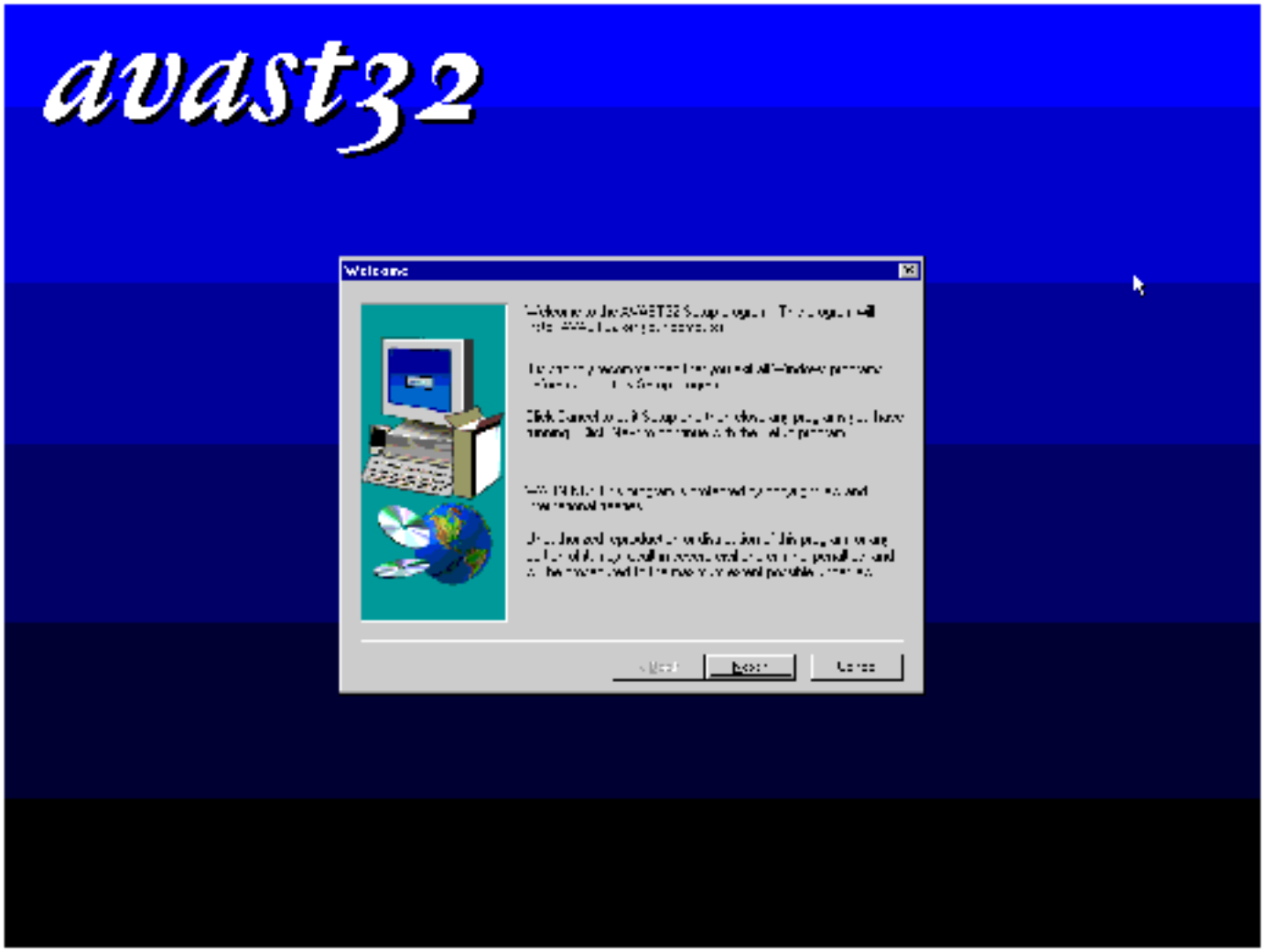

Fig. 6: AVAST32 Setup Window

Click the “Next” button to go to the next step of the AVAST32 Installation Process. Click the “Back” button to go back to the preceding window of the InstallShield®Wizard. If the action cannot be done (e.g. if you are at the first installation step, as in Fig. 6), then the button is gray or NOT selectable.

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- Step 2: When the “Software License Agreement” window (Fig. 7) appears, read the user copyright ownership information and warnings about unauthorized use of the program or its parts. If you agree with the License Agreement and to all of its parts, use your left button on your mouse to click the “Yes” button.

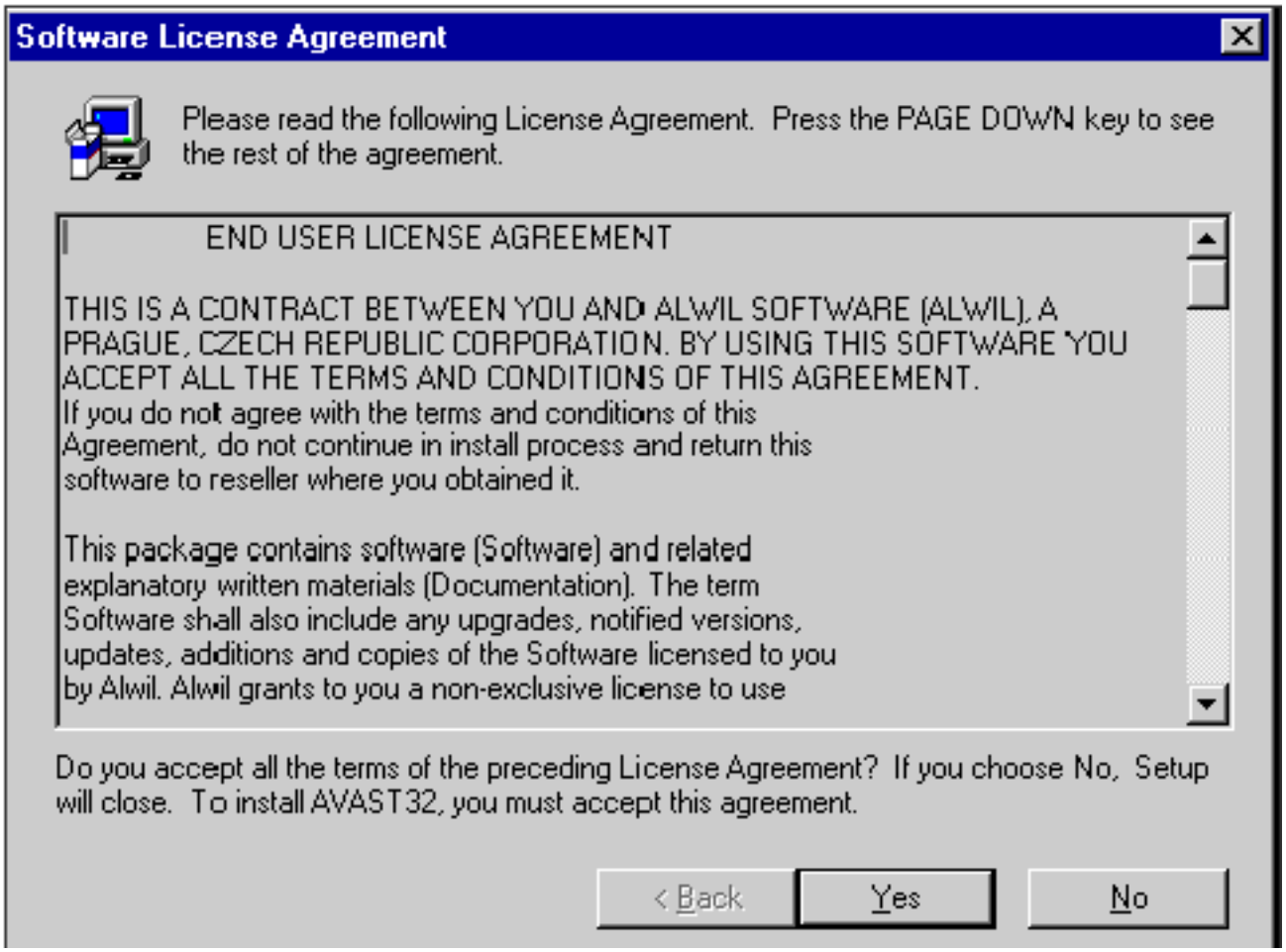

Fig. 7: “Software License” Window

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- Step 3: The “Info” window appears with the README.TXT in a scrolling text box (Fig. 8). Once you have read the README.TXT file, use the left button on your mouse to click the “Yes” button. The “Back” button returns you to previous License Agreement window and clicking on the “No” button cancels the installation of AVAST32.

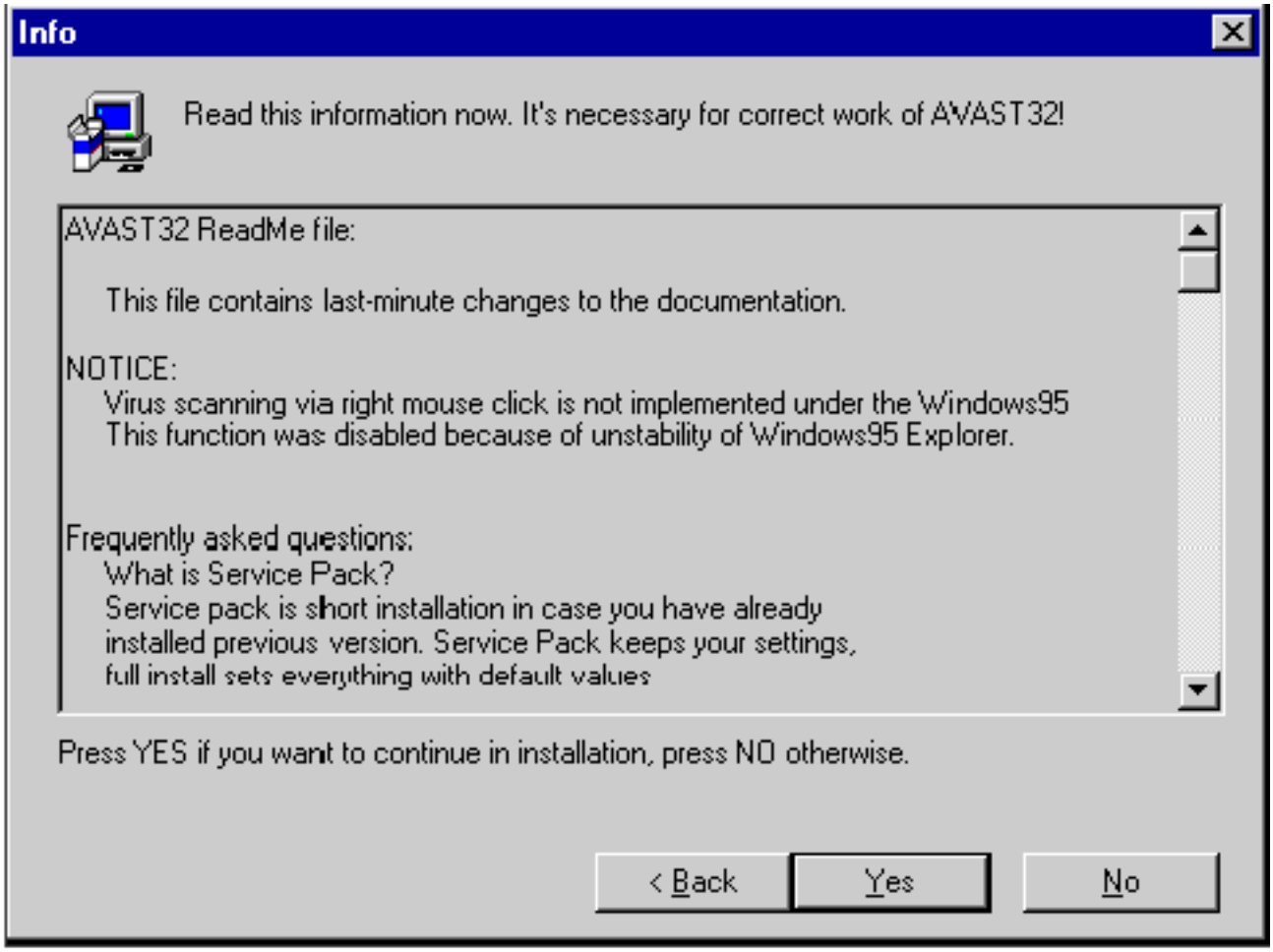

Fig. 8: “Info” Window

The README.TXT contains new information that we compiled after we created this manual. This important information may be about the program, the installation, or it may contain last minute instructions to help prevent problems.

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- Step 4: When the “User Information” window appears (Fig. 9), enter your name, then your company's name in the provided text boxes. On the other hand, if the installation is for home use, enter your address in the company text box. Once the information is correct, use the left mouse button to click the “Next” button.

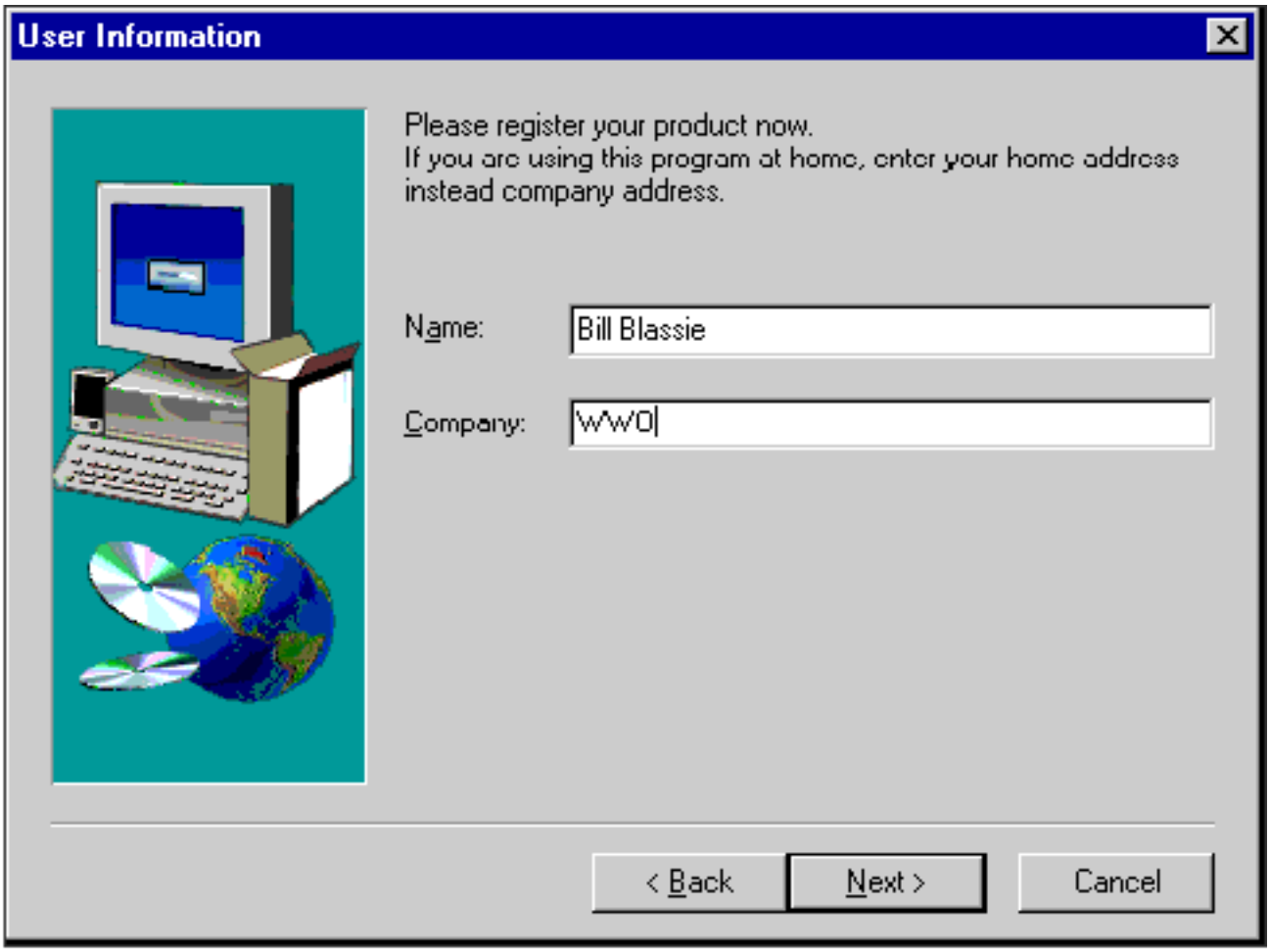

Fig. 9: “User Information” Window

When the “User Information” window appears, there may already be name and company information in the text boxes. If the data displayed is not accurate, use your left mouse button to click in the text box and correct by typing in your name and/or company name.

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- Step 5: When the “Personalization” window appears (Fig. 10), use your keyboard to enter the Activation Key (serial number) in the text boxes. How do you get an Activation Key (serial number)? After you purchase AVAST32, SecureNet faxes, telephones, or emails the Activation Key (serial number) to the customer. When you finish entering the Activation Key (serial number), use the left button on your mouse to click the “Next“ button.

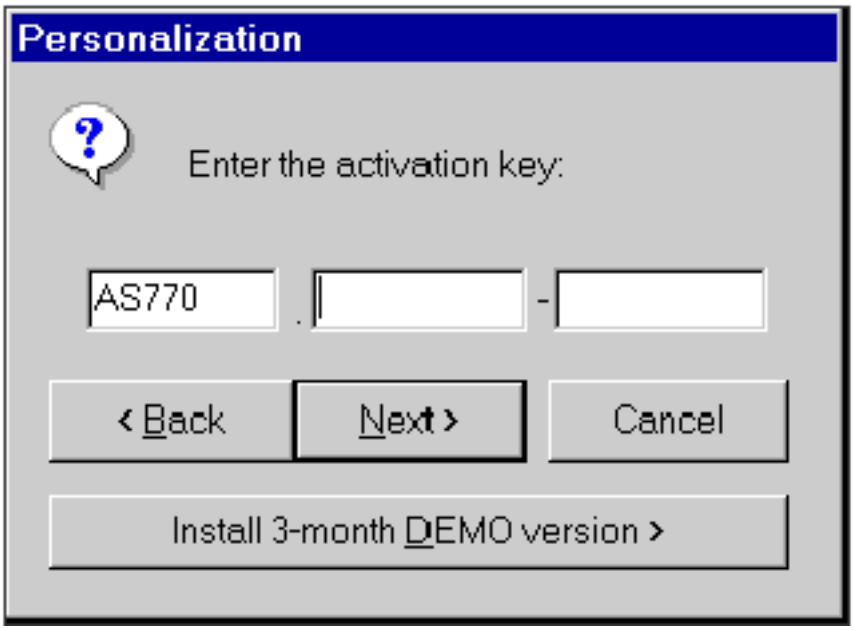

Fig. 10: “Personalization” Window

The InstallShield®Wizard automatically enters the first part of the Activation Key (serial number), which means that you need to add the rest. For more information, see Appendix D: Activation Key & Licenses.

If you just need to get started and cannot remember or do not have your Activation Key (serial number), you can install a three-month demo version. Just click on “Install 3-months DEMO version” button. You can go back later and re-enter your Activation Key (serial number) when you purchase AVAST32.

If the AVAST32 Installation Process will not accept your Activation Key (serial number) in the “Personalization” window, you have probably entered an incorrect serial number. Make sure that you haven’t entered the letter “O” instead of zero (and vice versa) and also that you have not entered a period or hyphen.

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- Step 6: If you enter the Activation Key (serial number) correctly, a “Choose Destination Location” window will appear (Fig. 11). If you agree that you should save AVAST32 into the designated target folder, use the left button on your mouse to click on “Next” button.

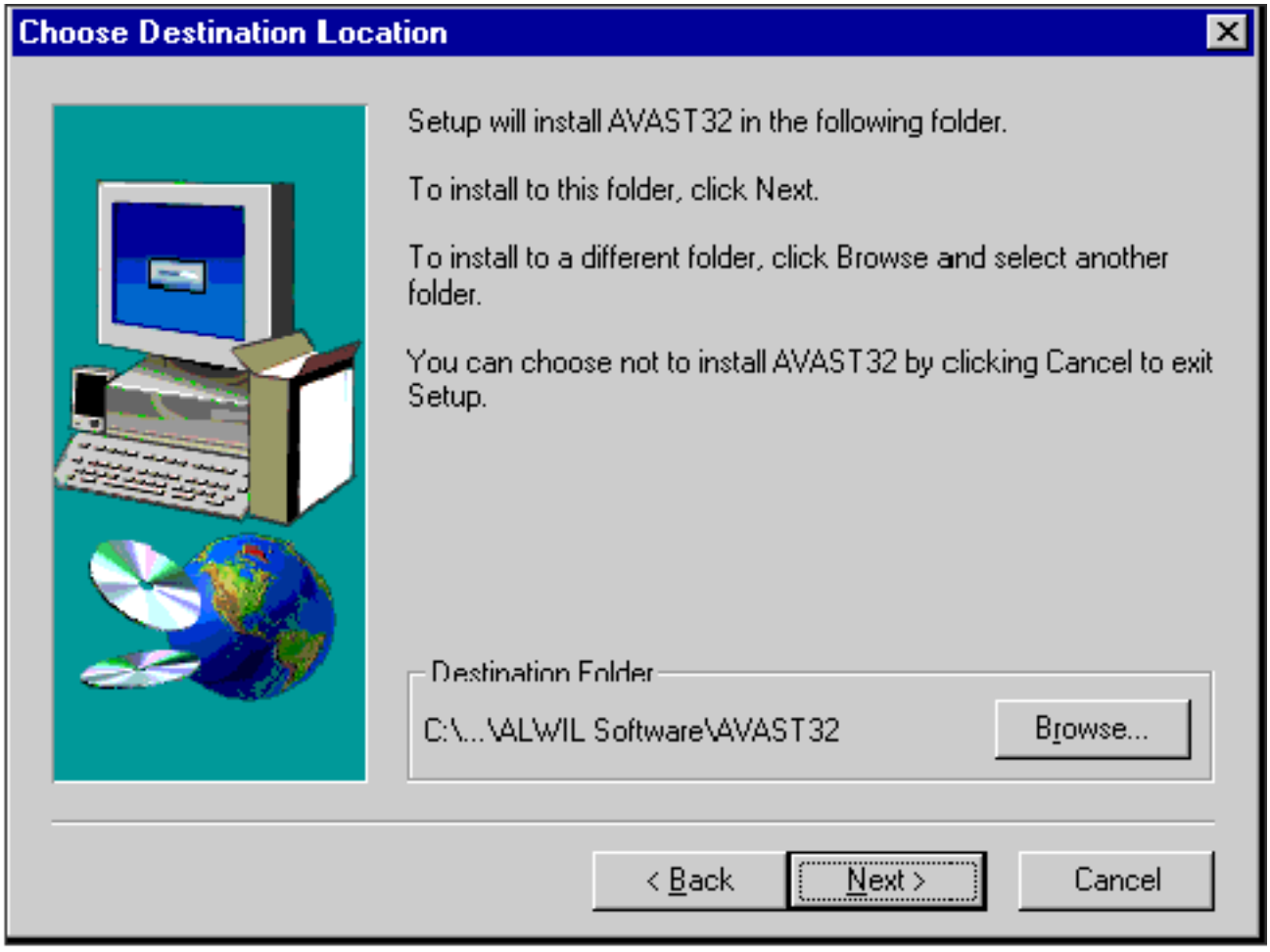

Fig. 11: “Choose Destination Location” Window

The suggested default folder is “C:\Program Files\SecureNet\AVAST32\” (Fig. 12). This means that the InstallShield®Wizard will create the AVAST folder on your system disk in the Program files folder and save AVAST32 into that folder. You can choose a different target folder by clicking on the “Browse” button, but we strongly recommend saving into the default target folder to avoid possible future problems.

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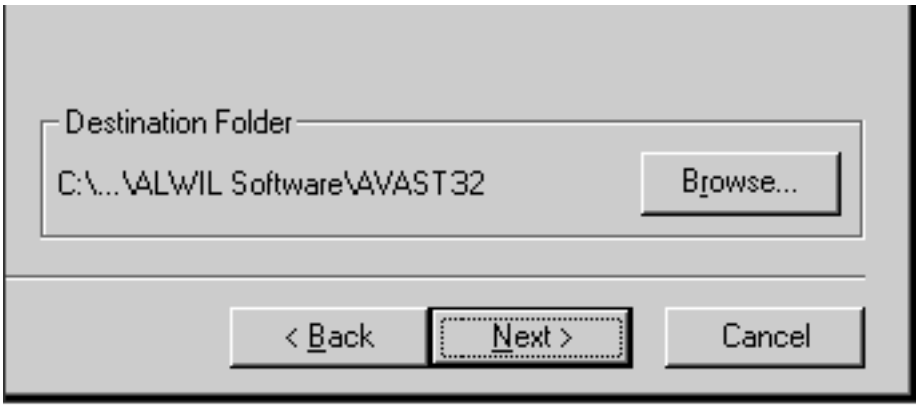

Fig. 12: “Destination Folder” Option

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- Step 7: A “Select Components” window appears (Fig. 13). You may not need to install extra components. But if you would like to install Czech or German language support and they are available, click in the check box next to the component you wish to add and a checkmark will appear showing the option is selected. Once you have selected the components you would like to add, use the left button on your mouse to click on “Next” button.

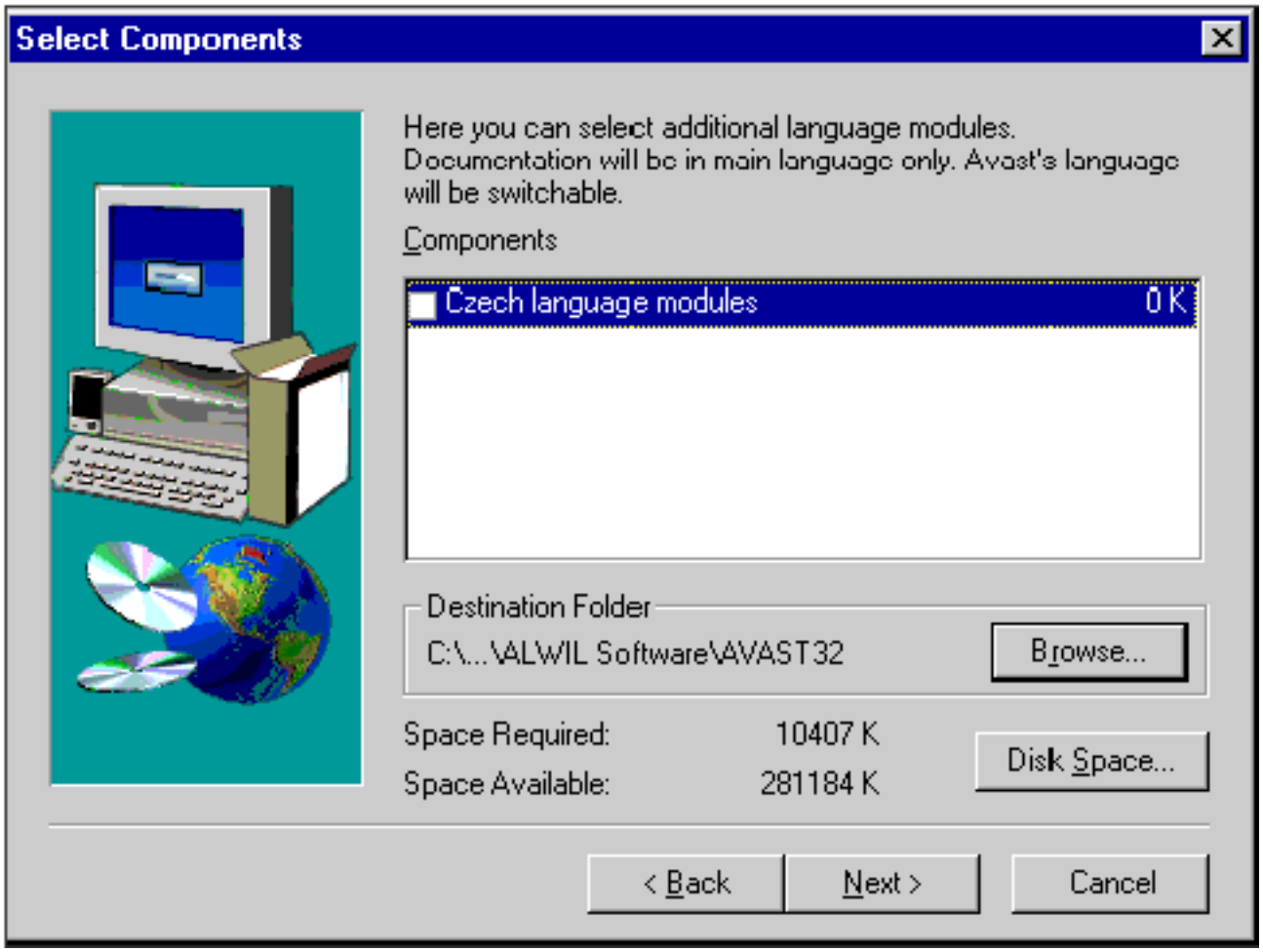

Fig. 13: “Select Components” Window

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- Step 8: When the “Start Copying Files” window appears (Fig. 14), please look over the listed information. If it is incorrect or you have misspelled something, click the “Back” button and correct it as needed. If you want to end the installation, click the “Cancel” button to end the installation. If everything is correct, click the “Next” button and the InstallShield®Wizard will install AVAST32 on your hard disk.

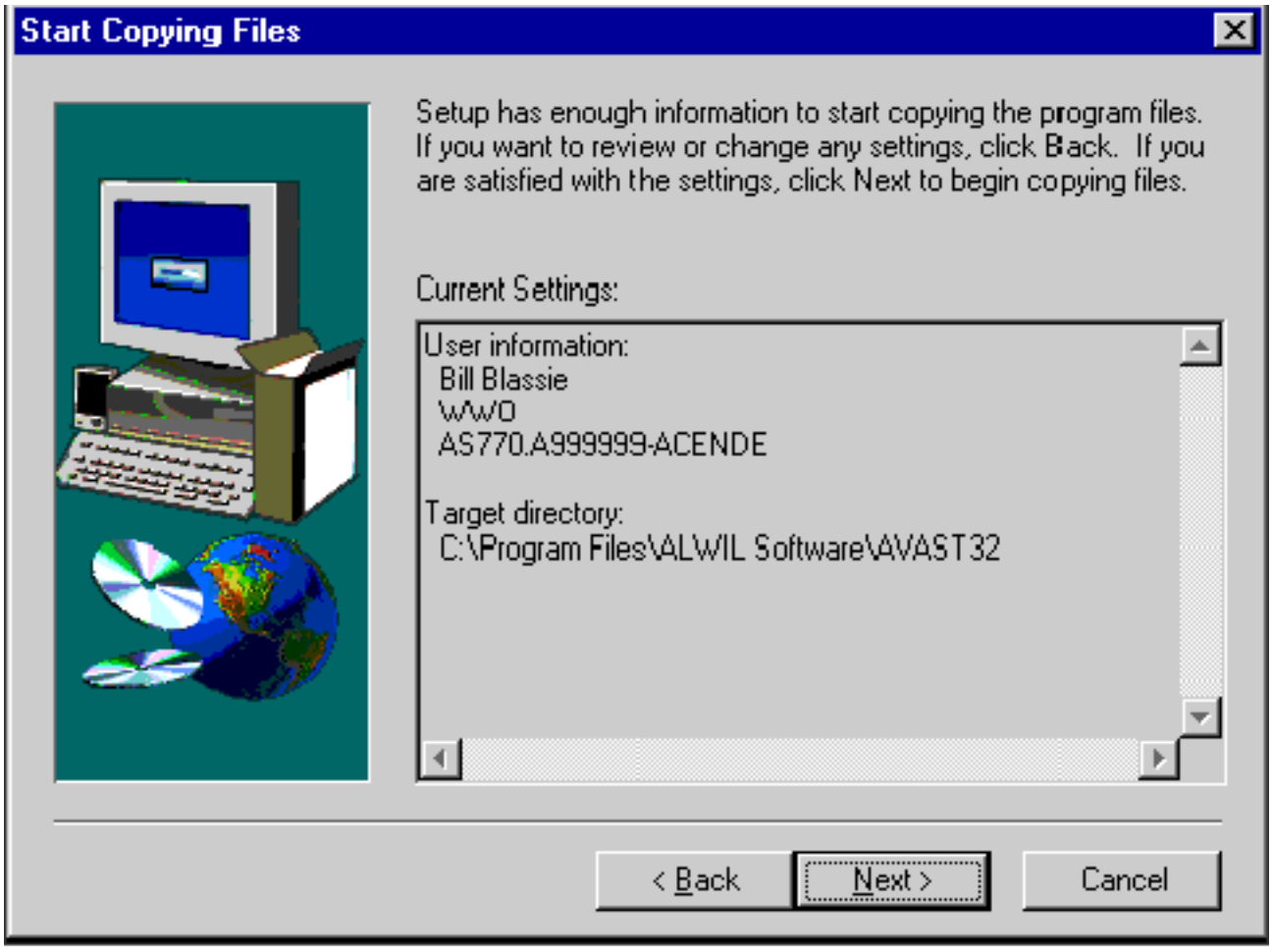

Fig. 14: “Start Copying Files” Window

Be patient, this may take a while…

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- Step 9: The “Setup Complete” window appears (Fig. 15). If you would like to restart your computer now, use your left mouse button to click or turn “ON” the “Yes, I would like to restart my computer now” radio button. Then click the “Finish” button. If you would like to restart later, use your left mouse button to click or turn “ON” the “No, I will restart my computer later” radio button, then click the “Finish” button.

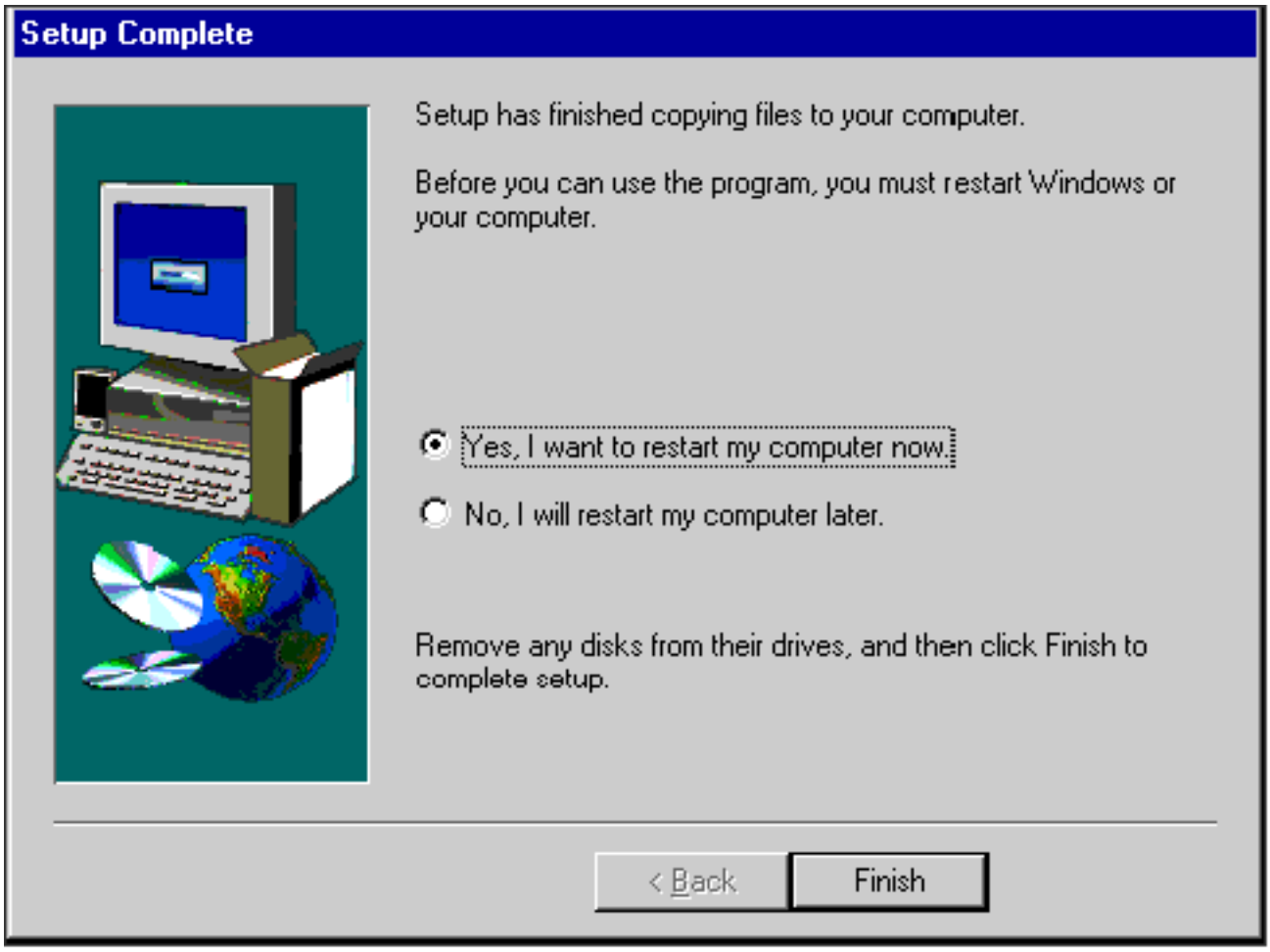

Fig. 15: “Setup Complete” Window

We recommend you restart now. Click or turn “ON” the “Yes, I want to restart my computer now.” radio button. Then click the “Finish” button. Restarting allows your computer to finish installing AVAST32. AVAST32 only offers a restart option on this dialog if you are using Windows NT as it uses a kernel mode driver.

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1.2.3 Help! Troubleshooting Installation Etc.

If you are running into problems, look through this manual first, then try the SecureNet web site at http://www.SecureNet.org. If that does not help, give SecureNet Technologies Technical Support a call at 1-800-673-3539 extension 33 between the hours of 8:00 AM and 5:00 PM PST. Before you call, make sure to write down what you have done, the errors you encountered, your operating system, and hardware specifications of your computer.

1.2.3.1 How to Use this Electronic Manual

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- Cut and paste text or make it bigger or smaller (5.3.4.2.3 Help Text Buttons).
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- Find any "text" in the help files. Click on the "Find" button to find any menu command, phrase, or word, use your left mouse button to click on the "Find" button. If you don't find what you need, there is a button to find what you are looking for again (5.3.4.2.7 Help Find & Search Buttons).
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Remember to set your page size to "100% Zoom" and the images will be sharp on your monitor. If you want to do this, go to 5.3.4.2.6 Help Size Buttons.

1.2.3.2 Possible Solutions to AVAST32 Installation Problems

Here are some possible solutions to problems installing AVAST32:

- The AVAST32 Installation Process will not accept your Activation Key (serial number) in the "Personalization" window. If this happens, you have probably entered an incorrect serial number. Make sure that you haven't entered the letter "O" instead of zero (and vice versa) and also that you have not entered a period or hyphen.
- You cannot install AVAST32 because there is not enough space on your hard disk. If this happens: cancel the installation program and clear the necessary space on your hard disk. To do this empty the recycle bin, delete useless programs, old documents, etc. AVAST32 needs 12MB of hard disk space; 10MB to successfully install plus 2 MB on the hard disk for the installation process. When you are finished clearing space on your hard drive, restart the AVAST32 Installation Process.
- You cannot install AVAST32 on a computer running Windows NT if you do not have administrator's rights. Cancel the AVAST32 Installation Process, log out or restart your computer, then log in as administrator. Or if you do not have administrator's rights, contact your network administrator.

1.2.4 Install from ZIP or Removable Cartridge

You can also use an Iomega Zip drive or other removable cartridge drive to install AVAST32. To do this, create one folder (name it whatever you like) on the removable media and copy the contents of the installation CD-ROM or installation diskettes into that folder. Once you are finished copying, install using the procedure described in 1.2.1 Start the AVAST32 Installation Process.

1.2.5 Install over a Network

A network administrator can remotely install AVAST32 on a large number of networked computers from one location without having to install at each networked PC. To do this, create one folder in a shared partition of a network hard drive and copy the contents of the installation CD-ROM or installation diskettes in that folder. If you want to know more about installing as the network administrator, read the text file ADMIN.TXT which is located on the CD-ROM or first installation diskette.

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1.3 Uninstall AVAST32

You can uninstall AVAST32 from your computer at any time. This operation removes all traces of AVAST32 from your hard disk and returns the system to its original state before you installed AVAST32. The uninstallation also removes AVAST32 information from Microsoft Windows 95's Registry.

1.3.1 Stop! Read This before You Begin to Uninstall.

Before you begin to uninstall AVAST32, it is important that no part of AVAST32 is running. This would include AVAST32, LGW32, RGW32, QUICK32, and WARN32 programs. If any are running, the AVAST32 Uninstall Process will not work correctly and parts of AVAST32 will remain on your hard disk. Nor will it be possible to restore your hard disk to the state it was in before you installed AVAST32.

The easiest way to locate running AVAST32 programs is to look in the Microsoft Windows 95 and NT Task Bar and Windows System Tray at the bottom of your computer screen. If you see any AVAST32 program, close it by clicking the right mouse button on the name rectangle in the Task Bar or the program icon in the Windows System Tray. A pop-up menu with options will appear next to your mouse pointer. Select the "Close" menu command and that particular AVAST32 software application will stop running and disappear from the Windows 95 Task Bar or Tray.

1.3.2 Start the AVAST32 Uninstall Process

Once you have made sure that no AVAST32 program is running, you are ready to uninstall AVAST32. Uninstalling AVAST32 works just like the AVAST32 Installation Process. To uninstall, use the same "Add/Remove Program Properties" window that you used to install AVAST32.

- Step 1: Use the left mouse button to click the "Start" button. After the Windows 95 or NT menu appears, choose the "Settings" menu and then the "Control Panel" menu command to open the "Control Panel" window.

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- Step 2: The “Add/Remove Program Properties” dialog appears. Find the AVAST32 description in the list of the installed programs (Fig. 16) and use your left mouse button to double-click the AVAST32 description.

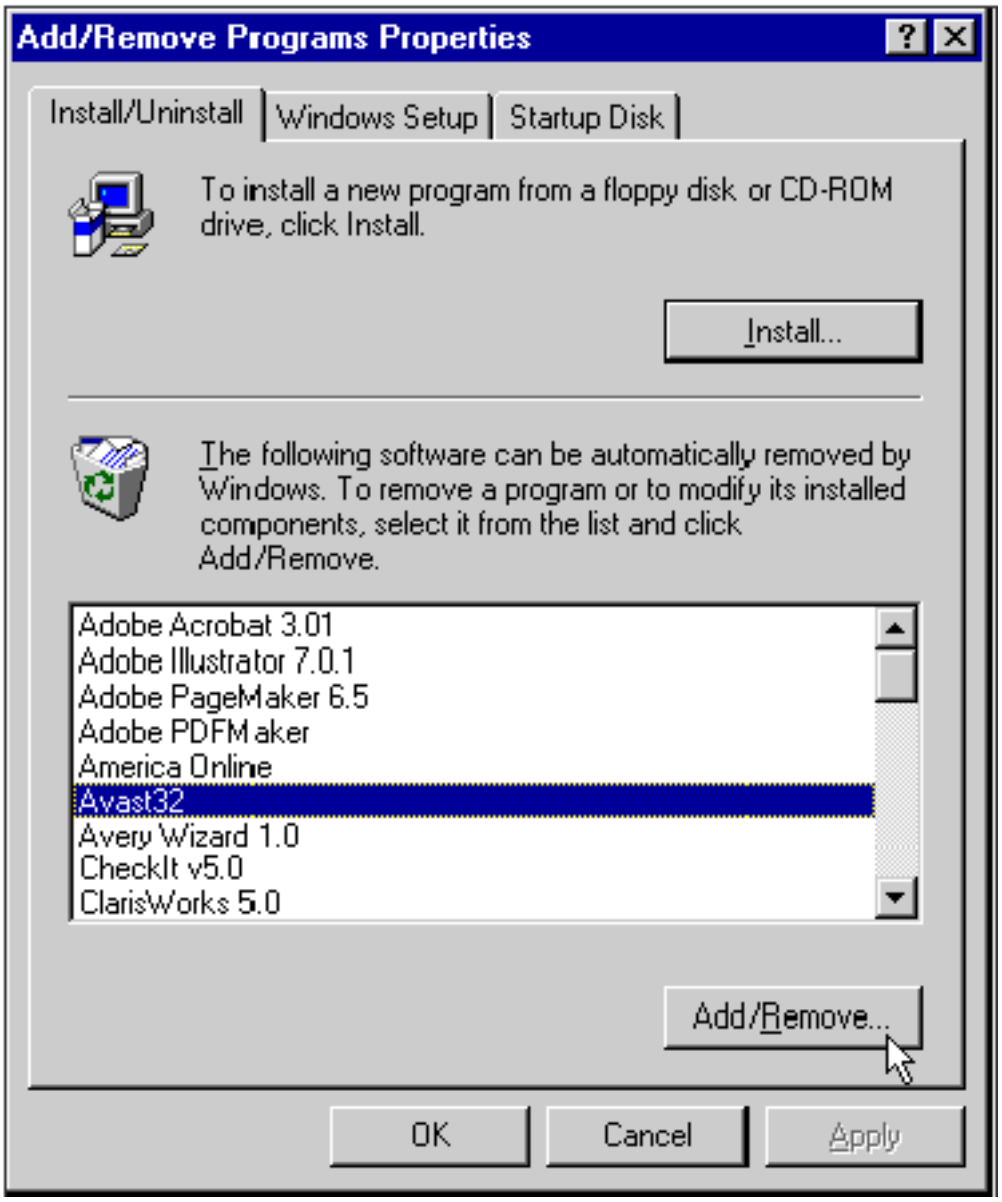

Fig. 16: “Add/Remove Program Properties” Dialog

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- Step 3: A dialog appears asking if you really want to uninstall AVAST32. Once you click the "Yes" button, the Uninstall Process is automatic. If you answer "Yes," AVAST32 will be uninstalled and it will return the system to its original state before you installed AVAST32.

Sometimes the AVAST32 Uninstall Process is unable to uninstall all of the files associated with AVAST32. You will know this because a dialog will pop up to tell you before the AVAST32 uninstall is completed. This can happen if you install AVAST32 in a different folder than the default folder suggested by the AVAST32 Install Process or because AVAST32 creates new files during its operation and saves them to your hard disk over time.

1.4 Please Use Original Software

Are you a software pirate? Have you illegally copied AVAST32 from someone who has a legal copy of AVAST32? Please do not support piracy by copying this and other software programs. At the very least, you will be hurting our company by robbing us of revenues that we need to stay in business. You will not be able to get customer service, regular updates, and other kinds of assistance we provide our regular customers. Considering one virus can cause hundreds, possibly thousands of dollars in damage to your computer files, it seems a small price to pay to buy AVAST32 and use it legally.

1.5 AVAST32 .VPS Virus Database Update Services

Unfortunately, hackers and other programming renegades are creating new computer viruses at an astounding rate. Thus, it is important to use the latest released versions of AVAST32 antivirus products if you want to keep a high level of protection. That's why we offer updates for the .VPS Virus Database and AVAST32 on our web site at http://www.SecureNet.org.

SecureNet usually updates the .VPS Virus Database once a month and updates AVAST32 as needed. Depending on your license, you will be able to upgrade AVAST32 free or for a small fee. The .VPS Virus Database is always free. Please feel free to contact us if you have a question about your upgrade status or the current AVAST32 version.

- End Chapter 1 -

CHAPTER 2

AVAST32 QUICK START

2.1 Start AVAST32

To use AVAST32, you must install it on your hard drive or network server. You cannot run AVAST32 from your CD-ROM or diskettes. Once you reboot after installing, AVAST32 is ready to go and has added an AVAST32 shortcut in the Start menu.

If you are using Windows 95, look for the AVAST32 shortcut in the “Start” menu, then the “Programs” folder (Fig. 17). If you are using Windows NT 3.51, the AVAST32 shortcut is located in the “AVAST32 antivirus” group.

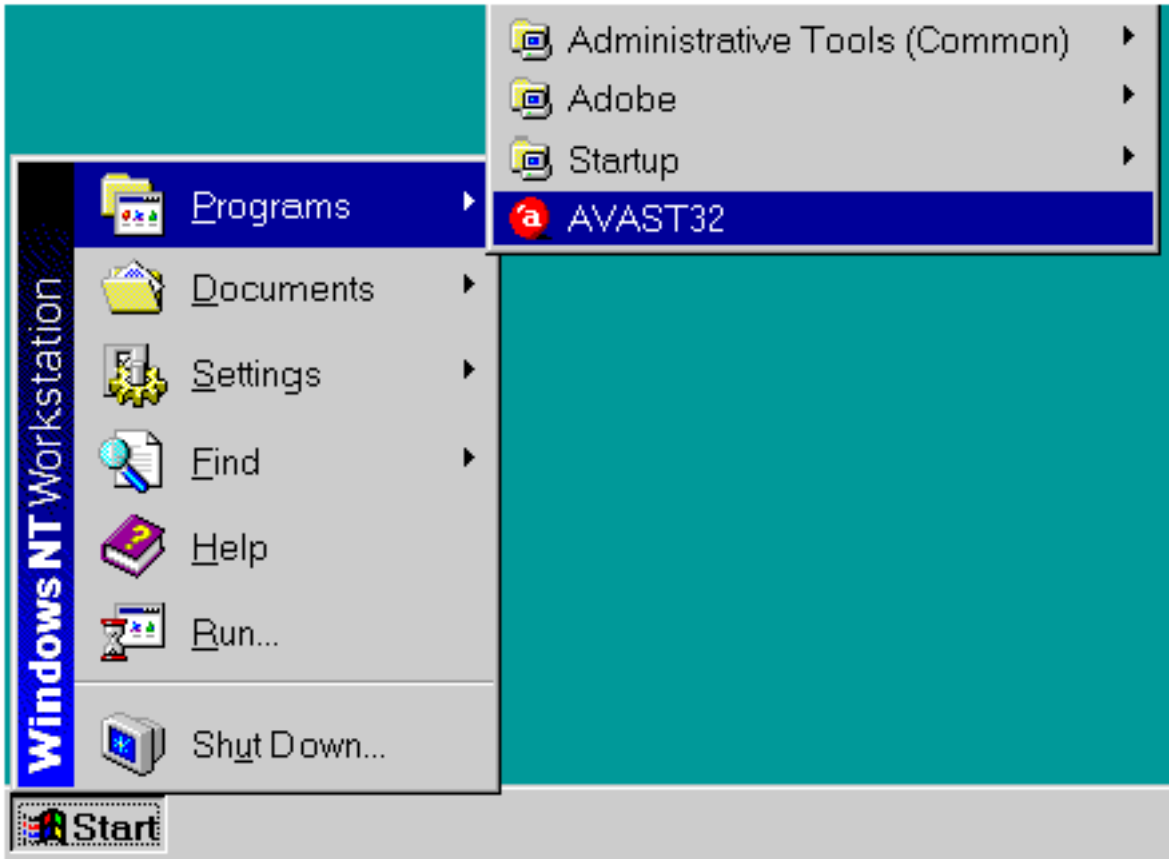

Fig. 17: AVAST32 Shortcut in Start Menu

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2.2 How to Start AVAST32

When AVAST32 launches, the AVAST32 General Console window opens on the Windows Desktop (Fig. 18). If this is the first time you have opened AVAST32, you will see the “Simple” User Interface. You will also see tasks with icons (small pictures) to the left of task description in the “Name” text box.

Fig. 18: AVAST32 General Console Window

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If this is not the first time you have opened AVAST32, you may see the "Enhanced" User Interface (Fig. 19). Just as with the "Simple" User Interface, you will see tasks with icons (small pictures) to the left of task description in the "Name" text box.

Fig. 19: "Enhanced" User Interface

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2.2.1 Task Basics

Several tasks are included with AVAST32 and can be launched as needed to protect against viruses. You can start and stop a task whether you are in the "Simple" User Interface or the "Enhanced" User Interface.

- To start a task, use your left mouse button to click on a task. This selects it. Then click the "Start" button. If the task is self-running, it will start up and the icon (picture) next to the task will turn into a "Green" ball (Fig. 20). If AVAST32 needs more information before the task can start, a dialog will appear to help you select files, folders, etc. to complete the task.

Fig. 20: "Green" Ball

- To stop a task, use your left mouse button to click on a task and select it. Then click the "Stop" button and the task will stop.

2.2.1.1 What to Do First

If you are just starting AVAST32 for the first time, we recommend using the "Scan+Check: all local disks" task. This task scans for viruses and builds the AVAST32 File Database used for "integrity checking." Without this file information, AVAST32 cannot warn you about changes in your files that might indicate a virus. For more information, see 2.3.1 "Scan+Check: all local disks" Task.

2.2.1.2 Do I have a Virus?

If you just want to know if you have a virus, use the "Scan: all local disks" task. This task scans for viruses just as the "Scan+Check: all local disks" task does, but it does not build the AVAST32 File Database. For more information, see 2.3.1 "Scan+Check: all local disks" Task.

2.2.1.3 How to Turn on Virus Protection

The "Resident: Full Protection" task monitors the activities performed inside your computer and is turned "ON" by default. If it finds (1) a suspicious operation or (2) a virus, it displays a warning message and gives you a chance to fix the situation.

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2.2.1.4 How to Protect against Macroviruses

AVAST32 protects against Macroviruses by keeping them off your computer. These viruses are different from the viruses usually found on computers because they infect the “macros” in files created by Microsoft Word, Microsoft Excel, etc. There are several ways Macroviruses infect your computer. they can sneak on your computer through the disk drive. They can also hitchhike on documents that you download over telephone lines or arrive attached to network email.

There are two tasks that help prevent this: the “Scan: diskette A:” task and the “Scan: interactive selection” task. Use the “Scan” diskette A:” task to scan files on diskettes inserted in your disk drive. Use the “Scan: interactive selection” task to keep scan downloaded files or email attachments and to scan files before they are opened on your hard drive. For more information, see 2.3.1 “Scan+Check: all local disks” Task.

2.2.1.5 How to Detect an Unknown Virus

The only way you can detect an unknown virus is to track changes in the files themselves. Do this with the “Scan+Check: all local disks” task. The first scan records information about each file in the AVAST32 File Database. Later, when you use the “Scan+Check: all local disks” task or the “Check: All Local Disks” task again, AVAST32 looks at the original file information and the current file information and compares the differences. If there are certain kinds of changes, AVAST32 warns you that there is a possible virus on your computer. For more information, see 2.3.1 “Scan+Check: all local disks” Task.

2.3 Work with Tasks

As you might guess, different tasks are useful in different situations. There are tasks you should use when you are first starting AVAST32, when you are just checking for viruses, protecting against macroviruses, detecting unknown viruses, preventing viruses and making sure no viruses come in through your disk drive.

2.3.1 “Scan+Check: all local disks” Task

The first thing you should do after installing AVAST32 is scan your computer’s hard disks for viruses and create a database of your current files. Both of these activities can be performed by the “Scan+Check: all local disks” task.

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The “Scan+Check: all local disks” helps discover any new viruses based on the changes in files. Once started, the “Scan+Check: all local disks” task explores all the folders and files on your hard disks for viruses. At the same time it is checking for viruses, it is also building a database of the location and status of each file as well as checking the RAM memory of your computer for any RAM-resident viruses.

- Step 1: When you start AVAST32, you will see the AVAST32 General Console window and a list of tasks. Use your left mouse button to click and select the “Scan+Check: all local disks” task. Then use your left mouse button to click the “Start” button. You can also double-click the “Scan+Check: all local disks” task.

If the task has really started, the icon next to the task name would change to a “Green” ball (Fig. 21). If the icon remains unchanged, you probably have not pressed the left button of the mouse fast enough in the sequence.

Fig. 21: “Green” Ball

- Step 2a: If the “Scan+Check: all local disk” task does find a virus in a file or in the RAM memory, it will display a warning message.
- Step 2b: If the “Scan+Check: all local disk” task doesn’t find any viruses, it will not display any message and the “Scan+Check: all local disk” icon will return to its normal look.

The time it takes a task to run its course depends on the number and type of the files on your hard disks, and of course, on the capacity of your computer. It can vary in the range of a few seconds up to a few minutes. The good news is that AVAST32 tasks work in the background. This means that while AVAST32 is scanning, you can still be working writing letters, printing reports, and doing other kinds of business chores.

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- Step 3: When the “Scan+Check: all local disk” task is finished, the icon will change back to its original look. A dialog (Fig. 22) will also appear asking if you want to choose which changes should be saved into the AVAST32 File Database. If you use your left mouse button to click the “Yes” button, a window showing the file structure of your hard drive appears.

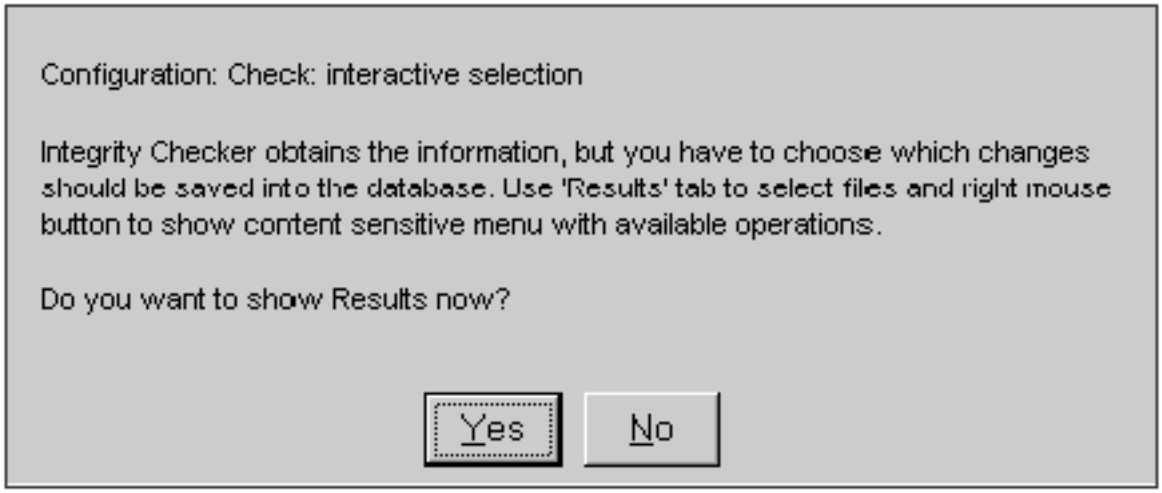

Fig. 22: “Scan+Check: all local disk” Dialog

- Step 4: AVAST32 has collected special information on all your files, folders and hard disks. Now save the information on all of your files in the AVAST32 File Database. To do this, you must first make sure that you are in the “Enhanced” User Interface. To change the interface, use your left mouse button to pull down the View Menu and select the “Enhanced” User Interface menu command.

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- Step 5: Once you are in the "Enhanced" User Interface, use your right mouse button to click the "My Computer" item in the left pane of the window. A pop-up menu appears (Fig. 23). Select the "Accept" menu command, then the "File processing" menu command and AVAST32 will save the information about your files in the AVAST32 File Database.

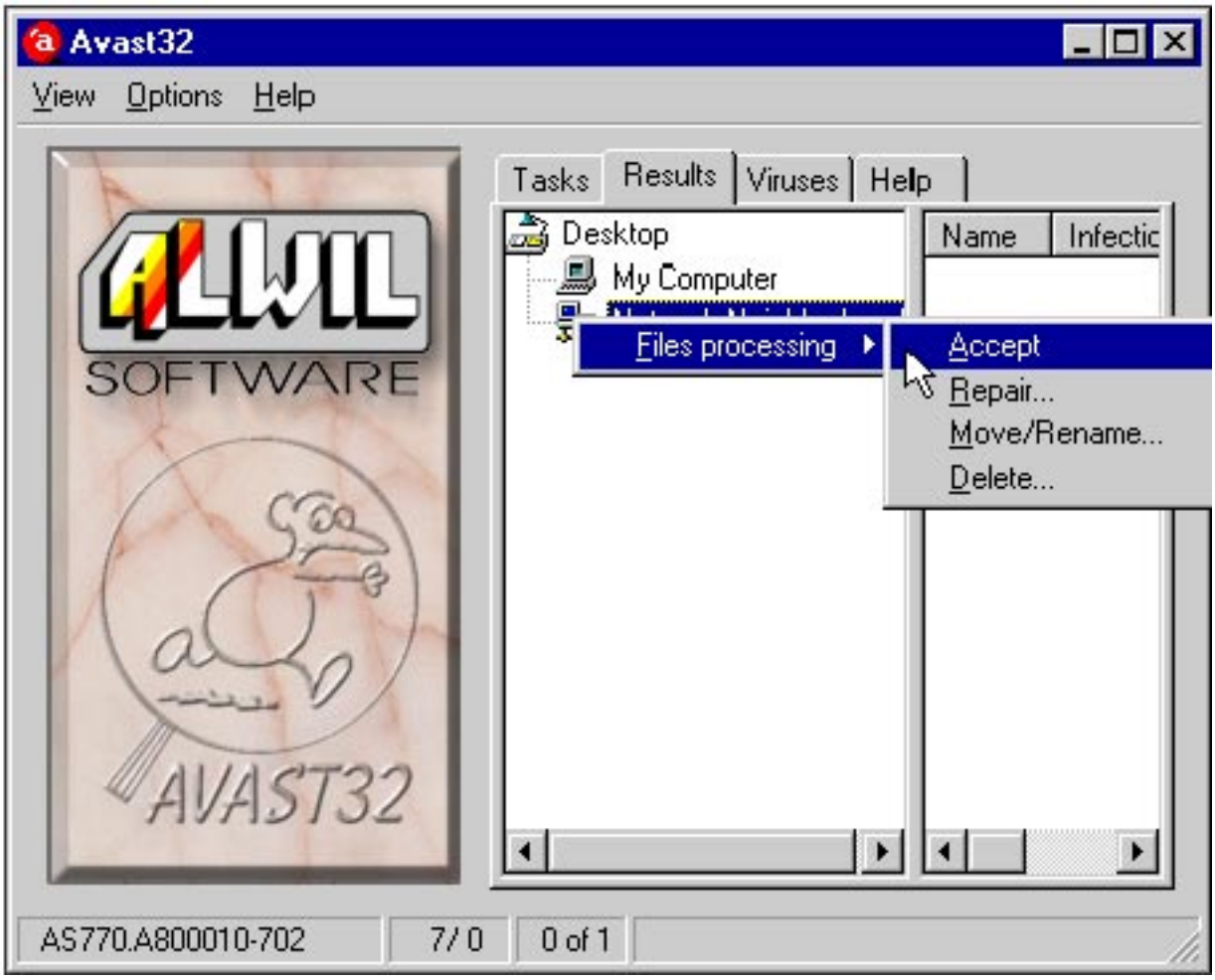

Fig. 23: "Accept" Menu Command

If you want to use the behavior-blocking abilities of AVAST32, you must "Accept" the new information. AVAST32 compares this file data against later snapshots to determine if there have been changes to the original files. If there are, AVAST32 will warn you and suggest possible solutions to this situation.

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2.3.2 "Scan: all local disks" Task

If you only want to find out if your computer has viruses and you don't want to use AVAST32's behavior-blocking abilities, you may decide to use the "Scan: all local disks" task.

For example, you may only work on one computer, do not do email, seldom bring foreign files on to your computer, and have a limited amount of time to deal with virus protection. However, you must realize that this severely limits AVAST32's virus protection abilities and does not take advantage of all the powerful tools at your disposal.

- Step 1: When you start AVAST32 program, you will see the AVAST32 General Console and a list of tasks. Use the left mouse button to double-click the "Scan all local disks" task.

If the task is running, the icon next to the task name changes to a small "Green" ball (Fig. 24). If the icon remains unchanged, you probably have not double-clicked the left button of the mouse fast enough.

Fig. 24: "Green" Ball

- Step 2a: If "Scan: all local disk" task finds a virus in a file or in RAM memory, it will display a warning message. For more information on what to do if you find a virus, see Chapter 7: How to Remove a Virus.
- Step 2b: If "Scan: all local disk" task does not find any viruses, it will not display any message and the "Scan: all local disk" icon will return to its normal look.

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2.3.3 “Scan: Diskette A:” Task

Viruses can sneak on your computer through the disk drive or hitchhiking on downloaded documents or email. This is particularly important if you want to protect against a new kind of virus called a “Macrovirus.” These viruses infect the macros in files created by Microsoft Word, Microsoft Excel, etc.

- Step 1: When you start AVAST32, you will see the AVAST32 General Console and a list of tasks. Use your left mouse button to double-click the “Scan: diskette A:” task. This task scans all the documents and files on the diskette and determines whether they contain a virus. After the “Scan: diskette A:” task has started, the icon next to the “Scan: diskette A:” task will change to a “Green” ball as in Fig. 18.
- Step 2a: If AVAST32 finds a virus in a document or file, the program will display a warning message and you should act immediately. For more information, see Chapter 7: How to Remove a Virus.
- Step 2b: If the task does not find any viruses, it will not display any message and the “Scan: diskette A:” icon will return to its normal look.

By the way, if you want to scan for the presence of viruses in one file or a folder of files on a diskette, use the “Scan <file or folder name>...” task described in Chapter 2.3.

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2.3.4 “Scan: Interactive Selection” Task

If you need to download documents from the Internet or other online services or from some other computer in your network, scan them using the “Scan: interactive selection” task.

- Step 1: When you start AVAST32, you will see the AVAST32 General Console and a list of tasks. Use the left mouse button to double-click the “Scan: interactive selection” task. After the “Scan: interactive selection” task has started, the icon next to the “Scan: interactive selection” task changes to a “Green” ball.
- Step 2: A window appears asking you to specify the folder(s) and/or file(s) to scan (see 5.5 Select Areas to Test Dialog). The dialog that appears is similar to the standard Microsoft Windows 95 “Open” dialog. Select the folder(s) and/or file(s) that you want scanned and AVAST32 will keep an constant eye on them possible infections.
- Step 3a: If AVAST32 finds a virus in a document or file, the program will display a warning message and you should take appropriate action. For more information, see Chapter 7: How to Remove a Virus.
- Step 3b: If the task does not find any viruses, it will not display any message and the “Scan: interactive selection:” icon returns to its normal look.

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2.3.5 “Check: All Local Disks” Task

Since the overwhelming majority of viruses change the data on the hard disk, the “Check: All Local Disks” task should be used to monitor theses changes. When this task is run, it saves the file information in the AVAST32 File Database. It compares the original gathered file information with subsequent gathered file information. If it finds changes, it warns you that you might have a virus.

The process this task uses is known as “integrity checking” and requires at least two scans to be effective. In addition, you must consistently use this task to keep your file information current. Regular data integrity checks of your hard disks is very important as it will protect you from unknown viruses and a number of other problems.

This type of scanning is different from just comparing data found in a scan against a virus database. This is one way to guard against viruses and is used by AVAST32 and many other virus checkers. However, AVAST32 does more by providing a way to discover unknown, new viruses. It does this with integrity checking in the “Check: All Local Disks” task and other tasks.

If you look closely, some of the task names include the word “scan” and some with “Check.” The basic difference is this, if a task “scans,” it compares data found against the .VPS Virus Database. If a task “checks,” it compares original file information against subsequent gathered file information. Scanning offers protection against known viruses, and checking protects against unknown or new viruses.

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- Step 1: When you start AVAST32, you will see the AVAST32 General Console and a list of tasks. Use the left mouse button to double-click the “Check: All Local Disks” task. After the “Check: All Local Disks” task has started, the icon next to the “Scan: interactive selection” task changes to a “Green” ball. After its start-up the task explores all hard disks and stores the status of every file it finds there.
- Step 2a: If the task does not find any viruses, it will not display any message and the “Scan: interactive selection” icon returns to its normal look.
- Step 2b: If a potential virus is found, the program displays a message asking you if you want to display the results of the task.
- Step 3: Use the left mouse button to click the “Yes” button. Once it is clicked, a window appears showing the structure of your computer noting all the files that have been changed since the last “Scan+Check: all local disks” task.

For a more detailed description of the results, see 5.3.2 “Results” Tab. If you think you have a virus, see Chapter 7: How to Remove a Virus.

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2.3.6 AVAST32 "Resident: Full Protection" Task

The "Resident: Full Protection" task is automatically CHECKED (✓) or turned "ON" when you install AVAST32. This task monitors almost all the activities performed inside your computer. A warning dialog appears (Fig. 25) if it finds a suspicious operation or a virus. At that time, it gives you a chance to fix the situation.

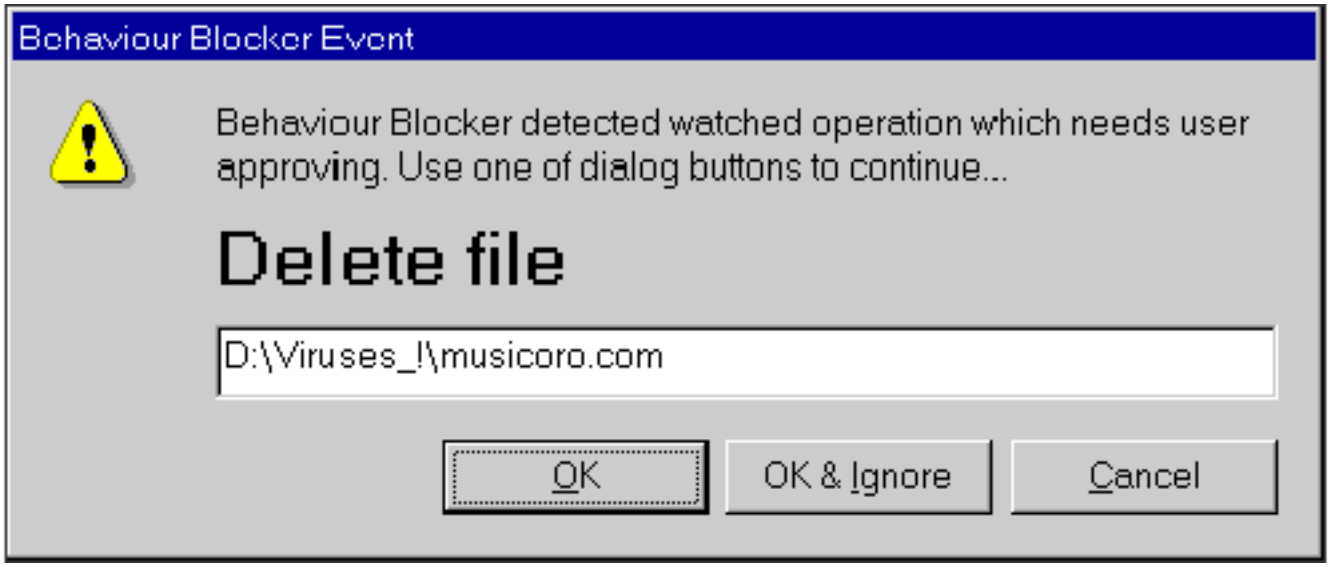

Fig. 25: Behaviour Blocker Warning Dialog

The "Resident: Full Protection" Task restarts automatically after each system restart, so you do not have to run this task manually. You can disable it, but we recommend that you keep it running all the time.

2.4 Scan a Specific File or Folder with Windows Explorer

You can also scan specific files and folders using Windows Explorer without having to go through opening up AVAST32.

- Step 1: When you start AVAST32, you will see the AVAST32 General Console and a list of tasks. Using the Windows "Explorer" program or in "My Computer" on the Windows Desktop, drill down until you find the file or folder containing the files you wish to scan. Then use the right mouse button and click on file or folder. A pop-up menu appears.

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- Step 2: When the pop-up menu appears, select the “Scan <file or folder name>...” menu command (Fig.26). The file in question will be scanned for viruses.

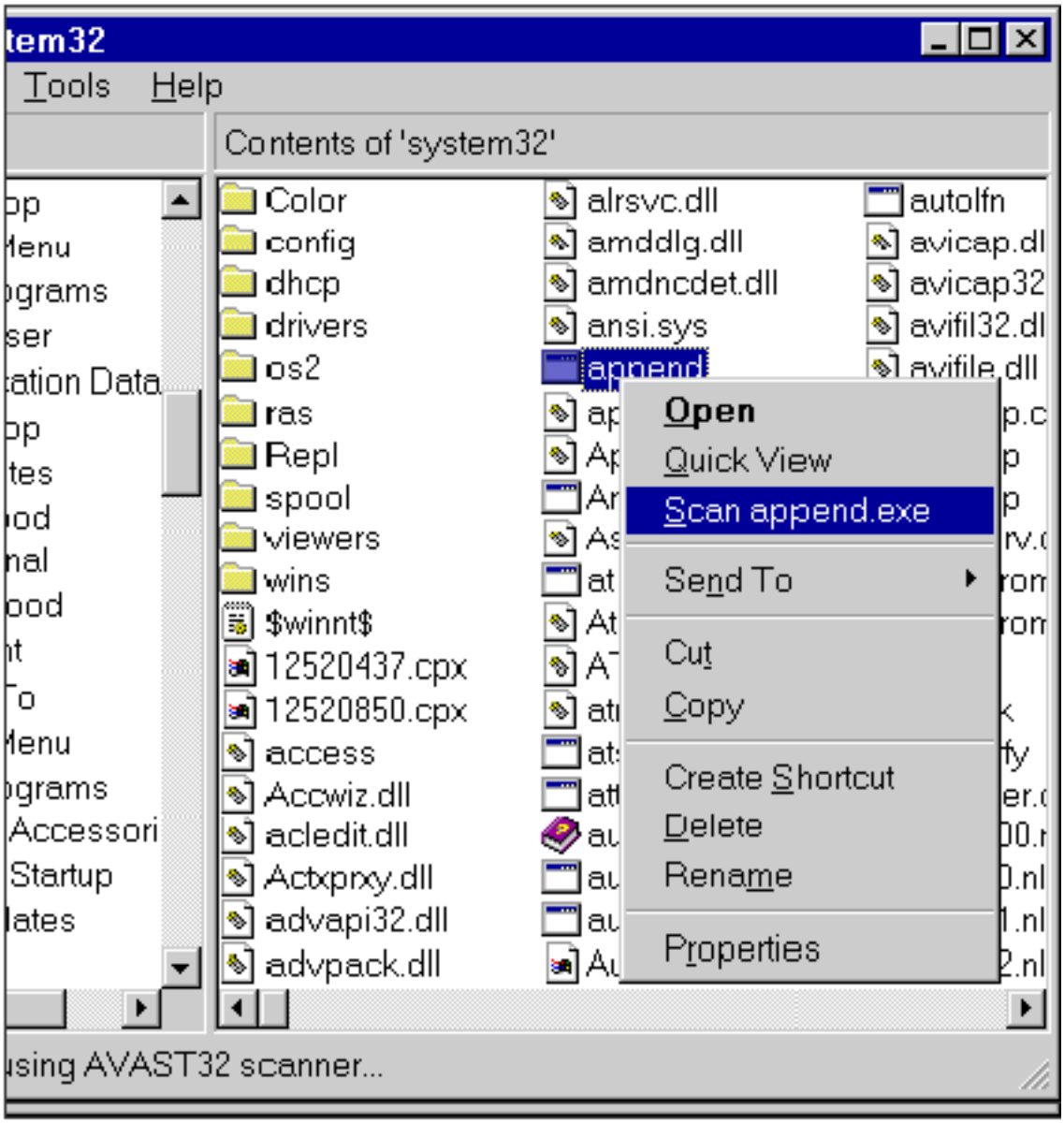

Fig. 26: “Scan <file or folder name>...” Menu Command

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- Step 3: What happens next depends on what the “Scan: all local disk” task finds. If the task does find a virus in a file or in the memory, it will display the warning message. What to do with a warning message is described in Chapter 7: How to Remove a Virus. If the task doesn’t find any viruses, it will not display any message and the “Scan: all local disk” icon returns to its normal look.

If you are checking a folder and it contains subfolders, AVAST32 will scan the files in subfolders as well.

2.5 Configure Tasks to Work Automatically

It is sometimes helpful to make sure some or all AVAST32 tasks will work to protect you, even if you shut down AVAST32 or reboot your computer. You can make sure this happens by modifying them to do so.

There are two ways to create or reconfigure a task: with the AVAST32 Task Wizard or the “Task Property” dialog. You will learn more about creating tasks in Chapter 4: Create New Tasks, but for now you may just want to configure tasks to work automatically. Depending on how AVAST32 is set up, you can do this using 2.5.1 Automate a Task with the Task Wizard or

2.5.2 Automate a Task with the Task Property Dialog.

2.5.1 Automate a Task with the Task Wizard

To automate a task with the Task Wizard, you need to change to the “Enhanced” User Interface.

- Step 1: To change to the “Enhanced” User Interface, use your left mouse button to click the “Enhanced” User Interface menu command under the “View” menu title.
- Step 2: In the “Enhanced” User Interface, use your left mouse button to click the “Tasks” tab. Use your right mouse button to click the name of task you would like to automatically run. A pop-up menu appears.

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- Step 3: When the pop-up menu appears, use your left mouse button to click on the “Modify” menu command.
- Step 4: When the Task Wizard appears, automate the AVAST32 task you selected. Use your left mouse button to click the “Next” button until you get to the “Common flags are working for all task variants” page.
- Step 5: Use your left mouse button to CHECK (✓) or turn “ON” the “Start the task with Operation system” check box on the “Common flags are working for all task variants” page. Then click the “OK” button. This means that this task will automatically start the next time you reboot.

To disable the automatic start for this task, follow the same steps but uncheck the “Start the configuration with Operating System” check box.

- Step 6: To go back to the “Simple” User Interface, use your left mouse button to click the “View” menu title. Then use your left mouse button to click the “Simple” User Interface menu command.

2.5.2 Automate a Task with the Task Property Dialog

To automate a task with the “Task Property” dialog, you need to make sure you are using the “Enhanced” User Interface.

It is also possible to automate a task with the Task Wizard. While the Task Wizard offers more information presented in an easier-to-understand manner, what the Task Wizard and the “Task Property” dialog do is the same. In fact, the “Task Property” dialog tabs relate on a one-to-one basis with pages in the Task Wizard.

- Step 1: To change to the “Enhanced” User Interface use your left mouse button to click the “Enhanced” User Interface menu command under the “View” menu title.
- Step 2: In the “Enhanced” User Interface, use your left mouse button to click the “Tasks” tab. Use your right mouse button to click on name of task you would like to automatically run. A pop-up menu appears.
- Step 3: When the pop-up menu appears, use your left mouse button to click the “Modify” menu command.

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- Step 4: Use your left mouse button to click the “Common” tab. This will take you to the “Common flags are working for all task variants” options (Fig. 27).

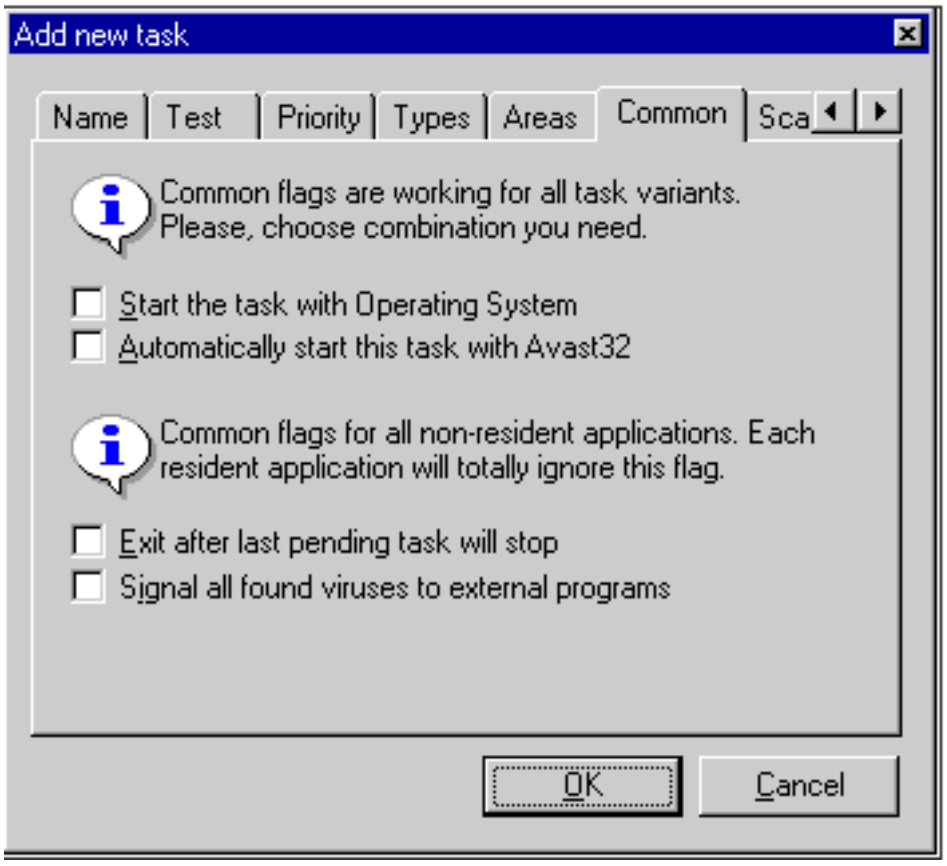

Fig. 27: “Add New Task” Dialog

To disable the automatic start for this task, follow the same steps but do NOT CHECK. This will turn “OFF” the “Start the configuration with Operating System” check box.

- Step 5: Use your left mouse button to CHECK (✓) or turn “ON” the “Start the task with Operation system” check box on the “Common flags are working for all task variants” tab and click the “OK” button. This means that this task will automatically start the next time you reboot.

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- Step 4: Once you finish customizing tasks with the “Task Property” dialog, you may want to go back to the “Simple” User Interface. To do this, use your left mouse button to click the “Simple” User Interface menu command under the “View” menu title.

- End Chapter 2 -

CHAPTER 3

WHAT IS AVAST32?

AVAST32 offers complete antivirus protection for Microsoft Windows 95 and NT computers. It allows you to perform tasks covering almost all aspects of antivirus protection. AVAST32's state-of-the art arsenal also contains tools that find and prevent infection from macroviruses and polymorphic viruses as well. In addition, it even offers protection from other new viruses that are yet unknown.

3.1 AVAST32 Advantages

AVAST32 is flexible and easy to learn. First, it is familiar -- it supports Microsoft's recommended standards and common practices for interface and operation. Second, it is fully Microsoft Windows 95 and NT 32-bit compliant, so users will run into fewer problems using it than when they are using other virus scanning software. Plus it's flexible, AVAST32 offers a wide variety of settings, potential tools and two user interfaces; a "Simple" User Interface and an "Enhanced" User Interface.

One of the main advantages of using AVAST32 is that you can scan your computer system and all of its parts quickly and efficiently. The algorithms used, called "integrity testing," are 100% effective in recognizing viruses as confirmed by independent tests. Not only can you test the presence of a known viruses, but also unknown viruses as well!

Another advantage is that AVAST32 can fully restore 95% of virus-infected files to their original working condition (if you have maintained the AVAST32 File Database).

Unlike some virus protection programs, AVAST32 supports all the Microsoft Windows 95 and NT features including long file names (up to 256 characters), adding new application controls, and multi-tasking several program operations at the same time. These and other benefits help AVAST32 users make the best use of time spent at their computers.

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The AVAST32 user interface is another advantage. It can be changed to meet the needs and skills of the new user or an expert. Beginners will appreciate being able to use the “Simple” User Interface to protect their computers without having to spend hours learning how to operate it. Experts will welcome being able the “Enhanced” User Interface to adjust almost every aspect of AVAST32.

AVAST32 uses the Adobe Acrobat Reader (included on the installation CD-ROM and diskettes) for its help system. This may not be apparent because the Acrobat Reader is integrated into AVAST32. With Adobe Acrobat, users can page through the manual just as if they would if it was paper-based. Plus, the electronic nature of this document makes searching for a specific subject incredibly easy. Moreover, users can also jump from hypertext link to hypertext link adding similar information and decreasing their learning curve.

AVAST32 can not only find “known” viruses, but “unknown” ones as well. AVAST32 compares system information against past data it has collected and notes the difference. If it finds something suspicious, it will block an operation and send a message to you about the potential virus infection. It can even scan files that are being run, downloaded, or moved across a network and prevent virus infection that way as well.

Last but not least, AVAST32 can communicate over a network. If it finds a virus, AVAST32 can send others in a network information about the virus. This saves time, reduces the risk of data loss, and can prevent the virus infection from spreading to others.

3.2 How AVAST32 Works

Many antivirus software applications only provide one or two methods to find viruses. AVAST32 provides multiple tools that can work with you to protect your computer’s information. In addition, AVAST32 is probably the only virus software that allows you to block bad “behaviour” that might lead to virus infection.

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3.2.1 Virus Scanning

Most antivirus applications, including AVAST32, search for known viruses using a process called “virus scanning.” Simply, the antivirus application looks inside each file on a hard drive and checks for the presence of a certain sequence of bytes which identifies a particular virus in the same way that fingerprints can identify a particular individual. AVAST32 keeps these virus profiles in the .VPS Virus Database.

This ability to scan for known viruses would be enough if the nothing changed on your computer, but in the real world new viruses and variations of viruses appear rapidly and regularly. To counter this, you can update your .VPS Virus Database (see 1.5 AVAST32 .VPS Virus Database Update Services) by downloading updates from SecureNet’s web site, http://www.SecureNet.org.

3.2.2 Polymorphic & Macroviruses Checking

AVAST32 recognizes “polymorphic” viruses and macroviruses. These viruses are able to change their own structure during their activity and thus are very difficult to identify. It can also recognize macroviruses, that is, viruses in the macros of OLE documents (e.g. a document of the Microsoft Word application or Microsoft Excel).

3.2.3 Integrity Checking

AVAST32 discovers many viruses using “integrity checking.” When you run certain tests, AVAST32 scans the hard disk, looks at the changes in the files, and stores them in a AVAST32 File Database. The next time a scan occurs, it compares each files past data against its newly acquired data. This comparison is the key to discovering unknown viruses and new variations of currently known viruses.

Keeping this database of file data has another benefit besides “integrity testing,” it can be used by AVAST32 to repair files that are infected or damaged. If you scan your hard disk periodically and maintain your computer’s file database, you have a high chance of repairing damaged files when you find them. Moreover, AVAST32 also uses the file database to determine whether it has successfully repaired a file.

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3.2.4 Resident Protection

AVAST32 users can also set up “resident protection” that acts as a “Behaviour blocker” that prevents viruses from performing certain operations with files while they are being used. This can also be used to test files and system areas of diskettes in the A: or B: drives, removable hard drives and files downloaded off of the internet or stored on a network. Once AVAST32 recognizes a problem, it informs the user and offers these options: to allow those files to run or saved on your hard drive -- or to “block” their use on your computer system.

3.2.5 Executable & OLE Document Protector

Another “resident activity” is an “Executable & OLE document protector” which tests all programs as they start up and files as they are opened. If there are no viruses, the program will start normally and the file will open normally. However, if it finds a virus in the program or a virus in a document, you will receive a warning message and AVAST32 will not execute your request.

3.2.6 Boot Sector Protector

The AVAST32 resident activity, “Boot sector protector,” starts up whenever a diskette is inserted into a disk drive and checks the diskette’s boot sector to see whether it contains a virus. If it finds a virus, the program informs the user about the findings through a warning message. If it does not find a virus, the diskette boots up normally.

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3.3 “Simple” & “Enhanced” User Interfaces

AVAST32 offers its users two user interfaces: a “Simple” and an “Enhanced” User Interface. The “Simple” User Interface (Fig. 28) offers simplified or basic ways to operate AVAST32. However, this can be very frustrating if you want to use all the features of AVAST32.

Fig. 28: “Simple” User Interface

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The “Enhanced” User Interface (Fig. 29) allows the user to access all the functions and settings offered by AVAST32.

Fig. 29: “Enhanced” User Interface

You operate the “Enhanced” User Interface using “tabs,” each containing its own functions and parameters. It is possible to move between tabs by pressing the left button of the mouse on the name of appropriate tab title.

The “Simple” User Interface is the default interface, but it is very easy to change between interfaces as needed. For a more detailed description of the two user interfaces and switching between them, see Chapter 5: User Interface Features.

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3.4 Which User Interface Should You Use?

Choose the one you feel the most comfortable with and the one that meets your personal needs. For example, if you were a Network Administrator you would probably work with the “Enhanced” User Interface because all functions and controls are totally accessible. In addition, it enables the users to adapt AVAST32 to their own requirements. However, a typical user probably does not need to learn how to set and control different aspects of AVAST32. For these users, the “Simple” User Interface will probably do.

3.5 More about AVAST32’s User Interfaces

Use the “Simple” User Interface if all you need to do is to check for and find viruses. It allows you to do so without having to get involved setting up the program. With the “Simple” User Interface, a user can start the main tasks, interrupt them, or stop their operation. If a task finds a virus, it advises the user about it.

The “Simple” User Interface will not show which files have been infected or changed and does not allow you to fix or delete files which may have viruses. Once you find a virus, you must switch to the “Enhanced” User Interface or call an administrator to fix the problem.

The “Enhanced” User Interface makes every AVAST32 feature available to the user. The “Enhanced” User Interface not only does everything the “Simple” User Interface does, but the user can also change the parameters of regular tasks, delete them and create new tasks, and, of course, fix or delete files with viruses.

While the “Simple” User Interface can locate a virus or block activity that might lead to a virus infection, the “Enhanced” User Interface offers the tools to correct those problems. It is also possible to delete the suspicious or infected files, or to simply rename them and move to other appropriate folders. The “Enhanced” User Interface can also set the environment for specific parts of the program or for AVAST32 as a whole.

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3.6 AVAST32 Tasks

"Tasks" are the basic elements that define how AVAST32 works. Tasks can be run when your computer starts up or can be run as needed. Tasks can do a variety of things; for example, scan files on the hard disk for the presence of viruses or system monitoring that 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.

The tasks can also be either private or shared. Anyone can use "shared" tasks, unlike the "private" tasks that are accessible only for those who created them. Each user decides whether a task is private or shared at the time of its creation. For more information about the creation of new tasks, see Chapter 4: Create New Tasks.

3.7 Current AVAST32 Tasks

When you initially purchase it, AVAST32 includes several predefined Tasks. These tasks provide all the basic tools that users need to protect their computer from virus infection. All tasks are located in the Simple and "Enhanced" User Interfaces task lists. The following sections, list the tasks that come with AVAST32.

3.7.1 "Scan: all local disks" Task

This task scans all the executable files and the OLE documents on all of the local disks of the computer in question. If AVAST32 finds a virus, it will announce this through a warning message and an audible alarm (if there is a sound card in the computer). The task will announce every virus found. In addition, it tests compressed files, operating memory, and system area of the computer as well.

3.7.2 "Scan: interactive selection" Task

This task scans all the executable files and the OLE documents on all of the local disks. It works just like "Scan: all local disks," but it can also select a specific hard disk, folder (and subfolders), or file to scan. It is also possible to select several areas at the same time (see 5.5 Select Areas to Test Dialog).

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3.7.3 “Scan: diskette A:” Task

This task performs the same tasks as the two previous tasks, but specifically on the diskette in the drive A:. We recommend running this task to find all potentially infected diskettes, particularly those used in other computers or by other users. This Task also scans the system area, i.e. the boot sector on a diskette.

Most viruses invade computers from files on floppy diskettes. If you get used to scanning every diskette before its use, you will greatly reduce the risk viruses infecting your computer.

3.7.4 “Check: All Local Disks” Task

This Task “integrity checks” the executable files and OLE documents on all local hard disks to see if they have changed since the time of the last scan. An alarm only appears if a parameter has changed since the last scan, e.g. such as attributes, size of the file, etc. AVAST32 records the results in a ““Tree Control”” (see 5.3.2 “Results” Tab). This task also checks to see whether a change has occurred in the hard disk system areas since the last scan.

You must scan all the files on your hard drive with an initial integrity check before a second integrity check can spot changes. New files from later scans are just added to the file database and the next time the ”Check: all local disks” Task is run, the status of the files is compared with the previous information. For more information on creating the AVAST32 File Database, see 2.2.1.1 What to Do First.

3.7.5 “Check: interactive selection” Task

This task performs the same test as the previous task, but allows the user to “integrity check” specific hard disk, folder (and subfolders), or file. For more detail, see 5.5 Select Areas to Test Dialog. Also, as with the “Check: All Local Disks” task, changes in the files can only be checked between two integrity checks. Thus, you must do an initial scan of all files before a second integrity check can spot changes.

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3.7.6 “Resident: full protection” Task

The “Resident: full protection” Task does two things. First, it scans all the executable files before they execute (as with a software application). Second, it checks the boot sectors of the diskettes inserted in the disk drives before the information about the diskettes is passed to the hard disk.

This prevents the virus from performing any activity in the computer until you give your OK. These kinds of activities can seem as innocent as writing executable code that is stored in the boot sector of diskettes to be run later or as serious as trying to re-format a part of your hard disk.

When AVAST32 sees an attempt to perform a potentially dangerous operation, it will ask you if it should allow your computer to perform that operation. If you do not authorize it, AVAST32 will not allow that operation to execute.

We recommend you to set this task to automatically start when you reboot your computer or place its shortcut in the “Startup” folder so that it starts before you begin work each day. If this task and its protections are to be effective, you must let it run!

3.7.7 “Scan+Check: all local disks” Task

This task combines the “Scan: all local disks” and “Check: All Local Disks” Tasks. If you need to run both of the tasks, the “Scan+Check: all local disks” Task is the one to use.

3.8 Basic Description of Program Controls

The AVAST32 user interface includes different visual controls that you can use to access different features and functions of the program. As with all well-engineered Windows 95 applications, you can control these visual elements with a keyboard or a mouse. These visual elements include a “Tabbed” interface, “Tree Control’s,” Panes, and Pop-up Menus.

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3.8.1 “Enhanced” User Interface Tabs

One difference between the “Simple” User Interface and the “Enhanced” User Interface is the “Enhanced” User Interface’s tabbed operation (Fig. 30). There are four tabs: Tasks, Results, Viruses, and Help. Only one tab’s content and functions is visible at any time. To make a tab visible, use your left mouse button to click the name of the tab.

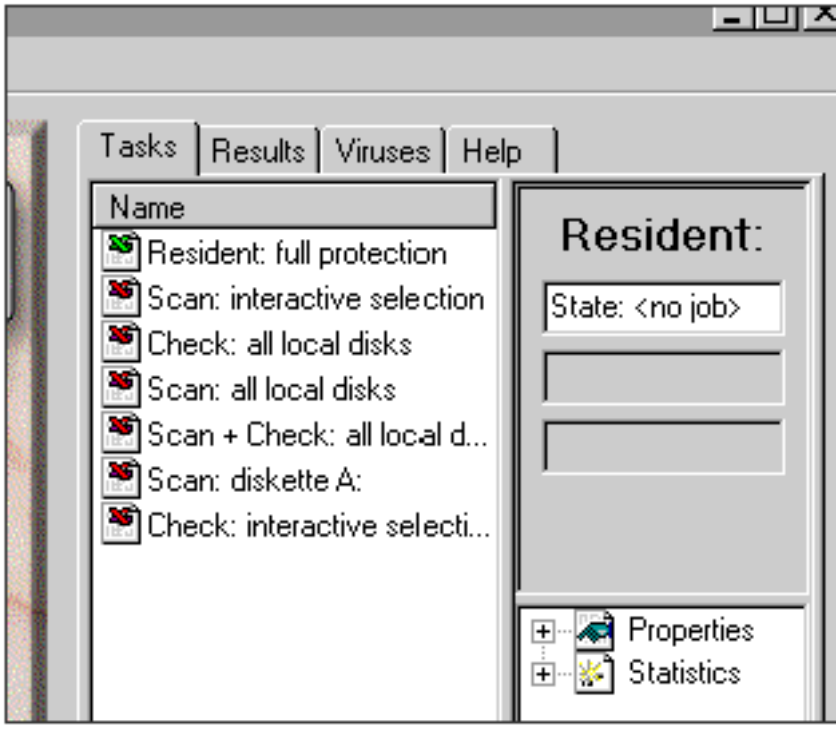

Fig. 30: “Enhanced” User Interface’s Tabbed Interface

3.8.2 “Tree Control”s

AVAST32 also uses “Tree Control’s” or a visual outline to represent a hierarchy of special information similar to the way Windows “Explorer” uses a ““Tree Control”” to show files and folders on your hard drive. Depending on the current view and where it is used in AVAST32, a “tree” can represent file and folders or it can represent special information under the Properties and Statistics options in the lower right pane in Fig. 30.

Just like an outline, if you want to “unpack” or look at all the information under an item, use your left button of the mouse to click the icon displayed before the name of the item in question. If you are using a keyboard, you must activate the item first with the Up or Down arrow key, and then use the left cursor key (to “pack” or open the item) and right cursor key (to “unpack” or close the item.)

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3.8.3 "Pane View"

Another visual element used by AVAST32 is the Pane View (Fig. 31.) Think of a windowpane. Each window can contain several panes with the meaning of each described on the first line. The left pane shows the list of the tasks available. The upper right pane shows the State, Folder & File connected to each name. The lower right pane offers a visual "Tree Control" of information regarding the Properties and Statistics of each name listed in the left pane.

Fig. 31: AVAST32 Pane View

To change the width of the panes, put the mouse pointer over the line between two panes (the mouse pointer changes into a "separator cursor.") Then press and hold the left button of the mouse on the line between the two panes. This will move the separator and change the width of both panes. When you release the mouse button, the change is fixed until the next time you need to change a pane width.

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3.8.4 Pop-up Menus

Pop-up Menus are a very important part of the AVAST32 interface and are found on almost all screens. To see if one is available, for example, use your right mouse button to click on a task description (Fig. 32). If pop-up menu is available, a it will appear.

- Step 1: To bring up a pop-up menu, click on a task description with the right mouse button. If one is available, a pop-up menu will appear.

Fig. 32: Highlight a Task

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- Step 2: When the pop-up menu appears, use the left mouse button to select a menu command (Fig. 33).

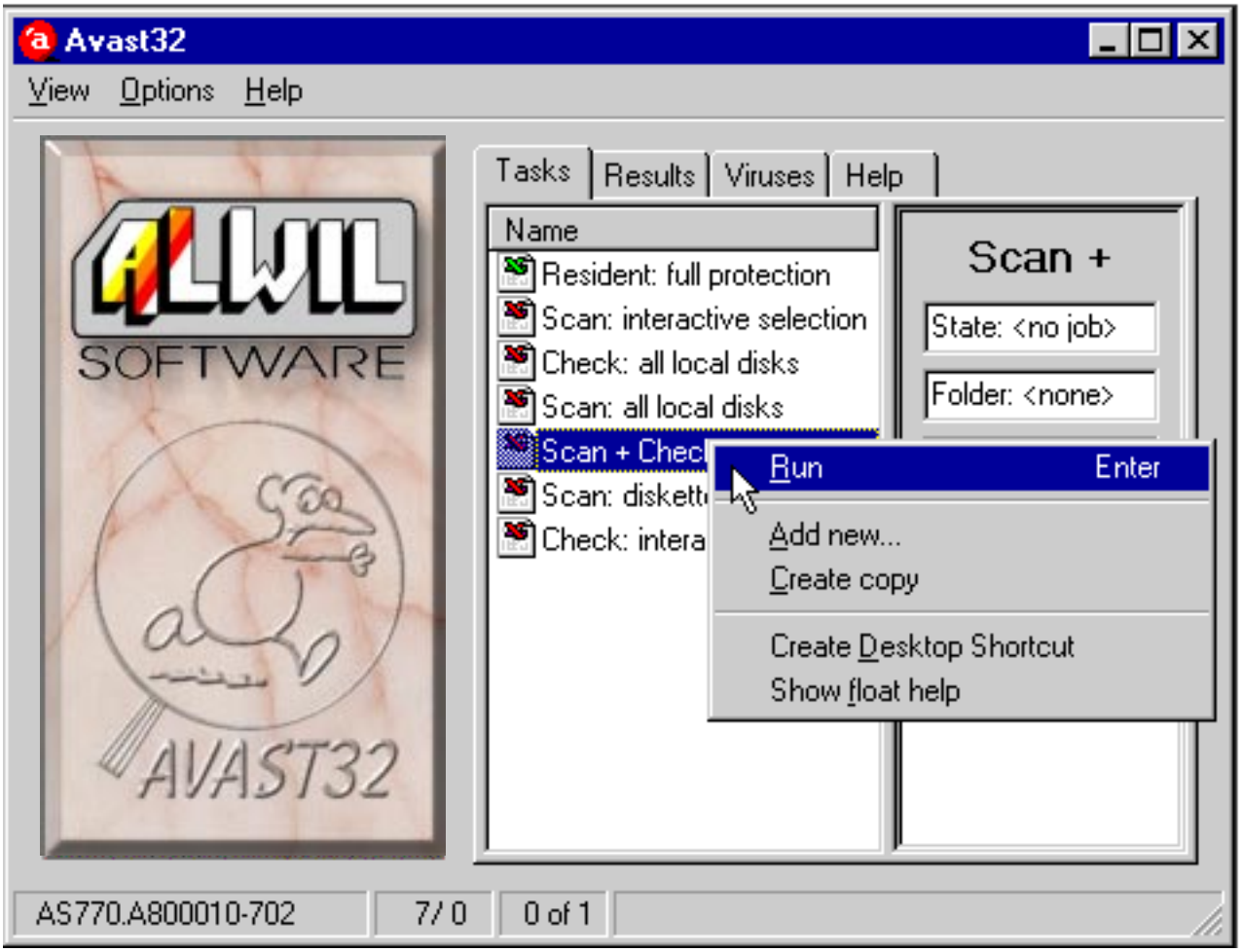

Fig. 33: “Scan+Check: all local disks” Pop-up Menu

The pop-up menu options or commands only affect the highlighted task under the mouse pointer. In Fig. 33, the pop-up menu defines options or commands of the highlighted “Scan: all local disks” Task. To select a command, use the left mouse button to click on a pop-up menu command.

- End Chapter 3 -

CHAPTER 4

CREATE NEW TASKS

When you install AVAST32, we include several “Tasks” which will help you scan, identify, and eliminate viruses immediately (Fig. 34). However, you may find over time that you need to create new tasks to fit specific needs and projects.

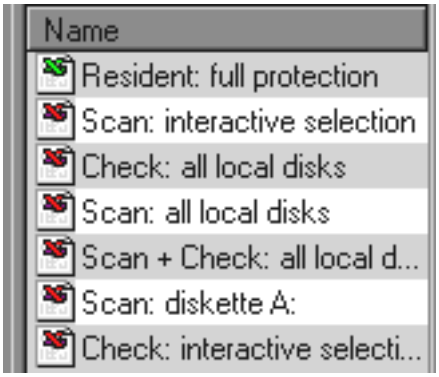

Fig. 34: Tasks

4.1 What is a Task?

A task is the basis for everything you will do with AVAST32. Every task has a name and contains a one or more tests and options. These include: what it should test, how much of your computer’s resources it should use when running, types of files it should test, where on your computer system it should test, and other pertinent aspects.

There are three kinds of tests: virus scanning, integrity checking, and various resident tests. Each of these tests can be set up exactly according to the user's needs. Furthermore, it is possible to combine several tests arbitrarily into a task. For example, you could set up a virus-scanning test, add integrity checking, and a few other tests, and the tests would be run one after another on whatever files or hard disks you have selected.

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Last, you can also set up when the Tasks are run. Some tasks start automatically when you turn on your computer: this will make sure to protect your computer while it is “ON.” It is also possible to start the tasks whenever you desire. How the tasks run is up to the user. In addition, by using AVAST32’s ability to specify which tests are run and not run, you can target specific viruses and speed up the overall virus scan process.

Tasks can also be set up to warn you if it finds a virus. You can even create a special message and select an audible alarm that sounds at the same time it shows the message dialog.

4.2 Before You Can Create a New Task

Before you can create a new AVAST32 task, you have to decide if this will this be a “Private” or “Shared” task. In addition, you need to decide if you want to create a new task with the AVAST32 Task Wizard or just enter information directly into the “Task Property” dialog.

4.2.1 Should You Create a Private or Shared Task?

Before you create a new AVAST32 task, you need to decide whether you should create a “Private” or “Shared” task. This depends on how and where you will use the task.

For example, if you are a single computer user, no one else shares your computer, and you are not tied into a network, it doesn’t matter if you create a “Private” or “Shared” task as you are the only one who will use it. However, if you are a network administrator with multiple computers, deciding whether a task is “Private” or “Shared” is important.

A “Shared” task is one that everyone on the network can or should be using to protect his or her computer from viruses. Examples of “Shared” tasks include a task for testing a diskette in disk drive A: or a task for testing files downloaded off the Internet. These tasks benefit everyone on a network and should be available publicly. On the other hand, some tasks should be kept “Private.” For example, you might need a new task for testing a particular type of document or you might want to run a time-consuming series of tests.

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Being able to create “Private” or “Shared” tasks is actually very convenient and cost-effective, particularly if you are a network administrator. This means that you can create one task and share it, thereby avoiding duplication of efforts and eliminating the possibility of similar tasks on each computer in your network. In addition, you can still create private tasks for special projects without putting potentially dangerous tasks in users’ hands across the network.

The icons next to the task names identify whether a task is “Private” or “Shared” (Fig. 35).

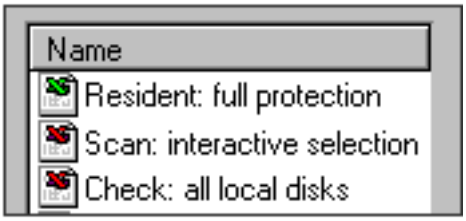

Fig. 35: “Private” & “Shared” Task Icons

“Shared” tasks appear in all users' task lists on the network and can be used by anyone on a network. They look like a document icon with a green “X” (Fig. 36).

Fig. 36: “Shared” Task Icon

In most cases, a network administrator creates shared tasks and others use them. Of course, sharing tasks brings on various challenges. For example, it is important to protect a “shared” task so that others cannot change it. The good news is that the network administrator can passwords protect the tasks. Users without a valid password can run, stop or make a private copy of such a “Shared” task, but a valid password is required to change or delete the task.

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A “Private” task is only available for use by those who created it. “Private” tasks do not appear in other user’s task lists on the network, which means that none of the other users are allowed to perform any operations with those tasks. Private tasks look like a document icon with a red “X” (Fig. 37).

Fig. 37: “Private” Task Icon

Determining whether a task is public or shared is decided by its originator at the time it he or she creates it, but it is possible to change different aspects of the task later, if desired. Of course, if you want to change any aspect of a “Shared” task, it is necessary to know the password.

4.2.2 Use the Task Wizard or Task Property Dialog?

You can create an AVAST32 task using the Task Wizard or the “Task Property” dialog. The basic concepts and features are the same whether you use the Task Wizard or the “Task Property” dialog. The exception is that the Task Wizard steps you through the process and explains each step as it occurs, while the “Task Property” dialog is simply a single dialog with a series of tabs and check boxes. When you first install AVAST32, the Task Wizard is set up as the default way to create tasks.

Modifying tasks works the same way as creating a new task: via the Task Wizard or through the “Task Property” dialog. However, there are three differences: (1) First, you have to select the task you want to modify; (2) you choose the “Modify…” menu command; and (3) when you press the “Cancel” button when modifying the task parameters, the values of all parameters are left unchanged and the task itself continues to exist without modification.

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4.2.2.1 The AVAST32 Task Wizard

If you create an AVAST32 task with the Task Wizard (Fig. 38), it steps you through the entire process of the task creation, page by page, until the task is complete.

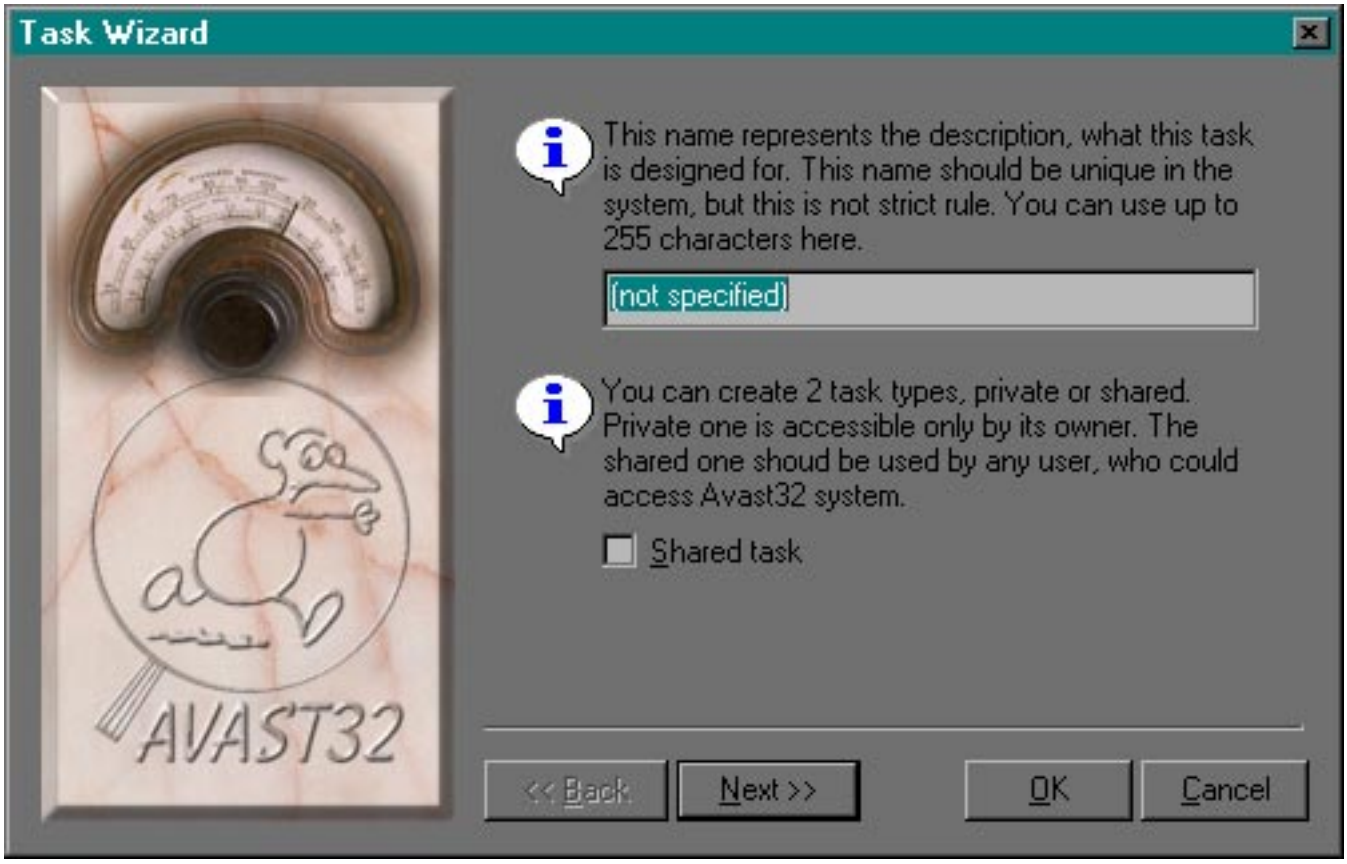

Fig. 38: "Task Wizard" Window

You can move to the next page at any time using the "Next" button when you are satisfied with the settings. You can also return to the previous page by using the "Back" button. It is also possible to cancel the creation of the new task at any time using the "Cancel" button or the "Esc" key.

We recommend that new users who are just learning to work with AVAST32 use the Task Wizard. The Task Wizard makes the process easy to accomplish, helps the new user understand the process, and assures that you do not forget important settings. To use the Task Wizard, you need the "Enhanced" User Interface.

4.2.2.2 The AVAST32 “Task Property” Dialog

You can also create an AVAST32 task using the “Task Property” dialog (Fig. 39), also known as the “Edit Existing Task” dialog. This enables the user to move directly to the tab containing the necessary controls without having to go through all the previous pages. Just as with the Task Wizard, you can cancel the creation of a task by using the “Cancel” button or create a task with the “OK” button.

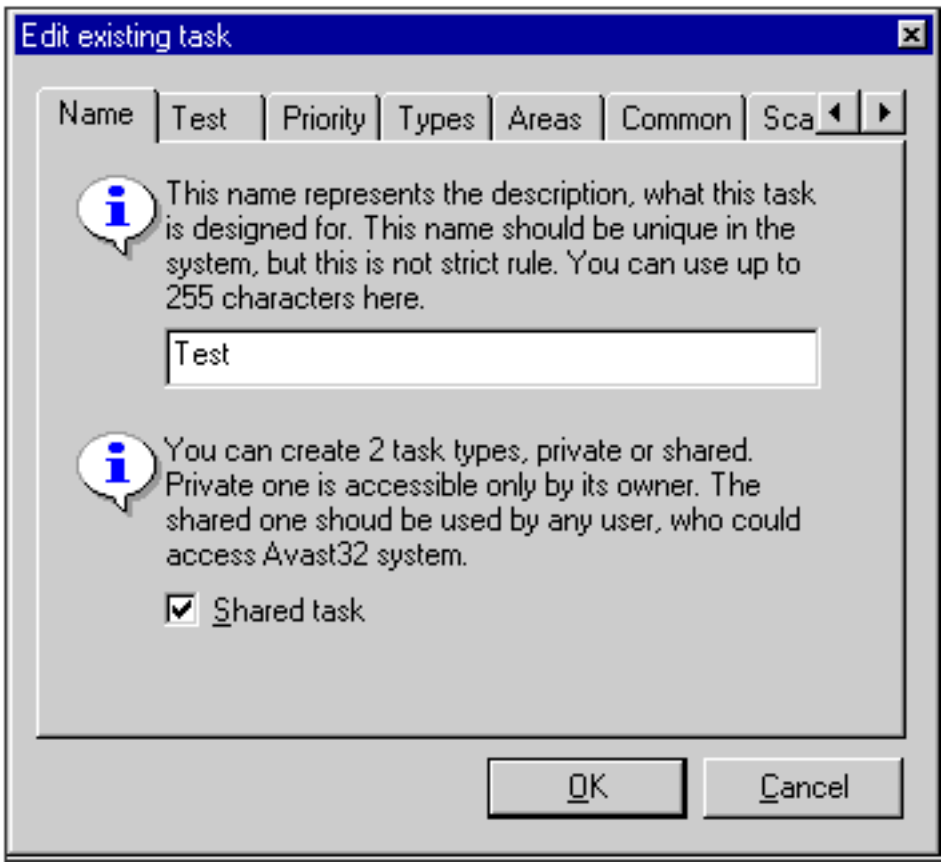

Fig. 39: “Task Property” Dialog

The “Task Property” dialog is likely to be used by more experienced users as it is faster to use. The user can set specific options and finish creating a new task. The “Task Property” dialog is also great if you just need to modify one or two options of a task.

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4.2.3 Turn the Task Wizard "ON" or "OFF"

Before you can create a Private or Shared Task, you need to decide whether you want to use the Task Wizard or just enter information into the "Task Property" dialog. No matter which you choose, you must be using the "Enhanced" User Interface to continue.

4.2.4 Switch to the "Enhanced" User Interface

- Step 1: You need to be in the "Enhanced" User Interface if you want to create or modify tasks. If you are using the "Simple" User Interface, you will need to change to the "Enhanced" User Interface. To do this, use your left mouse button to click the "Enhanced" User Interface menu command under the "View" menu title.

That is all you need to do to turn "ON" the "Enhanced" User Interface. The "Simple" User Interface will only allow you to run, stop, create a new desktop shortcut, and open the "Floating Help."

- Step 2: Once you are using the "Enhanced" User Interface, you can now use the Task Wizard or the "Task Property" dialog to create a task. To find out which you are currently using, use your left mouse button to click the Options menu title. When the menu commands are visible, click the "Main Console" menu command (Fig. 40).

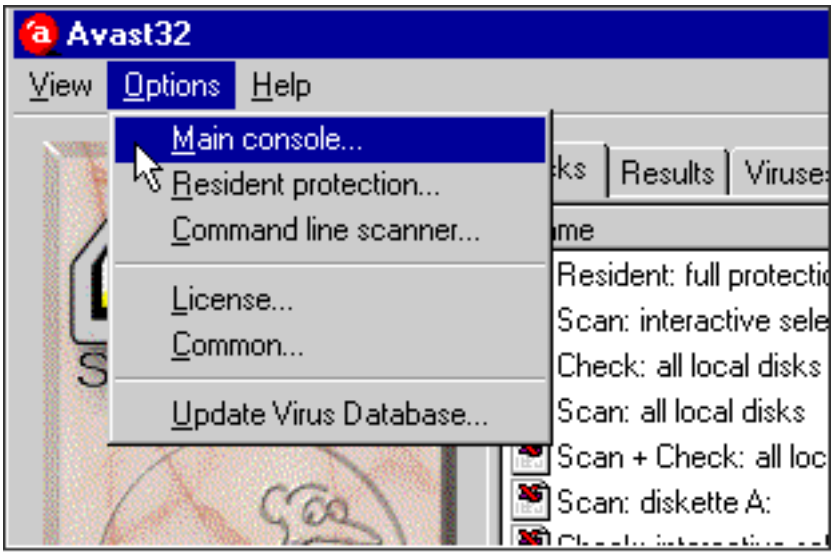

Fig. 40: "Options" Menu Title

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- Step 3: When the “Main Console Configuration” dialog appears, use your left mouse button to CHECK (✓) or turn “ON” the “Use wizard to create new configuration” check box (Fig 41).

If you also want to use it to modify current tasks using the Task Wizard, CHECK (✓) or turn “ON” the “Use wizard to edit existing configuration” check box. Click the “OK” button. To set the new configuration, you have to “Quit” and restart AVAST32. The next time you “Open” AVAST32, the AVAST32 Task Wizard is turned “ON.”

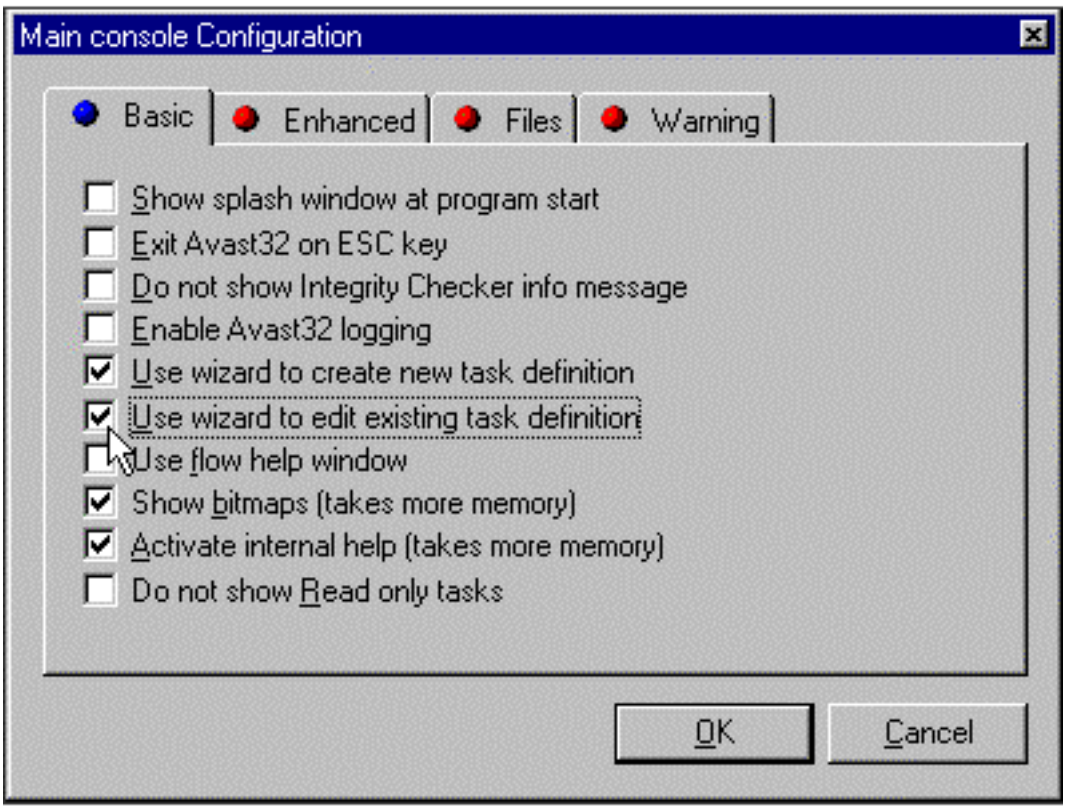

Fig. 41: “Main Console Configuration” Dialog

If you want to turn the Task Wizard “OFF” and turn “ON” the “Task Property” dialog, simply reverse the procedure making sure to NOT CHECK or turn “OFF” the “Use wizard to create new configuration” check box and NOT CHECK or turn “OFF” the “Use wizard to edit existing configuration” check box.

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4.3 Create a New Task

- Step 1: To create a new task, switch to the “Enhanced” User Interface. The “Simple” User Interface will only allow you to run, stop, create a new desktop shortcut and open the “Floating Help."
- Step 2: When the “Enhanced” User Interface appears, use your right mouse button to click anywhere under the list of tasks. A pop-up menu will appear. When the pop-up menu appears, use your left mouse button to click on “Add new...” (Fig. 42).

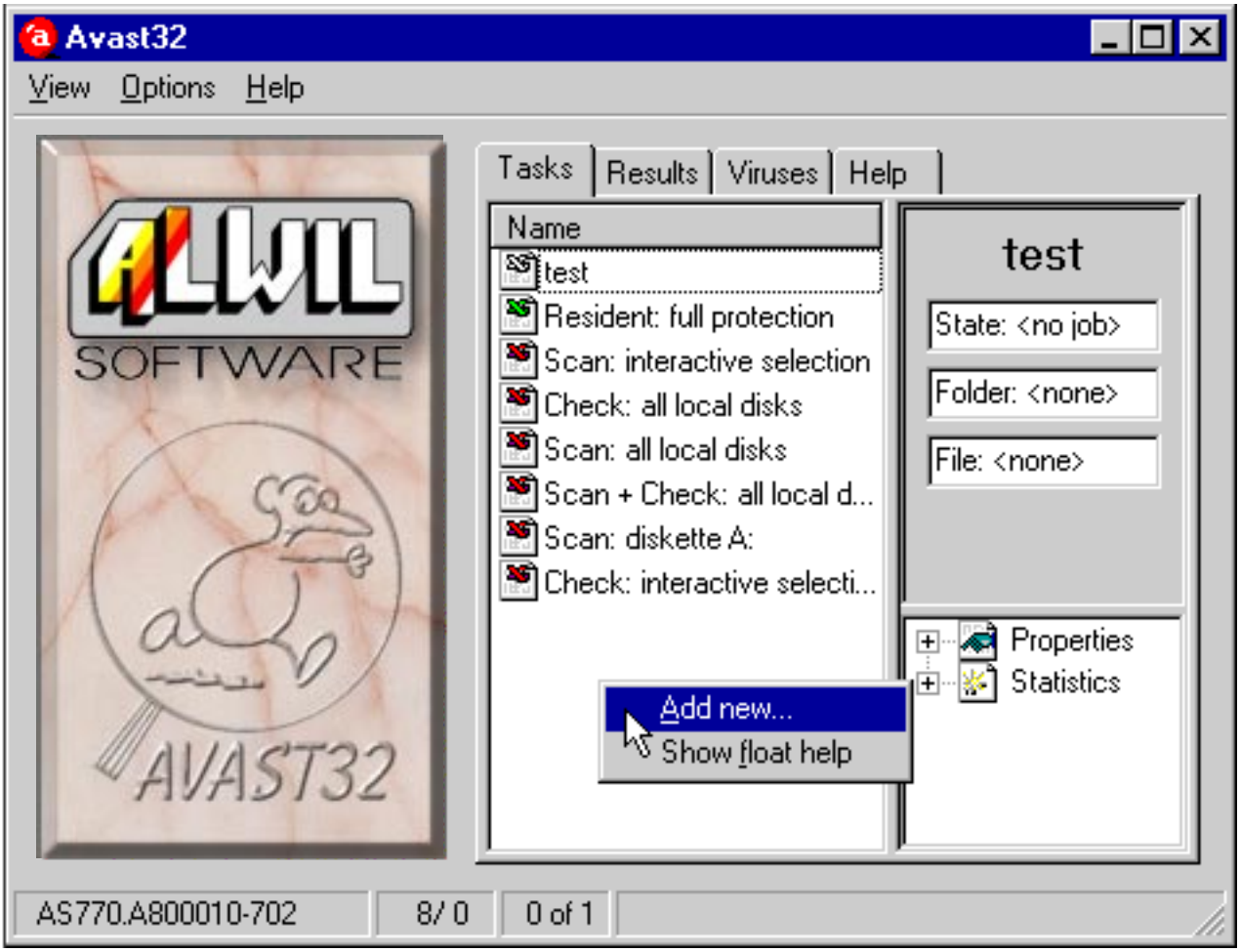

Fig. 42: “Add new…” Pop-up Menu

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4.3.1 Create a New Task with the Task Wizard

In the following text, you will create a task using the Task Wizard. When the "Task Property" dialog is used to create a task, the appearance of the window is different, but the controls and their meanings are the same. The main difference is that the Task Wizard offers more information about what the selections are and how they affect the operation of the completed task.

All the Task Wizard Pages and options will be discussed in following pages, but in reality each test you select may cause different Task Wizard Pages to appear. This is because not all tests require the same things and the Task Wizard will only offer you the pages you need to get your job accomplished. This speeds up the process because the user is not required to page through options that do not apply.

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4.3.1.1 “Name” Page

The first page of the Task Wizard is the “Name” Page. Every task requires that you name your task and make the task “Shared” or “Private.”

- Step 1: Using your keyboard, enter the name of the new task in the text box (Fig. 43).

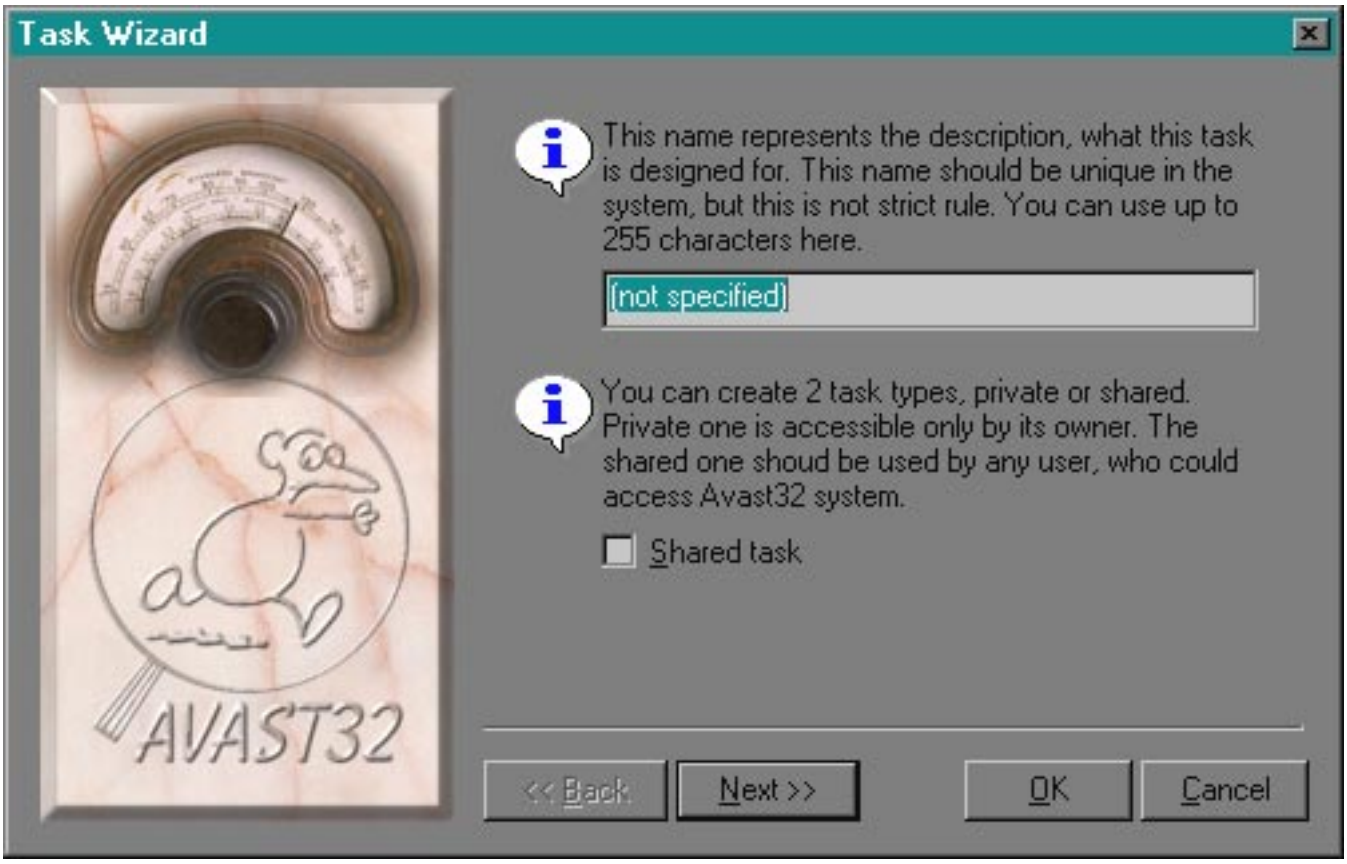

Fig. 43: “Name” Page

The name you enter should be as appropriate as possible and, to avoid possible confusion, it should not be identical to that of any existing tasks, even though AVAST32 will allow you to name tasks similarly. If you fail to enter a name, no new task will be created.

- Step 2: If you want to "share" this task, use your left mouse button to CHECK (✓) or turn "ON" the "Shared configuration" check box. If you do not want to share this task and keep it private, do not check the check box. When you are finished naming the task and making it a "Private" or "Shared" task, use your left mouse button to click the "Next" button.

Each user of a single computer as well as all the users on a network can use a "Shared" task. "Private" tasks can only be used by their creator.

4.3.1.2 "Tests" Page

The next page of the Task Wizard is the "Tests" Page. The "Tests" Page contains all the possible tests that you could run with this task (Fig. 44). If you CHECK (✓) or turn "ON" all the check boxes, AVAST32 will run each test on each file, folder, and/or hard disks you have selected. Also, the number of tests you CHECK (✓) or turn "ON" will affect the number of subsequent pages you will have to answer before you are through creating a task. On the other hand, if you select no tests, there will be no subsequent pages and no new task is created.

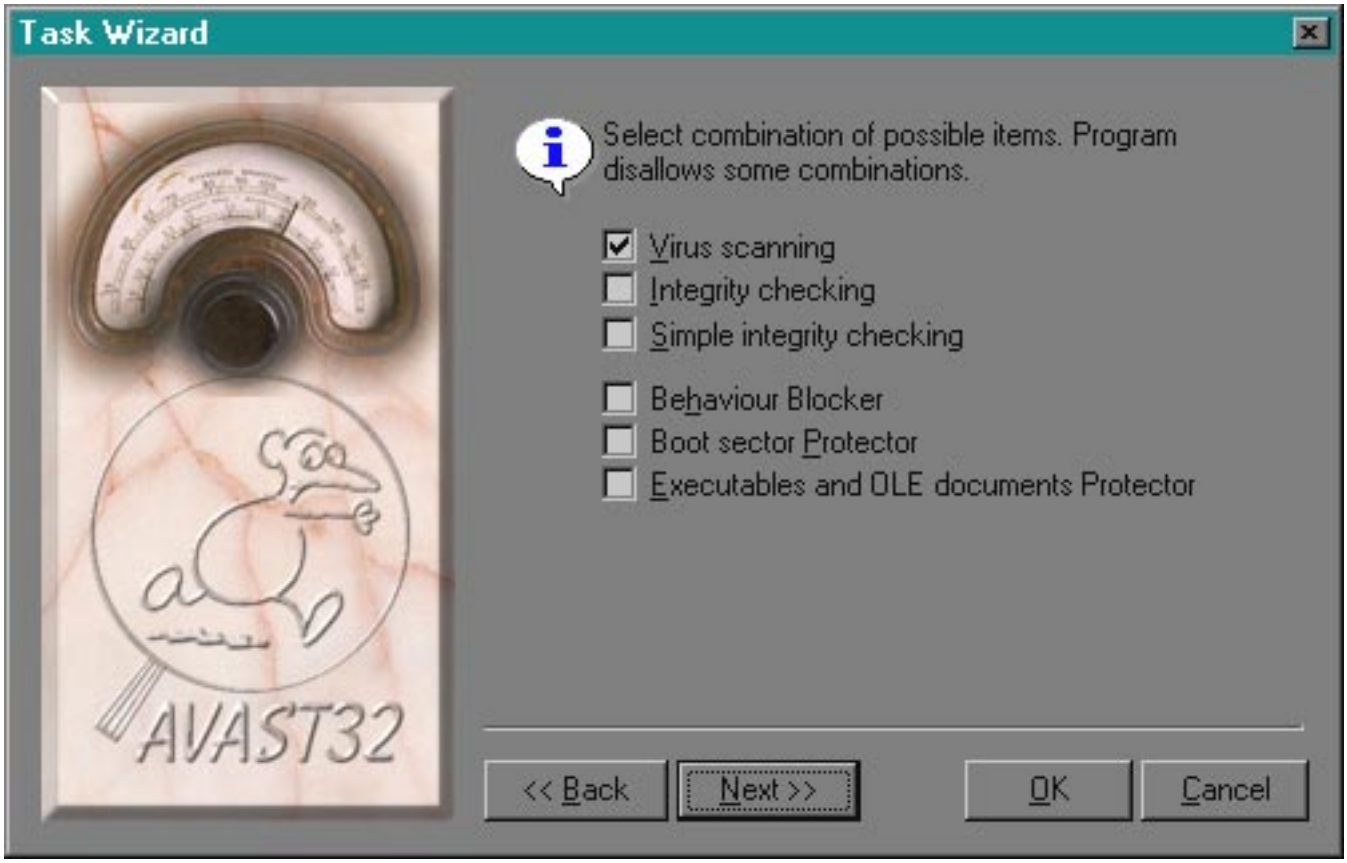

Fig. 44: "Test" Page

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Here are the tests and what they do:

- Test 1: The "Virus scanning" test searches for the presence of known viruses. If this test is CHECKED (✓) or turned "ON," it means that AVAST will search for all known viruses in its virus database. If it finds a virus, it warns the user. How it will warn the user is a different option. The search for viruses is CHECKED (✓) or turned "ON" by default.
- Test 2: The "Integrity Checking" test compares files against a previous integrity scans and determines if there has been any change in the file (thus there must be at least two integrity checks before a virus might be detected). In addition, if there is a change, the test will try to determine the way the changes were made. The check box is NOT CHECKED or turned "OFF" by default.
- Test 3: The "Simple Integrity Checking" check box activates a data integrity test similar to the previous "Integrity Checking" test. Unlike the previous test, it only tests the checksums of the file contents and no file attributes will be tested. While this is faster than the "Integrity Checking" test, it is not as thorough. The "Simple Integrity Checking: check box is NOT CHECKED or turned "OFF" by default.

The tests described above are called "Non-resident" tests, that is, they are turned "ON" when you need them. The following tests are "Resident" tests; they reside in place and work all of the time instead of needing to be called. We use the terms resident and non-resident tasks depending on the type of the tests performed. If there are any non-resident tests included in a task, the task is considered non-resident and all resident settings are ignored.

The "Tests" Page prevents combining tests that do not make sense. For example, you cannot turn "ON" the "Integrity Checking" test and the "Simple Integrity Checking" test at the same time. If you try to turn "ON" both, AVAST32 will turn "ON" the last test chosen. In other words, the AVAST32 will only allow acceptable combinations of tests to occur simultaneously.

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The following tests are “Resident Tests.” That is, they stay resident in memory and work all of the time:

- Test 4: The “Behaviour Blocker” test monitors the computer and warns you of potentially dangerous operations. Particularly if the operation relates to creating new files, deleting files, changing files and formatting hard disks. If the “Behaviour Blocker” test is added, it warns the user about any action that might be a problem and asked whether the operation in question should really be performed. “Behaviour Blocker” is NOT CHECKED or turned “OFF” by default.
- Test 5: The “Boot Sector Protector” test scans the boot sector of diskettes inserted into the disk drive and looks over the operating system for any potential viruses. The Boot Sector Protector is NOT CHECKED or turned “OFF” by default.
- Test 6: The “Executables and OLE document Protector” test scans OLE programs and documents. It scans every OLE program before the program starts up and every document before it opens to see whether it contains any one of the viruses known to AVAST32. If a virus is found, the “Executables and OLE document Protector” prevents that program from starting or that document from opening and give the user a warning message. If there are no viruses, the OLE program starts in the normal way and the document opens in a normal way. The Executables and OLE document Protector is CHECKED (✓) or turned “ON” by default.

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4.3.1.3 “Priority” Page

The next Task Wizard page is the “Priority” Page (Fig. 45). When you select a non-resident task, you can also set its priority when the computer is operating. In plain terms, you are telling your operating system how important the task is for you and how much of the computer’s speed to allot to it.

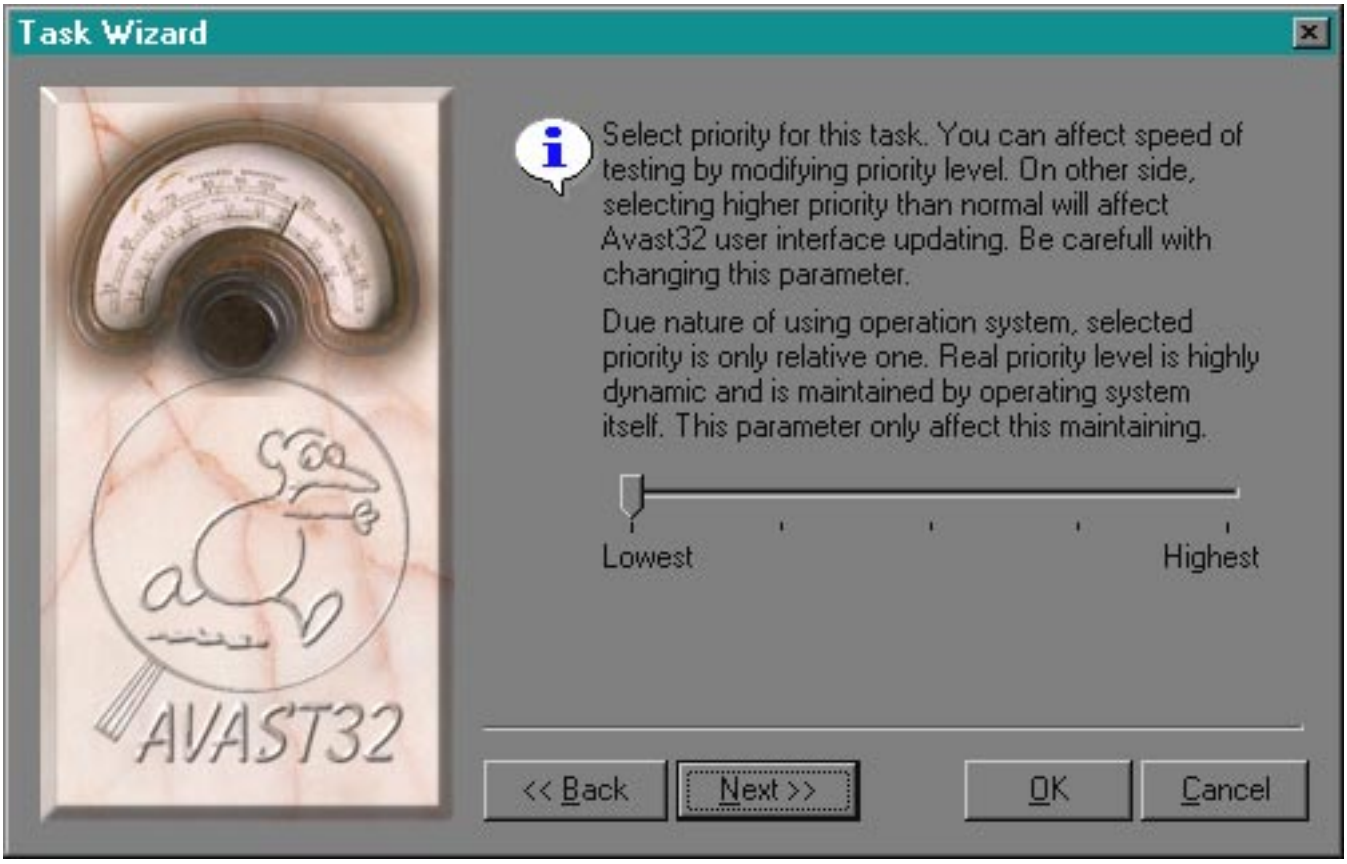

Fig. 45: “Priority” Page

The higher priority the task has, the more processor time it will get, and thus the faster it will run. The speed of the task operation depends not only on its priority, but also on the 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 less than the priority of AVAST32.

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Use the “Priority” slider to preset the task priority. Move the slider to the left to set a lower priority, and move the slider to the right to set a higher priority. While it is quite easy to adjust, we suggest that only experienced users move the slider from it’s original position as the preset priority is correct in the majority of cases. If the preset priority of a task is too high, it may prevent normal operation of the user’s computer.

The “Priority” page is present only when you CHECK (✓) or turn “ON” virus scanning or integrity checking tests.

4.3.1.4 “File Types” Page

The “File Types” Page allows the user to select the specific types of files to be tested. Once the “File Types” Page is visible, you will see descriptions listed in a text box. These descriptions represent the types of files that will be scanned by the test you are creating. In the picture below (Fig. 46), all applications and all OLE documents will be scanned by this test.

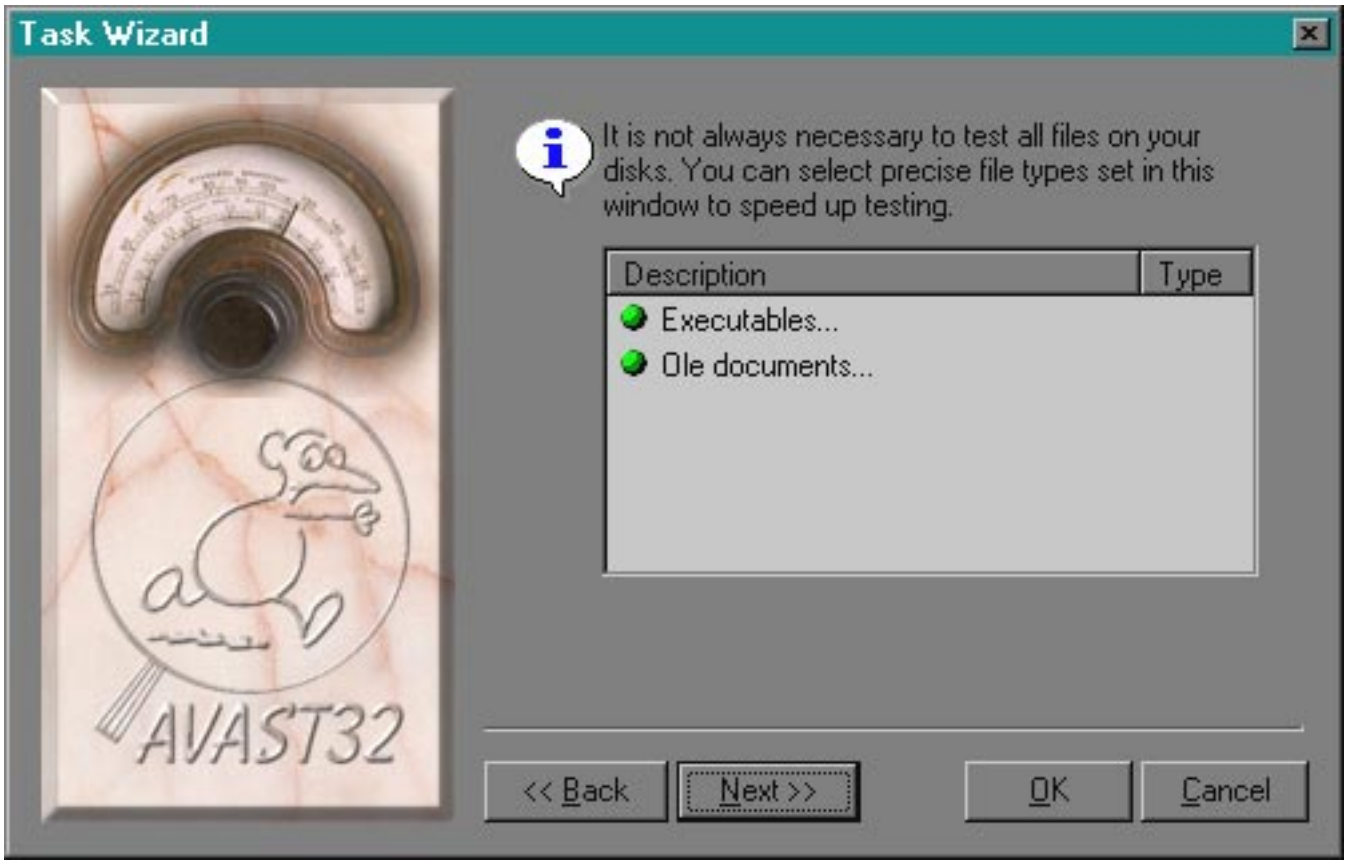

Fig. 46: “File Types” Page

If the description is in the list on this page and is marked with a “Green” ball, all operations will be performed. If the description has a “Red” ball next to it or is not listed, the file will be skipped. The program (executable) files and OLE documents are tested by default and need to be turned “OFF” or removed from the list. The Task Wizard will only show a “Types” Page when you are doing virus scanning, integrity checking (normal or simplified), or as a “Behaviour Blocker.”

4.3.1.4.1 To Remove a File Type from the List

To remove a description from the list, use your left mouse button to click on a description, then press the “Delete” key on your keyboard. This means that if you decide you do not want to SCAN your computer’s Executables, you can delete it. If they are removed or turned “OFF,” they are also automatically removed from the list of the types to be tested. However, that does not mean that they disappear. You can add any again using a pop-up menu.

4.3.1.4.2 To Add a Preset File Type to the List

To add general file types to the list of descriptions, you use a pop-up menu.

- Step 1: To display the pop-up menu, use your right mouse button to click in the text box under the “Executables” or “OLE documents” descriptions. A pop-up menu will appear.
- Step 2: When the pop-up menu appears, you will be able to add various file types to be scanned. To select a description, simply use your left mouse button to click on it and a CHECK mark will appear next to the menu command, the pop-up menu will disappear, and the task will appear in the list.

The first three items of the pop-up menu are preset types. “All files types” means that the testing of all the types selected will be activated. “Executables” means only the applications will be tested (including the libraries); and “OLE documents” tests OLE documents.

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4.3.1.4.3 To Add Known File Types to the List

In some cases, it is not necessary to test all the files because the virus you are looking for might attack only some of them. It is, for example, useless to test text files (files with the .TXT extension) when the targeted virus only attacks paint files (files with the .PCX extension). By reducing the number of files that need testing, you will make the progress of the task faster.

AVAST32 allows you add one or more known file types to the list. To do this, you add file types from a "Custom File Types" dialog containing the database of the known types of files (Fig. 47). If you CHECK (✓) or turn "ON" the "Show all extensions" check box, it will show all the known file types. If the "Show All Extensions" check box is NOT CHECKED or turned "OFF," only general file types are shown.

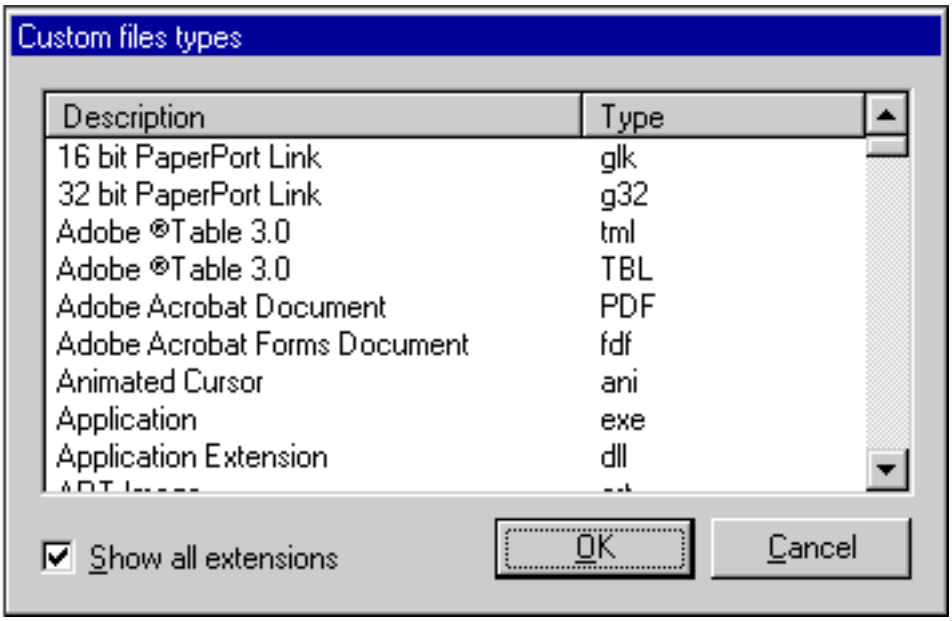

Fig. 47: "Custom File Types" Dialog

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There are three ways to add file types to the description list: (1) to select one file at a time; (2) to select a contiguous list of file types; and (3) to select a discontinuous list of file types. This is how you do it:

- Step 1: To display the pop-up menu, use your right mouse button to click in the text box under the “Executables” or “OLE documents” descriptions. A pop-up menu will appear.
- Step 2: When the pop-up menu appears, use your left mouse button to click the “Browse Types” menu command and a “Custom File Types” dialog will appear.
- Step 3a: To select one file type, use your left mouse button to click on one file type and then click the “OK” button. The “Custom File Types” dialog disappears and the file type is added to the description list.
- Step 3b: To select a contiguous list of file types, use your left mouse button to click on one file type and then, holding down on the “Shift” key, click on a second file type down the list. All file types between the two file types you clicked are darkened or selected. When you are finished, click the “OK” button. The “Custom File Types” dialog disappears and the file types are added to the description list.
- Step 3c: To select a discontinuous list of file types, use your left mouse button to click on one file type and then, holding down the “Control” key, click on a second file type. Both file types will be darkened or selected. Using this method, you can select any number of discontinuous file types. When you are finished, click the “OK” button. The “Custom File Types” dialog disappears and the file types are added to the description list.

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4.3.1.4.4 To Add a New File Type Template to the List

The "Add Template…" menu command in the pop-up menu is used to add an unknown file type to the description list. To add an unknown file type:

- Step 1: To display the pop-up menu, use your right mouse button to click in the text box under the "Executables" or "OLE documents" descriptions. A pop-up menu will appear.
- Step 2: When the pop-up menu appears, use your left mouse button to click the "Add Template" menu command and a new description will be added to the list (Fig. 48).

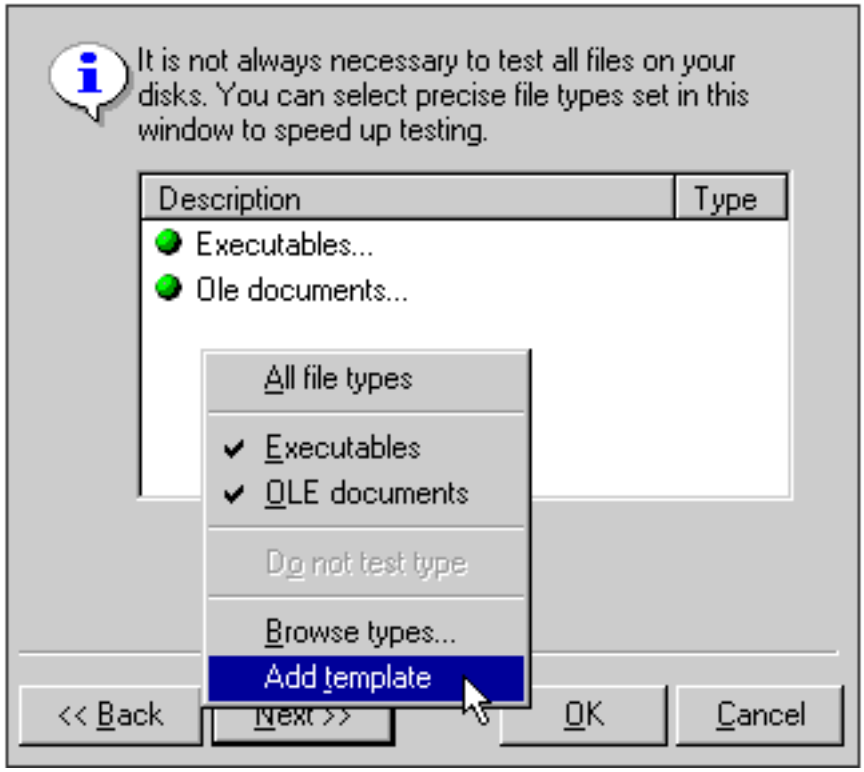

Fig. 48: "Add Template" Menu Command

- Step 3: Type in the three letters or numbers of the file type you want scanned. For example, a text file uses the .TXT file type. Microsoft Word uses the .DOC file type. You can also use wildcards, as "*" (asterisk) and "?" (question mark), to look for similarly named file types.
- Step 4: When you are done, press the "Enter" key and the file type will be entered into the list.

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4.3.1.4.5 To “NOT TEST” an Unknown File Type

There will be times when there is a particular file type that you DO NOT want tested. To NOT TEST this file type, you must still enter it into the description list. The “Do not test type” menu command in the pop-up menu is used to add an unknown file type to the description list. To NOT TEST a file type:

- Step 1: To display the pop-up menu, use your right mouse button to click on a description in the file list. A pop-up menu will appear.
- Step 2: When the pop-up menu appears, use your left mouse button to click the “Do not test type” menu command (Fig. 49). The description will leave a red, round icon next to the description instead of a green, round icon.

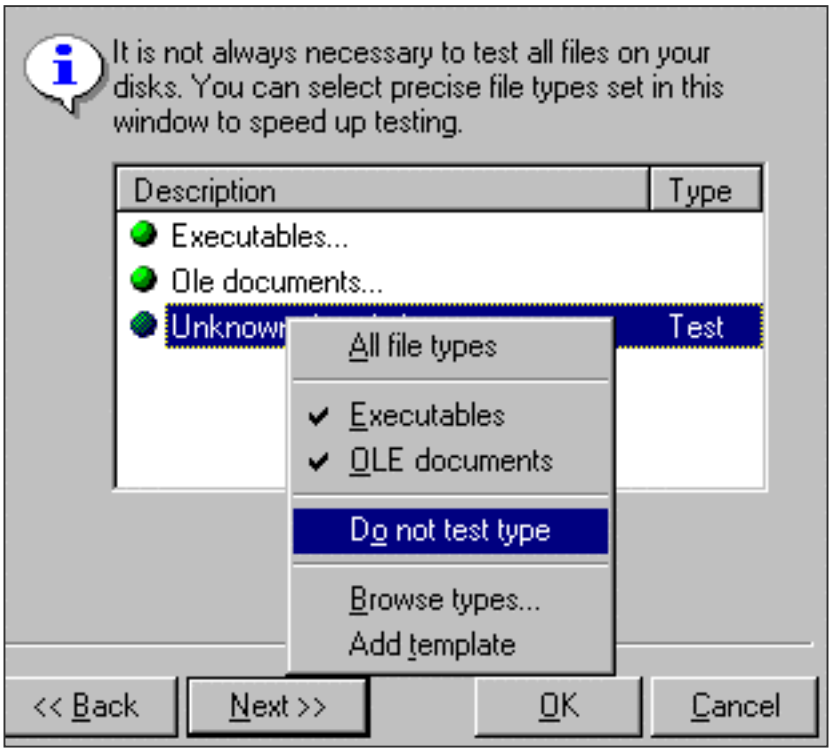

Fig. 49: “Do not test type” Menu Command

This means that marked files of this type will NOT be tested. Thus, it is possible to test “All files” except for the .TXT files, .DOC files etc. However, it is not possible to exclude preset types like “Executables” from the tests.

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4.3.1.5 “Areas” Page

The next page of the Task Wizard is the “Areas” Page. The “Areas” Page allows the user to select which disks, folders or files will be tested by the newly created task (Fig. 50). These “to be tested” areas are listed on this page.

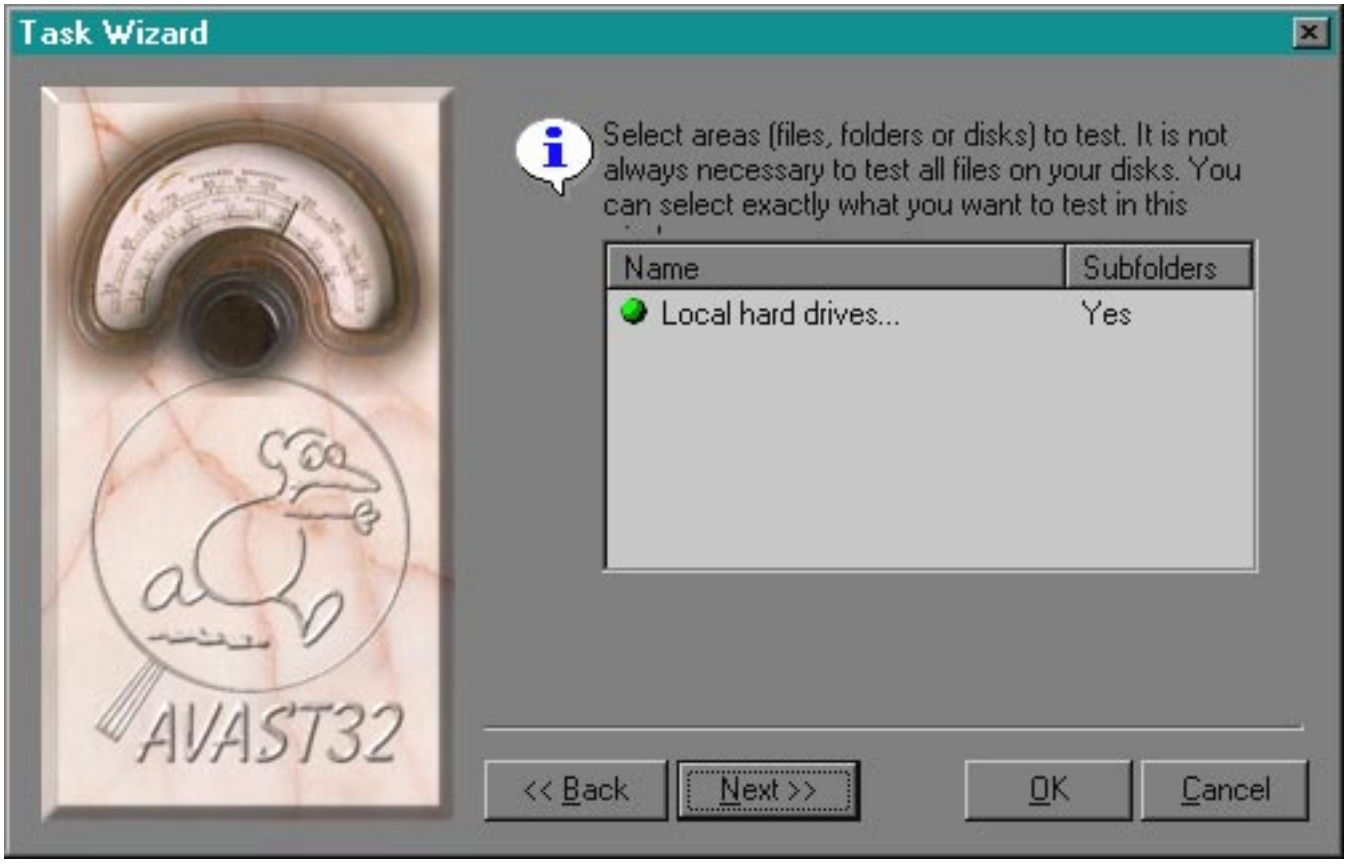

Fig. 50: “Areas” Page

4.3.1.5.1 Remove an Area from the List

To remove a description from the list, use your left mouse button to click on a description, then press the “Delete” key on your keyboard. This means that if you decide you do not want to scan a particular area, you can delete it from the list. If they are removed or turned “OFF,” they are also automatically removed from the list of the areas to be tested. However, that does not mean that they disappear. You can add any again using a pop-up menu.

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4.3.1.5.2 Add a Preset Area to the List

To add an area that is already known or “preset” to the list of descriptions, you use a pop-up menu.

- Step 1: To display the pop-up menu, use your right mouse button to click in the text box under the “Local Hard drives” or other descriptions. A pop-up menu will appear.
- Step 2: When the pop-up menu appears, you will be able to add various areas to be scanned. To select an area, simply use your left mouse button to click on it and a CHECK mark will appear next to the menu command, the pop-up menu will disappear, and the area will appear in the list.

The first three items of the pop-up menu are the preset types: “All drives”, “Diskette A:”, “Removable drives”, “Local hard drives”, “Remote drives” and “Add in run time." “Add in run time” means that before the task starts up, the user will be asked about other areas to add to those specified in the test list.

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4.3.1.5.3 Add one or More Known Areas to the List

AVAST32 allows you scan selected areas for viruses by adding one or more known areas to the list. This option is available because it is not always necessary to scan your computer's entire hard disk, particularly if the virus you are looking for might attack your A: Disk Drive. By reducing the number of areas you test, the scan will take less time.

There are three ways to add areas to the description list: (1) To select one file at a time; (2) To select one folder at a time; and (3) To select one hard drive at a time. This is how you do it:

- Step 1: To display the pop-up menu, use your right mouse button to click in the text box under the current area descriptions such as "Local hard drives." A pop-up menu will appear (Fig. 51).

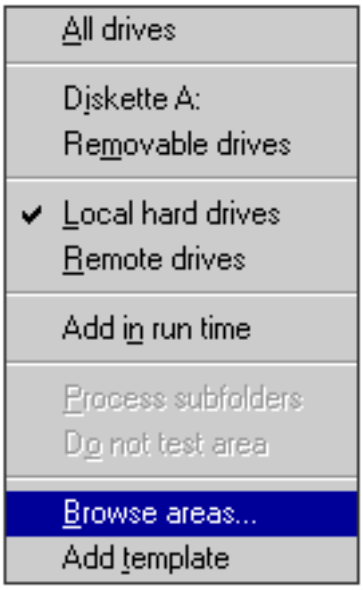

Fig. 51: "Add Known Areas" Pop-up Menu

- Step 2: When the pop-up menu appears, use your left mouse button to click the "Browse Areas" menu command and a standard Microsoft Windows 95 "Open" dialog will appear.

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- Step 3a: To select one or more files, use your left mouse button to click on one file and then click the “Add” button. You can continue to add files until you are done. When you are done, click the “OK” button and the standard Microsoft Windows 95 “Open” dialog will disappear and the file(s) added to the description list.
- Step 3b: To select a folder, use your left mouse button to click on one folder. All files in the first level of the folder, but not the subfolders will be scanned. You can continue to add folders until you are done. When you are finished, click the “OK” button. The “Open” dialog disappears and the folder(s) are added to the description list.
- Step 3c: To select a hard drive (including disk drives and removable drives), use your left mouse button to click on one hard drive. All files in the root directory of the hard drive, but not the subfolders, will be scanned. You can continue to add drives until you are done. When you are finished, click the “OK” button. The “Open” dialog disappears and the folder(s) are added to the description list.

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- Step 4: Scan the subfolders - If you want to scan the subfolders, you need to take a few extra steps. After the folder or hard drive is added to the list in the "Areas" Page, use your right mouse button to click on a name in the list. A pop-up folder will appear that is slightly different from the original pop-up menu (Fig. 52). If appropriate, this one will have a "Process subfolders" menu command that you can use to specify that all files should be checked, including those in subfolders. To scan subfolders, CHECK (✓) or turn "ON" the "Process subfolders" menu command.

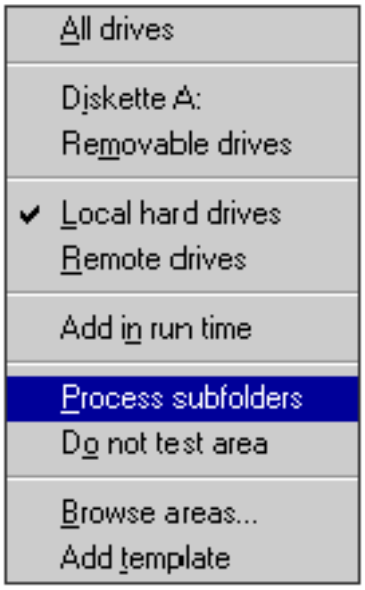

Fig. 52: "Process Subfolders" Menu Command

The "Process subfolders" menu command is not available on the pop-up menu if you are selecting a preset area or an area without subfolders to scan. In addition, if the "Process subfolders" menu command is NOT CHECKED or turned "OFF," only the files situated in the first level of the folder or disk selected are tested. The testing or processing of files in subfolders is CHECKED (✓) or turned "ON" by default.

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4.3.1.5.4 Add a New Area to the List

The "Add Template…" menu command in the pop-up menu is used to add an unknown area to the description list. To add an unknown area:

- Step 1: To display the pop-up menu, use your right mouse button to click in the text box under any area description already listed. A pop-up menu appears.
- Step 2: When the pop-up menu appears, use your left mouse button to click the "Add Template" menu command and a new description will be added to the list. The description will show a text box with question marks in it (Fig. 53).

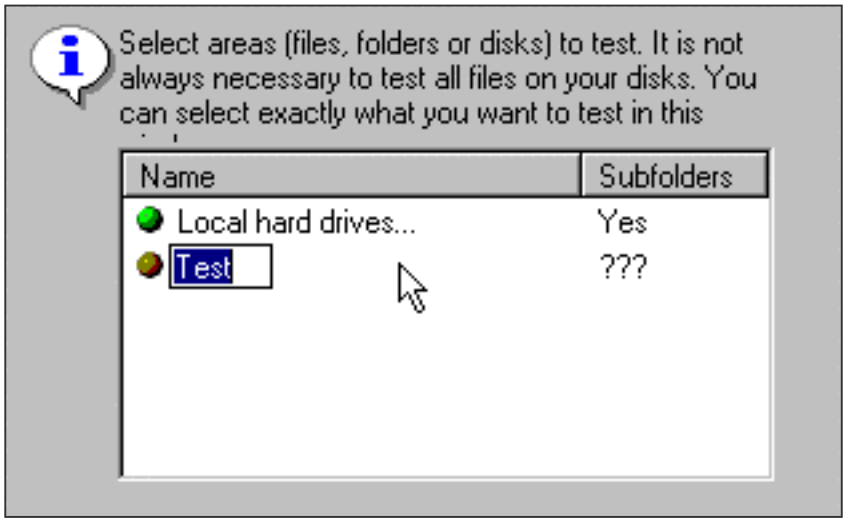

Fig. 53: Add New Area to List

- Step 3: Type in a description of the area you want checked. For example, you might type "Bob's Hard Drive" or "Downloaded Files."
- Step 4: When you are done, press the "Enter" key and the area type will be entered into the list.
- Step 5: Now you must define the area. Use your right mouse button to click on "Bob's Hard Drive." A pop-menu will appear.
- Step 6: When the pop-up menu appears, use the "Browse areas..." command of the pop-up menu to select those areas 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.

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If you want to remove an area from the list, select it with the left mouse button, and then press the “Del” key. Areas can also be removed from the list by NOT checking them in the pop-up menu.

4.3.1.6 “Common Flags” Page

The “Common” Page contains the controls that tell the test when to start and when to exit (Fig. 54). The first two tasks are resident tasks. The last two tasks following only influence the non-resident tasks, i.e. the tasks containing the virus scanning or the integrity checking (normal or simplified ones) are ignored by the resident tasks.

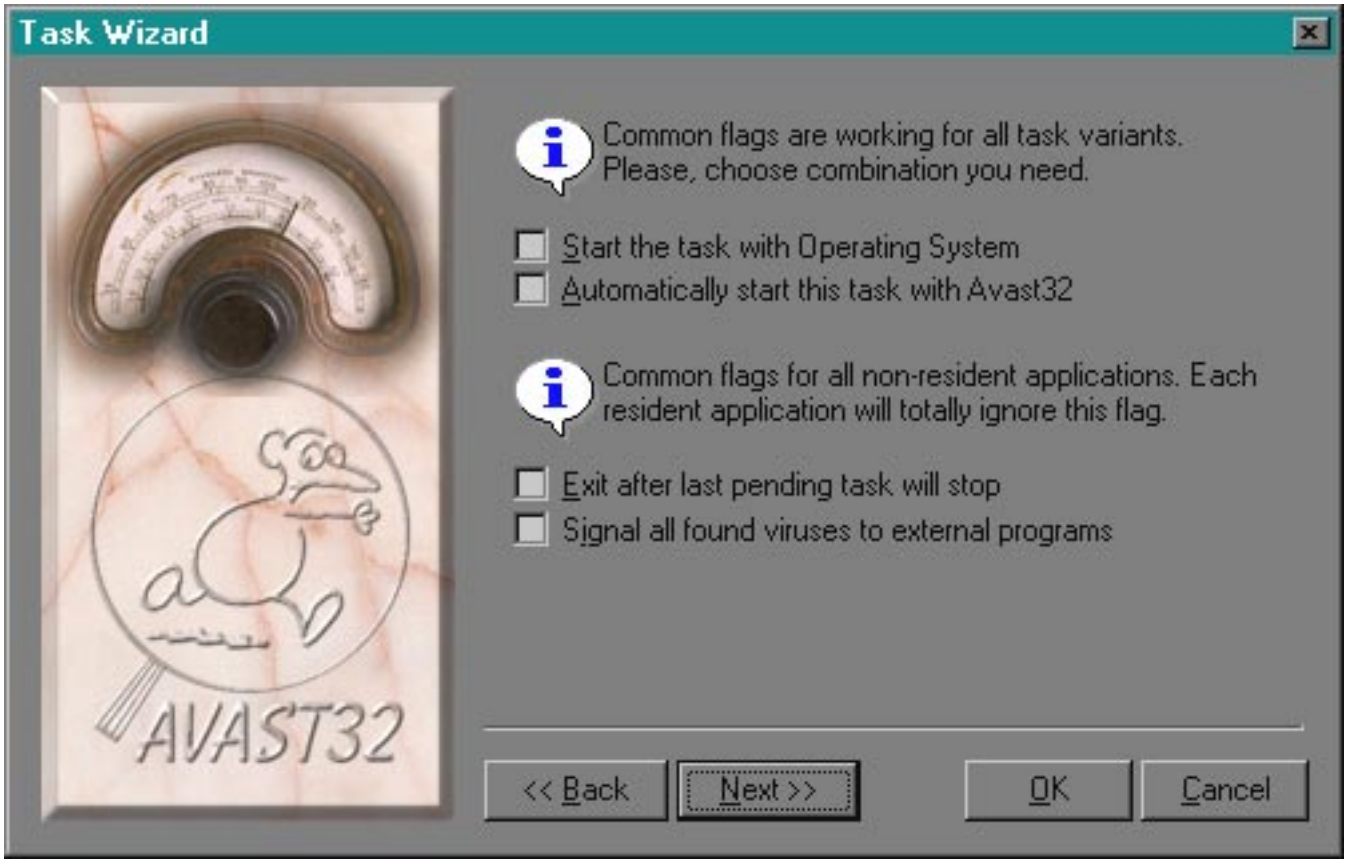

Fig. 54: “Common” Page

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4.3.1.6.1 Start Task with Operating System

CHECK (✓) or turn "ON" the "Start task with Operating system" check box to starts the task immediately after the user logs on. If the task is "Shared" and the check box is CHECKED or turned "ON," this task will be run every time someone logs on the network into or turns on their computer. This check box is CHECKED (✓) or turned "ON" by default.

4.3.1.6.2 Automatically Start This Task with AVAST32

CHECK (✓) or turn "ON" the "Automatically Start This Task with AVAST32" check box to start up the task being created when AVAST32 is started. If the task is "Shared" and on a network, it will automatically be run for all the users. If it is "Private," it will run only for the user who has created the task. Starting the task when AVAST32 is started is NOT CHECKED or turned "OFF" by default.

4.3.1.6.3 Exit after Last pending Task Will Stop

CHECK (✓) or turn "ON" the "Exit after last pending task will stop" check box to close AVAST32 after that last task has run. 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 check box is NOT CHECKED or turned "OFF" by default.

4.3.1.6.4 Signal All Found the Viruses to External Programs

CHECK (✓) or turn "ON" the "Signal All Found the Viruses to External Programs" check box to warn external programs (i.e. programs that are not a part of AVAST32). You can warn about the first virus found during the run of a task (the check box is NOT CHECKED) or about all the viruses found (the check box is CHECKED (✓) or turned "ON"). The check box is NOT CHECKED or turned "OFF" by default. For more detailed information about warning external programs, see F.2 Sending messages of the viruses found.

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4.3.1.7 “Virus Scanner” Page

One of AVAST32’s main purposes is virus scanning. The “Scanner” Page (Fig. 55) presets the part of AVAST32 that is responsible for searching for the viruses.

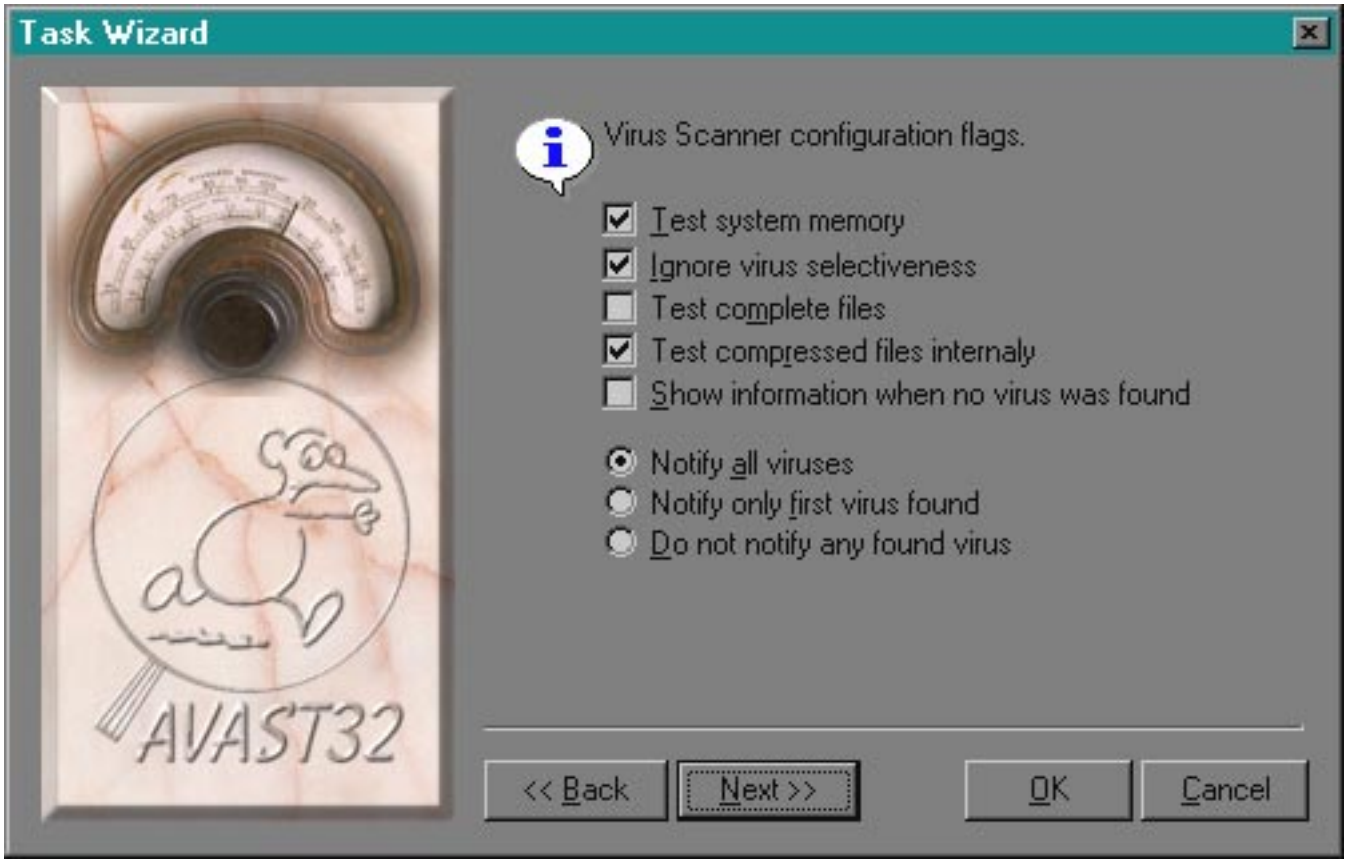

Fig. 55: “Scanner” Page

4.3.1.7.1 Test System Memory

CHECK (✓) or turn “ON” the "Test System Memory" check box to have AVAST32 scan your computer's system memory and will look for viruses that may have infected your computer before installing AVAST32. This test is CHECKED (✓) or turned "ON" by default.

If you use Windows NT, you will not be offered this option. Thus, the “Scanner” page will not contain “Test system memory.”

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4.3.1.7.2 Ignore Virus Selectiveness

CHECK (✓) or turn "ON" the "Ignore Virus Selectivness" check box to have AVAST32 compare all of your computer's files against all the virus profiles in the virus database when it scans. If the check box is NOT CHECKED or turned "OFF," AVAST32 only tests the files for the presence of viruses that attack that specific file type.

For example, if the file is of the COM type, AVAST32 will not test for the presence of viruses that only attack .EXE files, etc. CHECK (✓) this check box to ensure that all of your computer's files are tested for the presence of all the viruses, regardless of the type being infected. This check box is NOT CHECKED or turned "OFF" by default.

4.3.1.7.3 Test Complete Files

CHECK (✓) or turn "ON" the "Test Complete Files" to have AVAST32 test a file's code when it scans files for the presence of viruses. If the check box is NOT CHECKED, AVAST32 will only scan part of each file. This is because the overwhelming majority of viruses infect files by adding their code to the end or beginning of files. Thus, AVAST32 is set up to test only the beginning and end of files unless asked to do otherwise. This test is NOT CHECKED or turned "OFF" by default.

4.3.1.7.4 Test Compressed Files

CHECK (✓) or turn "ON" the "Test compressed files" check box to have AVAST32 scan compressed files. AVAST32 offers this option because viruses in compressed files can infect your computer in two ways. Compressed files can sometimes infect your computer without having to be uncompressed and compressed files with viruses can infect your computer when they are decompressed.

To do this, AVAST32 first scans the compressed files, then internally decompresses the files (the files on the disk will remain compressed), and scans again. At present, AVAST32 supports the Diet, Lzexe, Pklite, and Ice compression programs. This test is CHECKED (✓) or turned "ON" by default.

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4.3.1.7.5 Show Information when a Virus Is Found

You can decide when you want AVAST32 to notify you when if finds viruses. To do this, select one of the following radio buttons (Fig. 56):

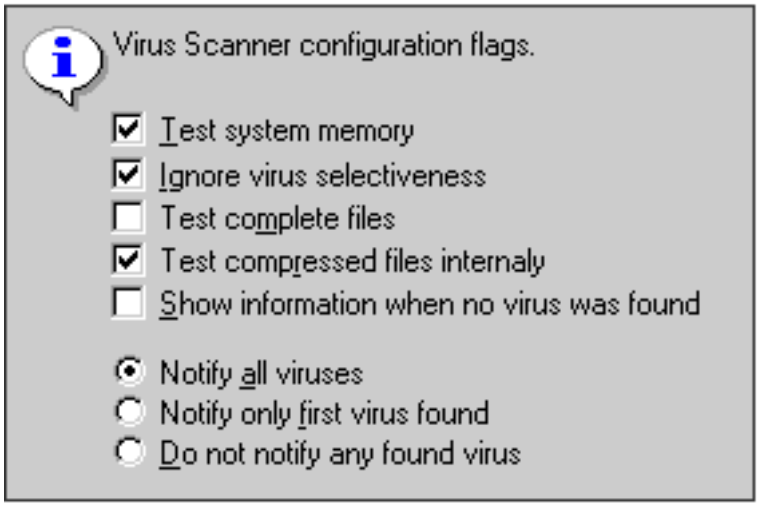

Fig. 56: Virus Configuration Flags

- CHECK (✓) or turn “ON” the “Notify all viruses” radio button to ask AVAST32 to display a warning message dialog for every virus found, and will wait for the user's response.
- CHECK (✓) or turn “ON” the “Notify only first virus found” radio button to display a warning message dialog just like the previous radio button, but only for the first virus found. This is useful if the user only needs to find out whether his computer is infected or not. If the user needs to find out more about all the files that are infected, all he has to do read through the “Enhanced” User Interface’s “Results” tab when the test is complete.

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- CHECK (✓) or turn "ON" the "Do not notify any found virus" radio button to suppress the display of any warning message dialogs if viruses are found. If this radio button is checked or "ON," the user will NOT be informed when viruses are found. This is useful if the user wants the tests to run their course and not interfere with other computer operations, for example, on a server.

As there is no warning, using the "Do not notify any found virus" radio button makes it easy to overlook a virus alert. This option is set to "Notify all viruses" by default.

4.3.1.8 "Integrity Checker" Page

The "Integrity Checker" Page (Fig. 57) contains the controls that set the integrity parameters for the integrity scan. "Integrity checking" makes it possible to monitor the changes in individual files by making more than one scan and comparing the differences. These changes allow a user to discover known and unknown viruses.

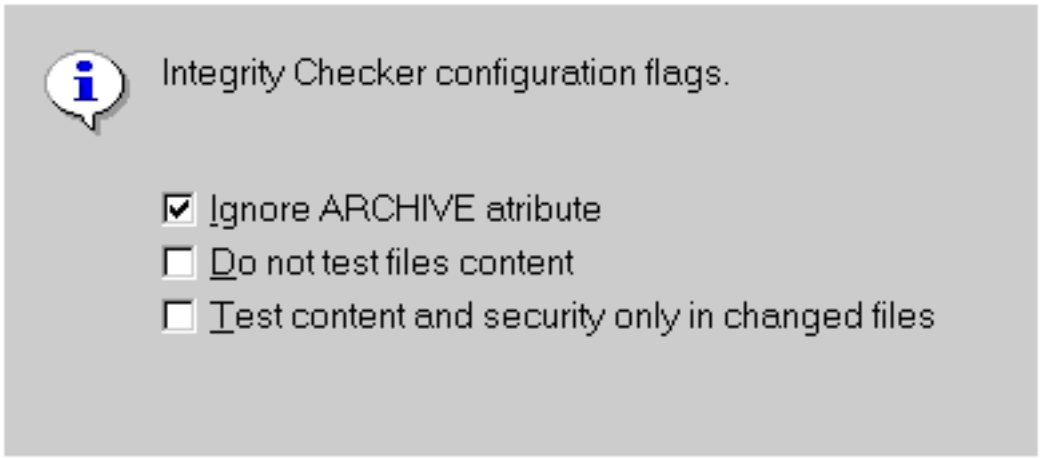

Fig. 57: Integrity Checker Configuration Flags

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4.3.1.8.1 Ignore Archive Attribute

CHECK (✓) or turn "ON" the "Ignore Archive attribute" check box to have AVAST32 ignore the archive attribute of the checked files during an integrity scan. The attribute is used by backup programs to recognize whether a file has been archived or backed up. Since the operating system sets this attribute any time a change is made to a record, it is important except under special circumstances to ask AVAST32 to ignore this change. Otherwise, it will notify you of these changes when there is probably nothing wrong. This test is NOT CHECKED or turned "OFF" by default.

4.3.1.8.2 Do not Test File Content

CHECK (✓) or turn "ON" the "Do not test file contents" check box to have AVAST32 ignore changes in the file contents during an integrity scan. It will Tip the changes in date of the last change, size, attributes, etc., but no checksums of their contents will be created. If you CHECK (✓) or turn "ON" the "Do not test file contents" check box, you will make the task run faster, but you will not be able to be sure the entire file is not infected. This test is NOT CHECKED or turned "OFF" by default.

4.3.1.8.3 Test Content and Security Only in Changed Files

CHECK (✓) or turn "ON" the "Test content and security only in changed files" check box if you want AVAST32 to integrity scan the contents of the files. AVAST32 will tell you if there is a change in basic properties of the file (attributes, date of the last change, etc.). This is based on the presumption that if the parameters of a file are changed, the contents will probably be changed as well. If you CHECK (✓) or turn "ON" this check box, tasks run faster. This check box is NOT CHECKED or turned "OFF" by default.

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4.3.1.9 “Continue” Page

The user can choose a task that will start when the current task is finished in the “Continue” Page (Fig. 58).

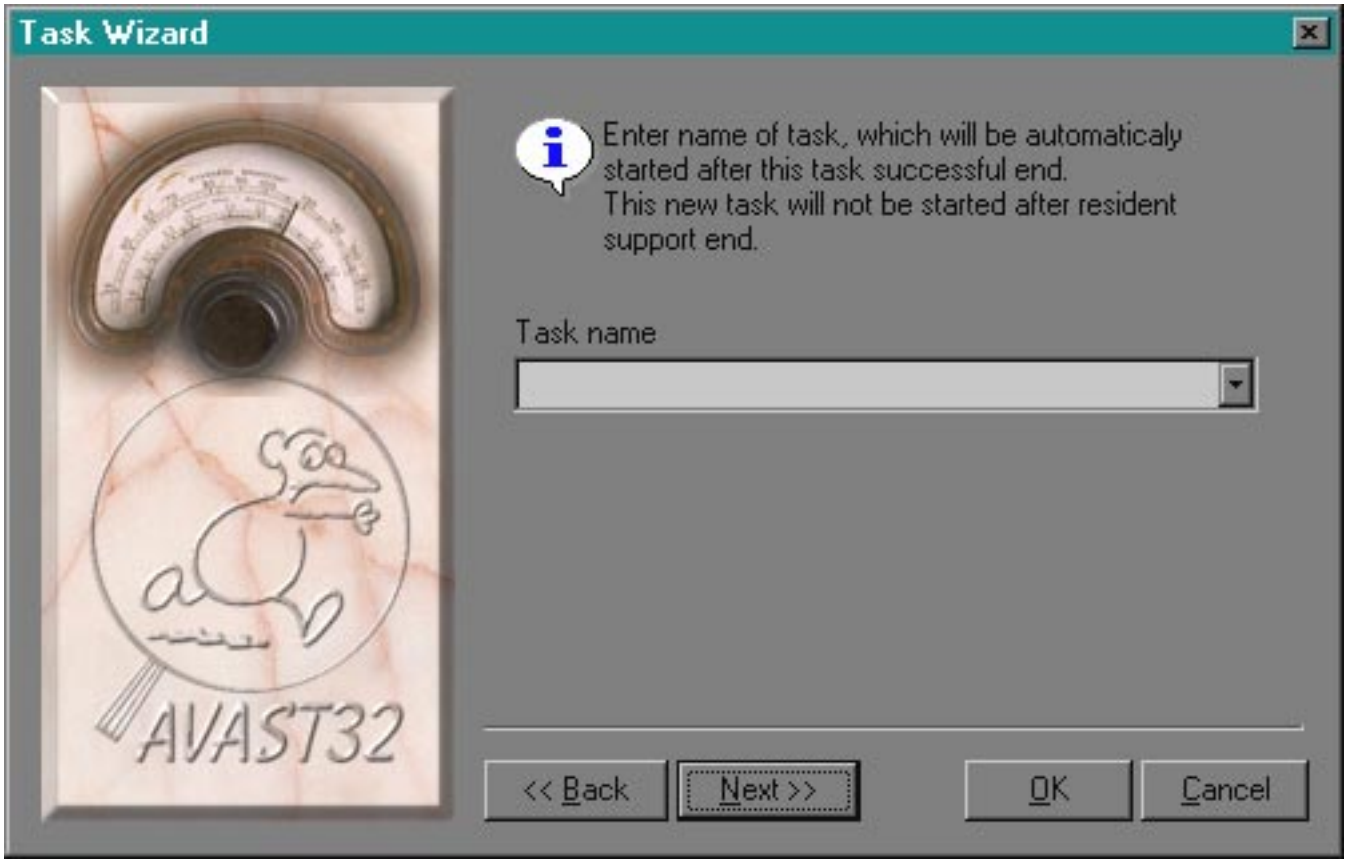

Fig. 58: “Continue” Page

Type a task name in the Task Name Box or chose from the list of tasks that have already been created. If you use your left mouse button to click the down-arrow on the right edge of the Task Name Box tasks, the list of previously created tasks will appear. The Text box contains no text by default.

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4.3.1.10 "Report" Page

AVAST32 can create a file containing a detailed message on its activity and results when it is finished testing.

- To do this, CHECK (✓) or turn "ON" the "Create a Report File" check box and type the name of the report name in the text box (Fig. 59). When the test is complete, AVAST32 will write the report to the file you have designated. The report contains the information on the tested files, on the viruses found and other important information, including statistics of tests. AVAST32 creates the report by default.

If the you enter the "*" (asterisk) instead of the name, the file with the report will have the same name as the task, only the file extension will be RPT. If no extension is specified at the file name, RPT will be added automatically. The text box contains "*" by default.

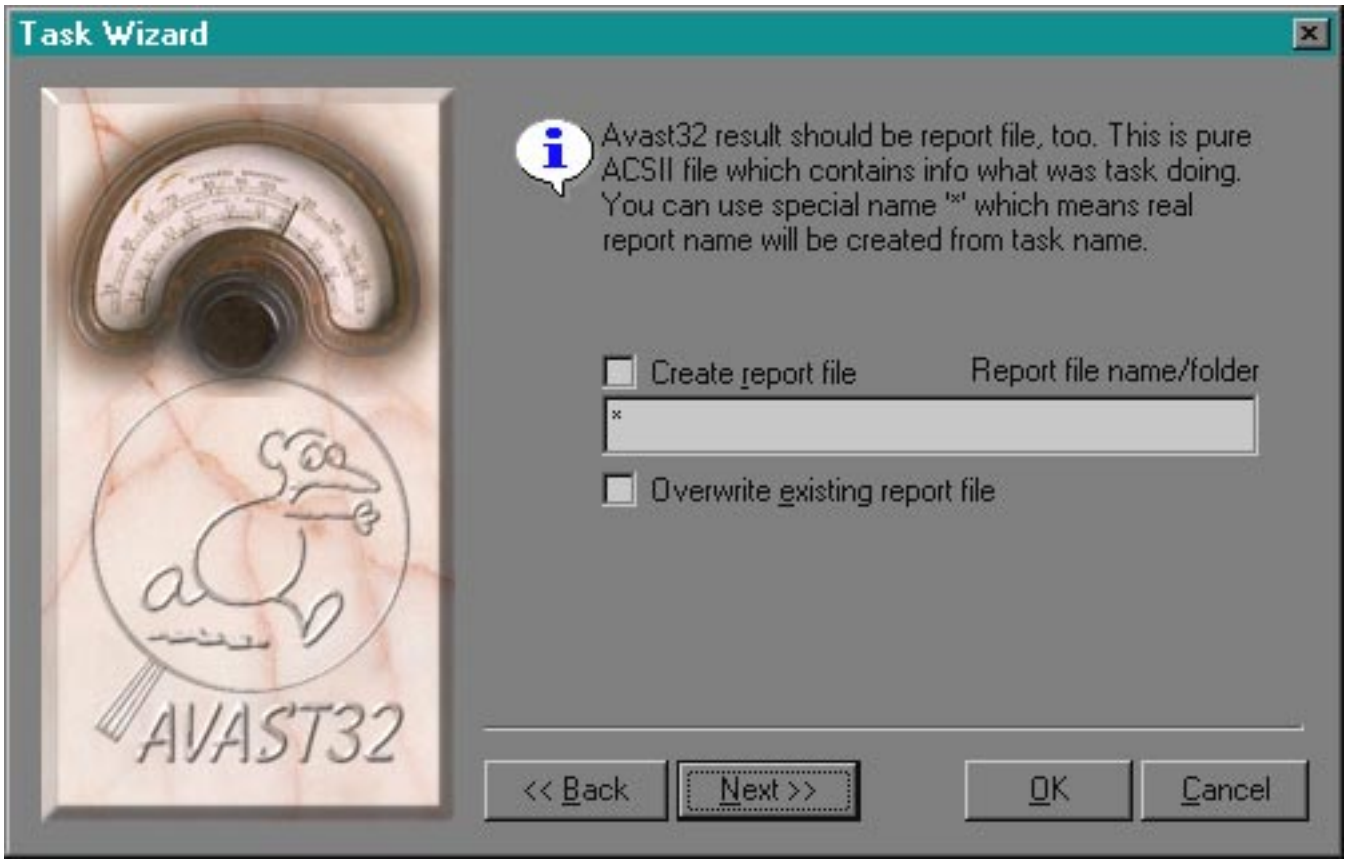

Fig. 59: "Reports" Page

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- CHECK (✓) or turn "ON" the "Overwrite existing report file" check box to have AVAST32 overwrite the file if the name already exists. If you do NOT CHECK the "Overwrite existing report file" check box and a file with that name already exists, the report on the activity of this task is added to the already existing file. This check box is NOT CHECKED or turned "OFF" by default.

4.3.1.11 "Net Alert" Page

The "Net Alert" Page contains the controls to send warning messages if a virus is found to some or all of the computers on your computer's network via the Internet, Microsoft Exchange (email), or your internal network.

To delete a computer "name" from a list, select i then press the "Del" or "Delete" key. Warning messages can be sent to a recipient multiple times depending on how that computer is set up on the network and the installed network options.

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4.3.1.11.1 Send Alert over the Network

CHECK (✓) or turn on the "Send alert over the network" check box to send a warning message over the network. This check box is NOT CHECKED or turned "OFF" by default.

If you plan to send a warning message over the network, you must also decide which computers will receive the warning and how you will sent the warning. To do this, select one of the following radio buttons:

- CHECK (✓) or turn "ON" the "Send alert to current domain" radio button to send a warning message reporting that a virus has been found to all the computers connected on the network.
- CHECK (✓) or turn "ON" the "Send alert only to selected users" radio button to send the warning message only to the computers that you specify.

Sending of a warning message to the selected computers is NOT CHECKED or turned "OFF" by default.

4.3.1.11.1.1 Send Alert Only to Selected Users

If you CHECK (✓) or turn "ON" the "Send alert only to selected users" radio button, you must also select which computers will receive the message. You can do this with the "Browse" button and the "Template" button.

4.3.1.11.1.2 Send Alert Using the Browse Button

One way you can do this is by using your left mouse button to click the "Browse" button. The "Browse" button will allow you to select names from a "Tree Control" list of the entire network.

- Step 1: Use your left mouse button to click the "Browse" button and a "Browse for Computer" dialog will appear with a ""Tree Control"" of the entire network.
- Step 2: Once the "Browse for Computer" dialog appears, use your left mouse button to open the "Tree Control" and click the name of a computer to which you would like to send a virus warning.
- Step 3: After selecting the computer name, use your left computer button to click the "OK" button and the name of computer will be entered in the list of selected computers. You can continue to select as many names as you like using the "Browse for Computer" dialog.

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4.3.1.11.1.3 Send Alert Using the Template Button

You can also select users by using your left mouse button to click the “Template” button. The “Template” button offers three different protocols to send the message:

- Selecting the “Internet” option will send a virus alert to a computer at a valid URL address.
- Selecting the “Microsoft” option will send a virus alert to a computer at a valid Microsoft Exchange address.
- Selecting the “Internal” option will send a virus alert to a specific computer over the local network.

After you have selected the appropriate protocols, an “Edit for valid address or name...” text line will appear. Use your left mouse button to select and edit the text line by entering a valid URL, Microsoft Exchange address, or the address of a specific network computer. Press the “Enter” key and it will be added to the list.

4.3.1.11.1.4 Use the Test the Connection Button

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

4.3.1.11.1.5 Sending Messages under Windows NT

For sending or reading network messages under Windows NT “Alerter” and “Messenger” services must be enabled (“Control panel”, “Service” item). If you do not have the required permission contact your system administrator. You need “WinPop-up” program enabled for Windows 95 Messaging.

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4.3.1.12 “Message” Page

The “Message” Page is used to edit the text of the message which will be displayed if a virus if found (Fig. 60). If you CHECK (✓) or turn “ON” the “Send alert over the network” check box, sending the virus warning to the network is enabled and this message will also be sent to all of the computers selected.

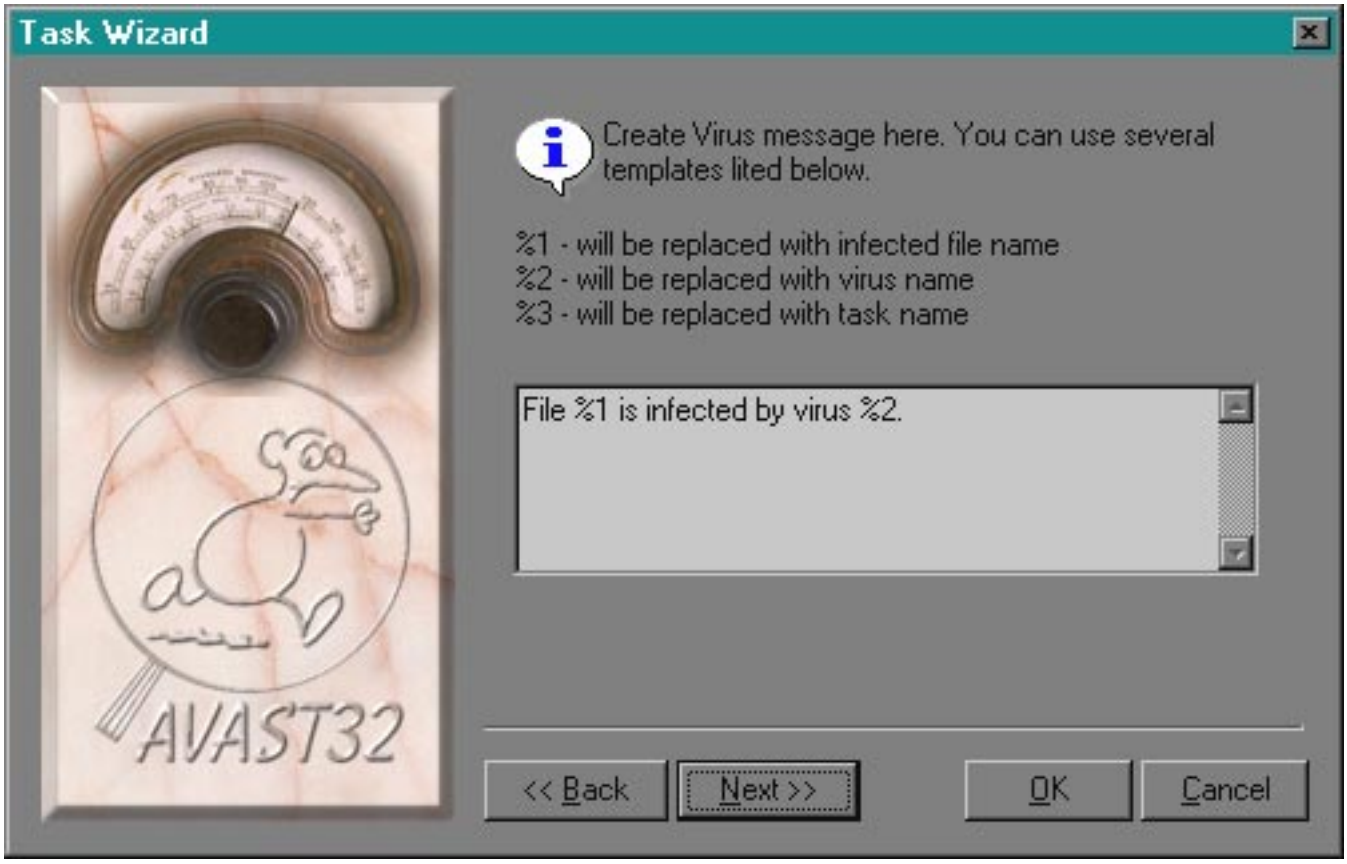

Fig. 60: “Message” Page

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All the user has to do is enter the information in the provided text box. It is also possible to enter variables that represent the infected file name, task name, etc. When AVAST32 sends the warning, the appropriate name will replace the variable. The meanings of variables are as follows:

%1 - infected file name

%2 - name of the virus which infected the file

%3 - name of the task which discovered the virus

Here is an example of on possible example of what could happen and a variable statement you could type in the text box:

"Warning! Virus %2 has been found in the file %1. Used task %3."

And here's what would happen if the "Scan Main Hard Drive" task found the virus "OneHalf" in the "D:\PRG.EXE" file, the resulting message would read:

"Warning! Virus OneHalf has been found in the file
D:\PRG.EXE. Used task Scan Main Hard Drive."

By default, the text box contains the following warning message:

File %1 is infected by virus %2.

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4.3.1.13 “Sound” Page

The “Sound” Page (Fig. 61) contains the controls that tell AVAST32 play a sound file when it finds a virus.

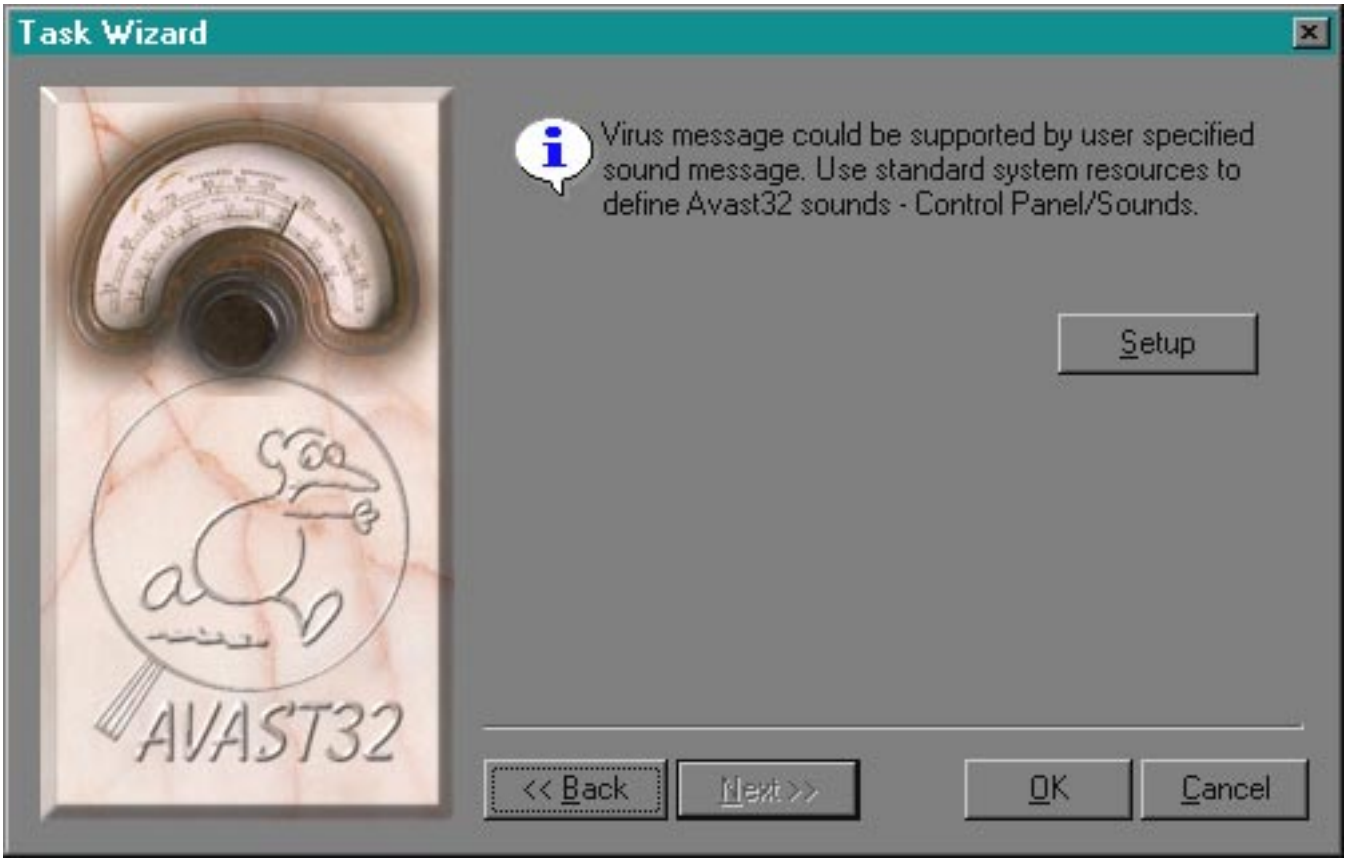

Fig. 61: “Sound” Page

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If you would like to use this feature:

- Step 1: Use your left mouse button to press “Browse” button on the “Sound” Page. A dialog will appear.
- Step 2: When the dialog appears, use your left mouse button to choose a sound file. You can either pick the virus alert sound that is installed when AVAST32 is installed or choose another.

AVAST32 installs a virus alert sound that can also be located in the “Sound” control panel. It is possible to set up AVAST32 sound events via “Sounds” in control panel even if AVAST32 is not running. For more information, see 6.7.4 Use Sounds to Announce Events.

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4.3.1.14 “Online Scan” Page

The “Online Scan” page contains the controls used to specify which types of files need to be scanned before they are run (Fig. 62). For example, AVAST32 will scan programs and documents for new types of viruses that have recently appeared that do not attack executable files nor boot sectors of disks. Instead, these “macroviruses” attack data files, specifically OLE documents.

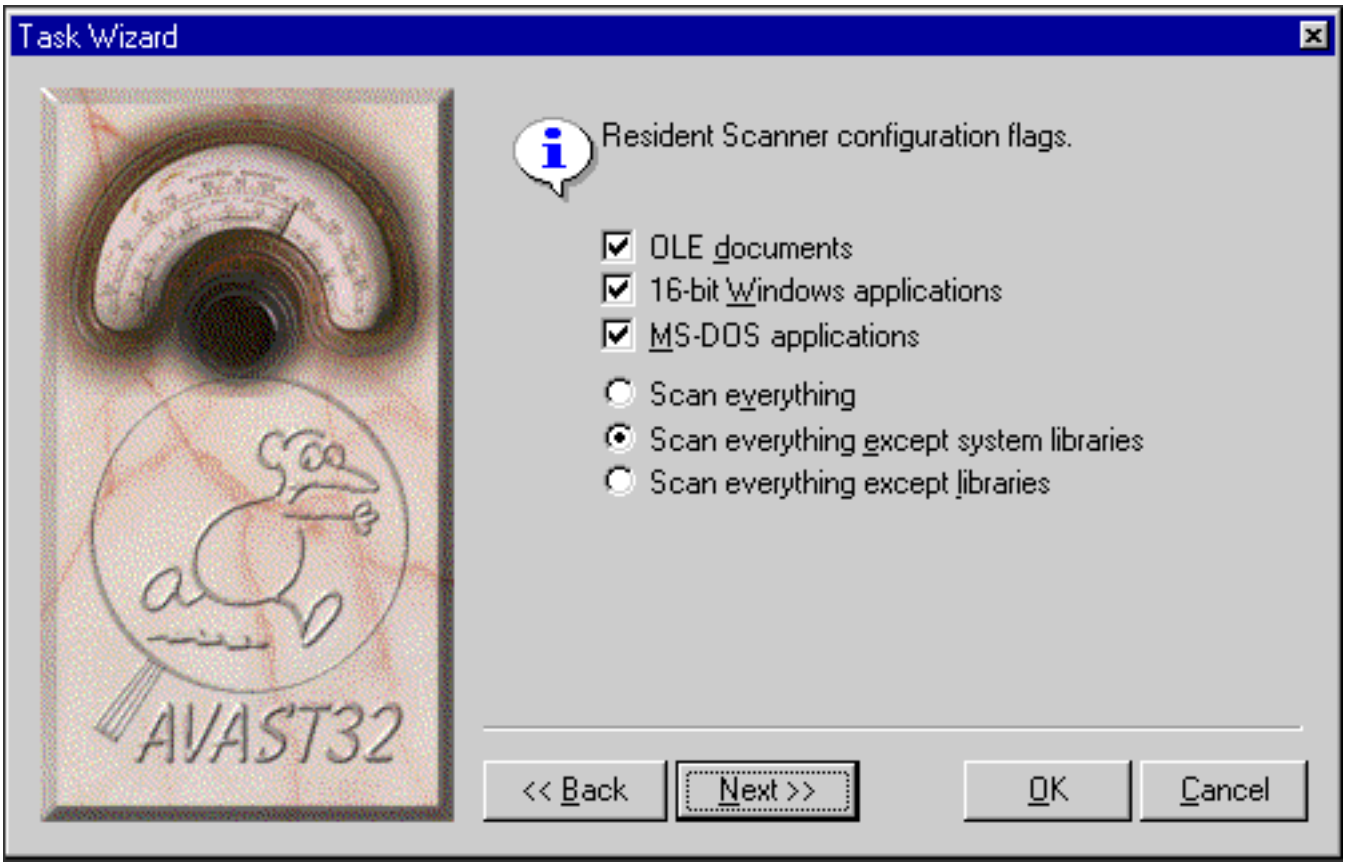

Fig. 62: “Online Scan” Page

This test allows you to test a program or a document before they are run or opened to see if they have a virus. If the program or document does not contain a virus, it will open normally. If it does find a virus, AVAST32 warns you. However, AVAST32 will only scan the files containing OLE documents when they are opened using the OLE functions. If the programs and OLE document files are just copied, deleted, or changed via other standard system operations, they will not be scanned. Also, AVAST32 will not scan them while you are using them.

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It is possible to scan OLE documents, 16-bit applications for Windows 3.1x, MS-DOS applications, and the system libraries and libraries of 32-bit programs. AVAST32 will always scan 32-bit applications designed for Windows 95 and NT. It is possible to mark and check an arbitrary combination of the documents, applications, and libraries. All the items on this list are CHECKED (✓) or turned "ON" by default. The selection is made by CHECKING or turning "ON" this option using the radio buttons next to each option.

This test can have a large impact on the time it takes to start the programs, especially when the same libraries are always used. If you periodically scan your system and speed is a problem, you should at least disable scans of the system libraries. Alternatively, if you intend to install any program, particularly if it is from an unknown source, we recommend checking of all the executable files, including its libraries. All options concerning checking launched executable files and .DLLs are CHECKED (✓) or turned "ON" by default except for those that relate to system functions.

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4.3.1.15 “Behaviour Blocker” Page

The “Behaviour Blocker” Page contains the controls for the “Behaviour Blocking” of potentially dangerous operations (Fig. 63). This means that any time you try to perform an operation that has the potential to infect the computer, AVAST32 will advise you and the operation will be executed only with your approval.

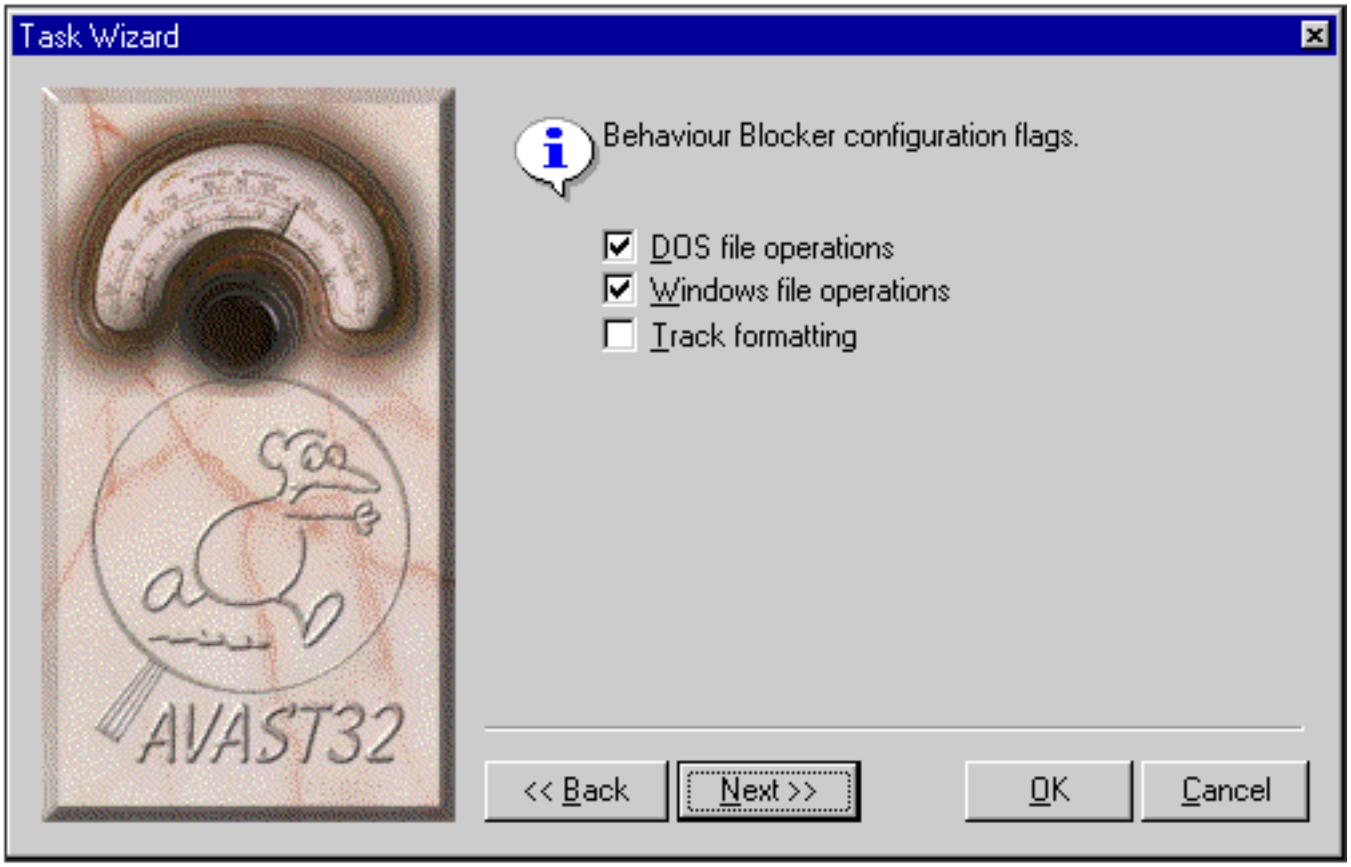

Fig. 63: “Behaviour Blocker” Page

4.3.1.15.1 Block DOS File Operations

CHECK (✓) or turn “ON” the “DOS File Operations” check box to have AVAST32 scan potentially dangerous operations relating to MSDOS files. The check box is CHECKED (✓) or turned “ON” by default.

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4.3.1.15.2 Block Windows File Operations

CHECK (✓) or turn “ON” the “Windows File Operations” check box to have AVAST32 stop potentially dangerous operations file operations such as creating new, changing, and deleting files. The check box is CHECKED (✓) or turned “ON” by default.

4.3.1.15.3 Block Track Formatting

CHECK (✓) or turn “ON” the “Track Formatting” check box to make sure that AVAST32 scans for viruses that format the tracks on your computer. These are especially dangerous; at the very least you can lose a part of your hard disk, in a more severe cases you can lose your entire hard disk. The check box is NOT CHECKED or turned “OFF” by default.

If you are using Windows NT, the “Behaviour Blocker” Page only contains the “MS-DOS file operations” and “Windows file operations” options.

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4.3.1.16 The “Ignore” Page

The “Ignore” Page (Fig. 64) contains the controls that allow the user to specify which MS-DOS and Windows applications will NOT be scanned by the “Behaviour Blocker.” This page was included because there are a large number of programs that store information about their activities in the application itself. If the scanning of these applications is not turned “OFF,” the “Behaviour Blocker” will constantly warn the user every time these programs change.

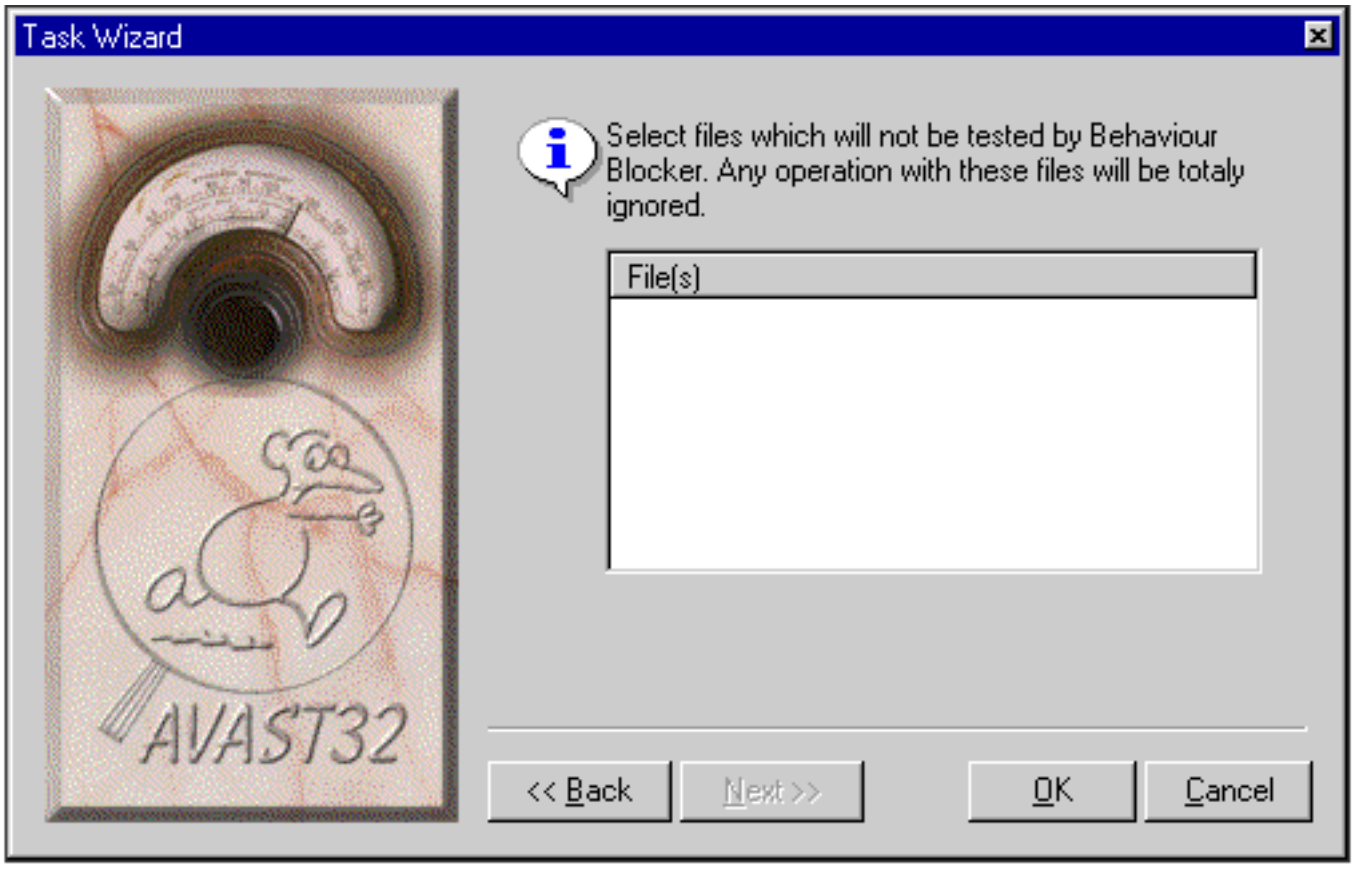

Fig. 64: “Ignore” Page

This page contains the list of the files that AVAST32 will not “Behaviour Block.” If there are other tests than “Behaviour Blocker,” then AVAST32 will continue to perform these tests on the files specified on this list. The file list is empty by default. If you want to add a file onto the list, use the pop-up menu and use the “Browse Files: option or “Add Template” option.

To delete a file from the list, use your left mouse button to select it, then press the “Del” or “Delete” key.

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4.3.1.16.1 Select from a Known List of Files

To "Select from a Known List of Files," you open up the pop-up menu and select the "Browse Files" menu command. To do this:

- Step 1: To display the pop-up menu, use your right mouse button to click in the text box under any files that are listed there. A pop-up menu will appear.
- Step 2: When the pop-up menu appears, use your left mouse button to click the "Browse Files" menu command and a "Open File" dialog will appear (Fig. 65).

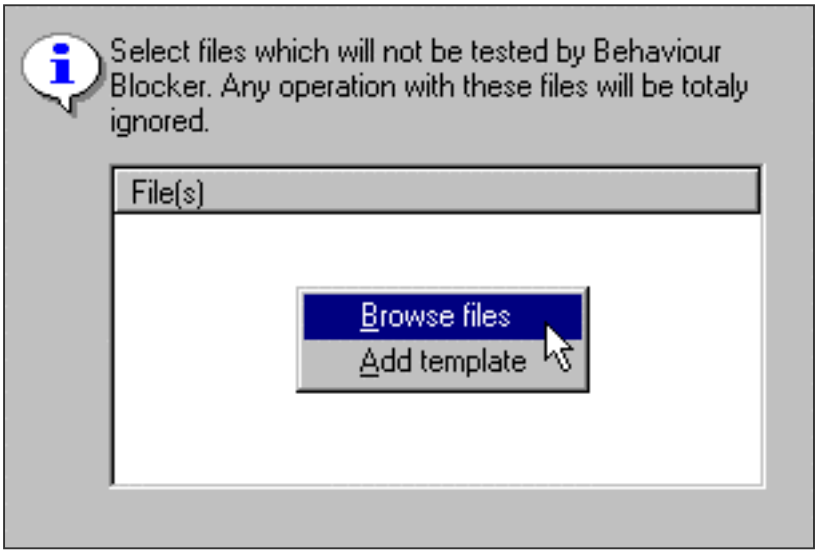

Fig. 65: "Browse Files" Menu Command

- Step 3: To select a file to exclude, use your left mouse button to click on a file name and then click the "OK" button. The "Custom Open File" dialog disappears and the file type is added to the description list.

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4.4.1.16.2 Type in the Names of Files

To Type in the Names of Files, open up the pop-up menu and select the "Add Template" option. To do this:

- Step 1: To display the pop-up menu, use your right mouse button to click in the text box under any files that are listed there. A pop-up menu will appear.
- Step 2. Use your left mouse button to select the "Add template" menu command and an item will be entered into the list with the name "Edit this file name template in this box...."
- Step 3: Click on "Edit this file name template in this box..." and you will be able to edit it. After you have entered the file name, press the "Enter" key.

When you type in the file name, it cannot include any wildcards such as "*" (asterisk) and "?" (question mark).

4.4 Check the Entered Data

When you create a task, AVAST32 has some built-in controls that check a task's correctness and completeness. However, there are also a few situations where AVAST32 is designed to NOT CHECK for correctness.

- AVAST32 will NOT CHECK to see if a task name is already in use.
- AVAST32 will NOT CHECK to see if a new task includes virus scanning or integrity checking and no file type has been specified to be tested or no areas to be tested have been defined.
- AVAST32 does NOT CHECK to see whether the files that are typed into text boxes (e.g. the sound files or the files to be ignored) really exist. When AVAST32 gets to that part of the task, it checks to see if those files are available.
- AVAST32 does NOT CHECK to see if the computers noted in the "Net alert" page are available. If you do want to know if the connection is "OK," use the "Test" button on that page.

- End Chapter 4 -

CHAPTER 5

USER INTERFACE FEATURES

AVAST32 offers two user interfaces: a “Simple” and an “Enhanced” User Interface. The “Simple” User Interface is illustrated in Fig. 66.

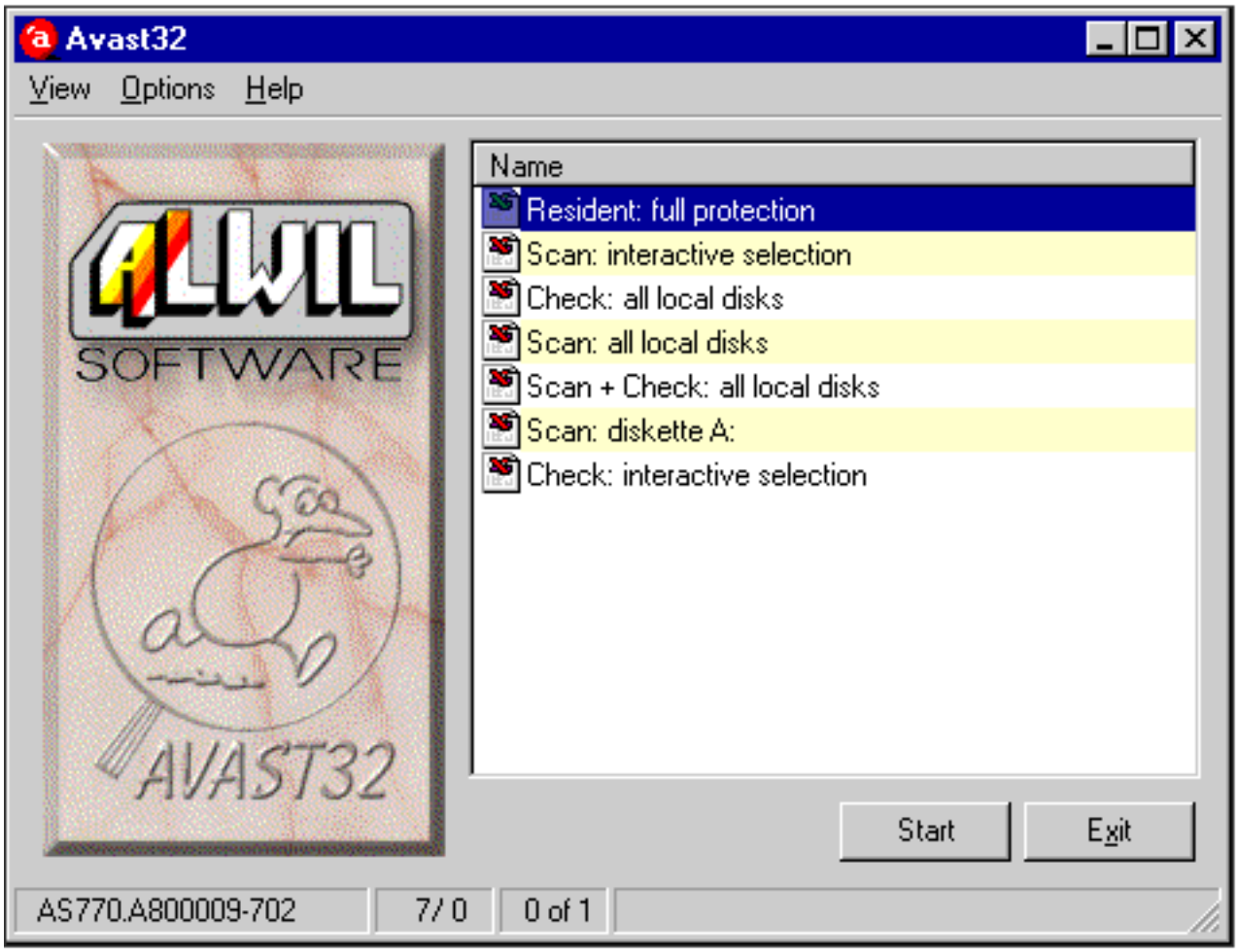

Fig. 66: “Simple” User Interface

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SecureNet calls this the “Simple” User Interface because it only offers the user minimal program controls. This is perfect for users who just need the basic AVAST32 functions. The “Enhanced” User Interface will be appreciated by experienced users, because it makes it possible to adapt the program to their own requirements and makes use of all its functions and advantages.

Both user interfaces include the ALWIL Software company logo, the command menu, and the Status Bar located at the lower edge of the window. The Status Bar contains four sections. The first section provides the AVAST32 version, including the number of its compilation. The second section contains the number of the tasks available and the number of the currently running tasks. The third section contains the number of the licenses included with this particular license. The last section is not used at present.

5.1 AVAST32 Window Menus

The AVAST32 Window menus (Fig. 67) is located under the AVAST32 title bar and it is available any time when program is running.

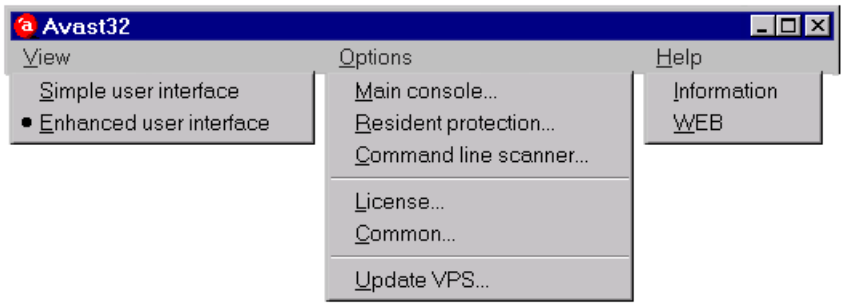

Fig. 67: AVAST32 Window Menus

5.1.1 “View” menu

Use the “View” menu to switch between “Simple” User Interface and “Enhanced” User Interface. The current user interface is marked with a “Black” ball.

5.1.2 “Options” menu

Use the “Options” menu to customize AVAST32. With the “Options” menu, you can create or modify tasks, configure the resident scanner, configure the console scanner, add the license activation key, set up common parameters, and update the virus database file (VPS file update). For more information on the “Options” menu, see Chapter 6: Customize AVAST32.

5.1.3 “Help” menu

The “Help” menu provides critical information that SecureNet will need if you call technical support.

The “Help” menu contains:

- License owner, company, and the number of licenses available across the network
- Copyright information
- AVAST32 and components version information, including detailed build number
- Operating system information and available physical memory
- VPS file version and its build information.

5.2 “Simple” User Interface

The “Simple” User Interface contains the list of available tasks and several control buttons.

5.2.1 “Name” Text Box

The “Name” text box contains a list of available tasks. Next to the name of each task, there is an icon indicating its status. If the task is not started, the icon illustrates whether it is a “Shared” (a document icon with a green “X”) or “Private” task (a document icon with a red “X”). If a task is running, there is a “Green” ball next to its name. If the task is paused, there is a “Red” ball.

5.2.2 “Start,” “Stop,” and “Exit” Buttons

There are two buttons at the bottom of the window. The meaning of the left button changes depending on the status of a selected or highlighted task. If no tasks are highlighted, the left button will be titled “Start.” If the highlighted task is not running, the left button will be titled “Start” and can be used to start-up the highlighted task. If the highlighted task is already running, the left button will be titled “Stop” and can used to stop the task.

When you click the right “Exit” button, you close AVAST32. At the same time, all non-resident tasks are stopped.

You can also start or pause (but not stop) a task by highlighting it, then pressing the “Enter” key, or by double-clicking with the left button of the mouse on a task.

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5.2.3 “Simple” User Interface Pop-up Menu

If you use your right mouse button to click on a task in the “Simple” User Interface, a pop-up menu will appear (Fig. 68). Its menu commands, however, depend on the current state of the task. To activate a menu command in the “Simple” User Interface, use the left mouse button to select a menu command when the pop-up menu appears.

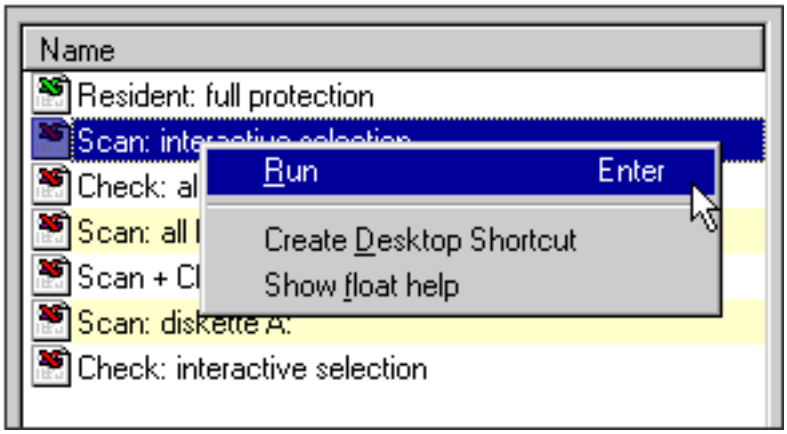

Fig. 68: “Simple” User Interface Pop-up Menu

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The “Simple” User Interface pop-up menu can contain the following commands:

- “Run” menu command starts-up a selected menu task. It is only visible when the selected task is not running or paused.
- “Stop” menu command will stop the task. It is only available for the tasks that are running or paused.
- “Pause” menu command will pause a running task. It is only available when a highlighted task is already running.
- “Create Desktop Shortcut” menu command creates and puts a shortcut to the highlighted task on the desktop. This shortcut can then be used to start-up the task without having to start AVAST32 first. This command is always available in the pop-up menu.
- “Show Float Help” menu command opens the AVAST32 Help. You can also press the “F1” key to open the AVAST32 Help. This command is always available in the pop-up menu.

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5.3 “Enhanced” User Interface

The “Enhanced” User Interface offers access to all AVAST32’s functions and settings. One of the main differences between the “Simple” User Interface and the “Enhanced” User Interface is that the “Enhanced” User Interface has a tabbed interface (Fig. 69). Each “Tab” has different content and functions and only one tab’s content and functions are visible at any time. To make any tab visible, use the left button of the mouse to click the name of the tab. There are four tabs: Tasks, Results, Viruses, and Help.

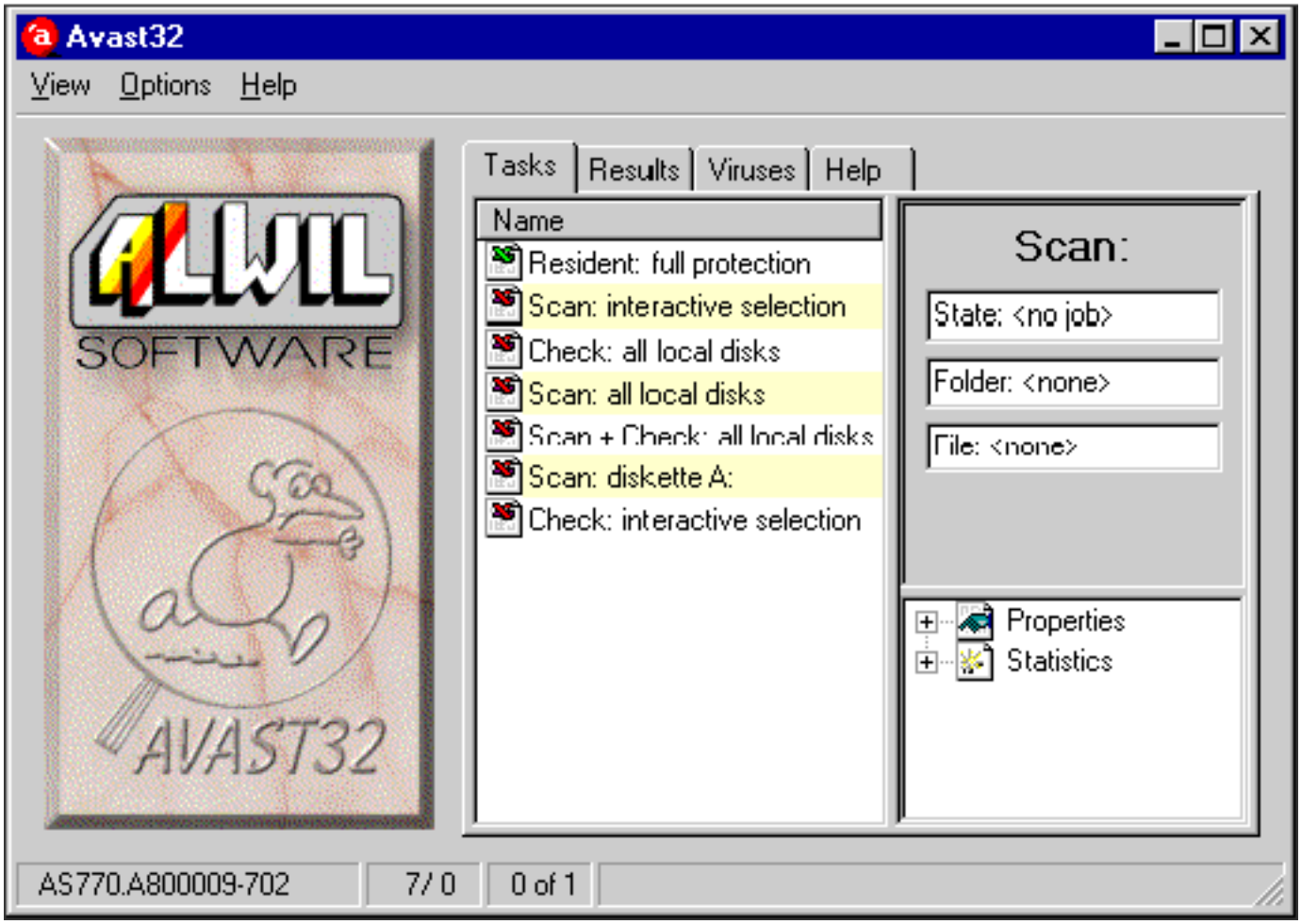

Fig. 69: “Enhanced” User Interface

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5.3.1 “Tasks” Tab

The “Tasks” tab is divided into three Pane views (Fig. 70). The left pane (as in windowpane) “Name” column contains the list of available tasks. Except for differences in the pop-up menu, the left pane works similarly to the “Names” text box in the “Simple” User Interface. The upper right and lower right panes of the page contains information on the status of an active task, its characteristics, and progress.

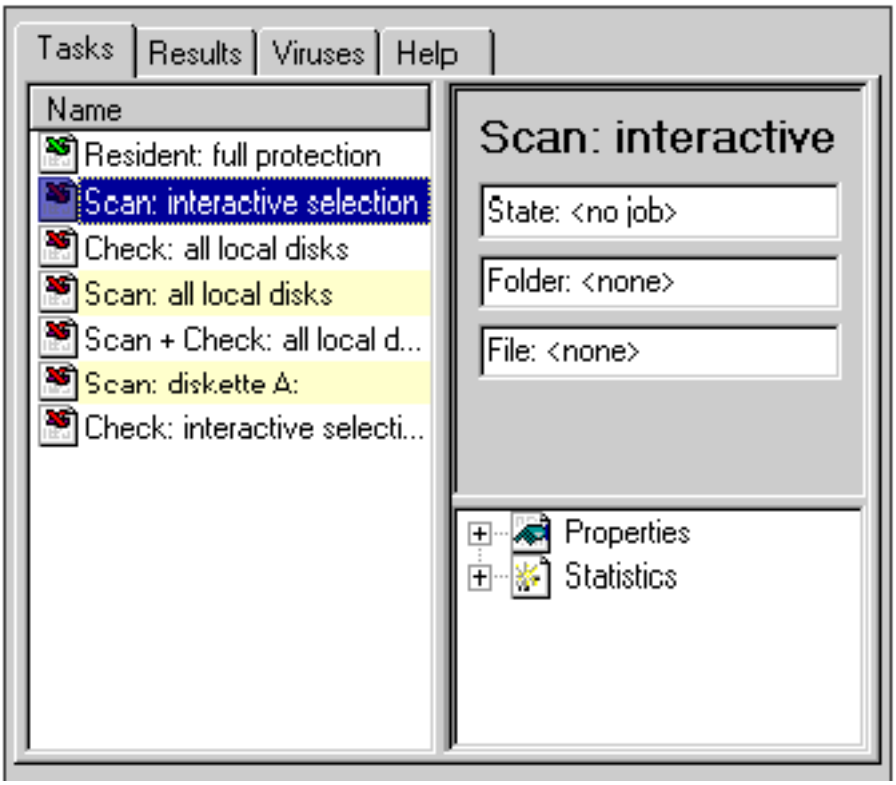

Fig. 70: “Tasks” Tab

The upper right pane shows the State, Folder & File connected to each name, and the lower right pane give a visual “Tree Control” of information about the Properties and Statistics for each task listed in the left pane. Information on the status of an active task is in the text boxes.

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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”) or the task has been started, but at the time being its run has been paused (<paused>“). The second text box contains the complete path to the folder of the task that is “RUNNING.” The last text box contains the description of the file being tested. If the active task is resident, only the information on the task state is displayed.

The lower right pane gives a visual “Tree Control” of information about the Properties and Statistics of each highlighted task name listed in the left pane. To find out more about a task in the left pane, use your left mouse button to select a task in the left pane. Then, use your left mouse button to click the plus sign in front of an item and you will “unpack” or see its information. Click on it again and you will “pack” or put away the information.

The “Properties” item in the visual “Tree Control” contains information relating to the task owner, tests performed during the task run, date of creation and date of the last utilization of the task. You will also find information on the total number of task start-ups since its creation.

The “Statistics” item in the visual “Tree Control” describes the number of the files found, files tested, files tested for viruses, integrity checked files, files which were not tested, virus infected files infected, and the number of the viruses found. All the statistics related to the selected task. If the active task checks, for example, data integrity, the item relating to the number of viruses found will always be zero!

If the active task (i.e. the task which selected on the task list) is currently running, the information is updated in real time. Thus, the user always knows its progress.

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5.3.1.1 “Tasks” Tab Pop-up menu

There is a specialized “Tasks” tab pop-up menu that appears when you use the right button of the mouse to click the name of appropriate task (Fig. 71). Besides the “Start,” “Stop,” and “Pause” menu commands, it contains “Add new…,” “Create Copy,” “Create Desktop Shortcut,” and “Show float help” commands.

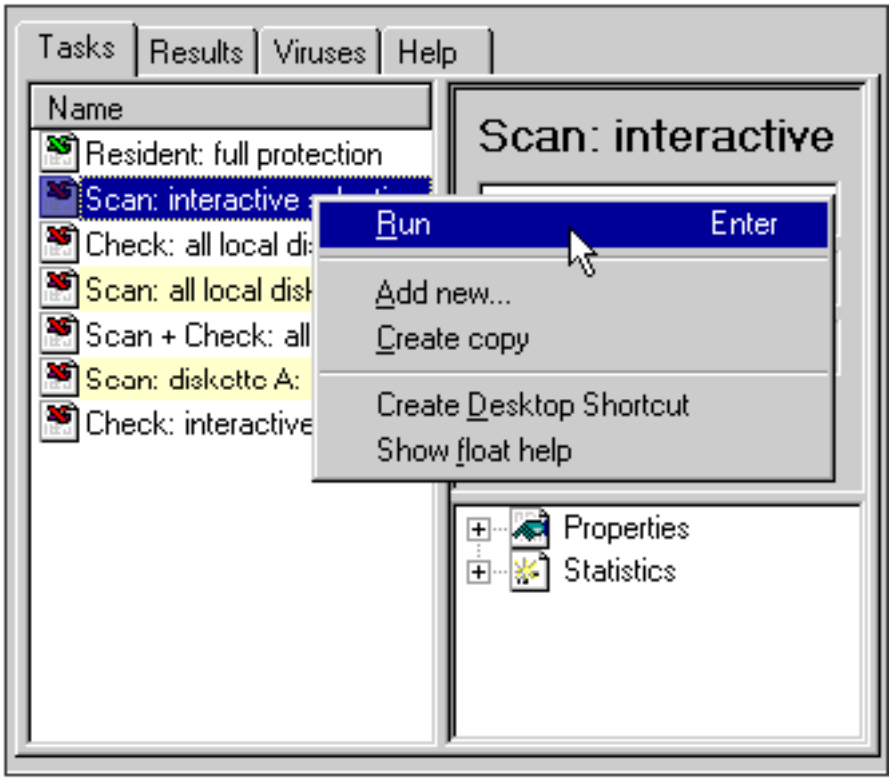

Fig. 71: “Tasks” Tab Pop-up Menu

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- The “Add new...” menu command is used to create new tasks. If you want to know more about creating new tasks, see Chapter 4: Create New Tasks.
- The “Create copy” menu command creates an exact copy of a highlighted task. The new task contains an identical set of parameters. AVAST32 names the new task “Copy <selected task name>."
- The “Modify...” menu command allows you to modify the task parameters. If you are familiar with creating tasks. For more information, see Chapter 4: Create New Tasks. You will find modifying a task to be similar.

If you press the “OK” button in the window while modifying a task, AVAST32 will modify the task. If you, however, press the “Cancel” button, AVAST32 will not change the task and the settings of all its parameters will remain unchanged.

- The “Delete” menu command deletes a selected or highlighted task from the list of tasks and removes it from the hard disk. After selecting the “Delete” menu command, AVAST32 will ask whether you really want to delete the task (Fig. 72). If you press the “Yes” button, it deletes the task from the list of available tasks and from the hard disk of the computer.

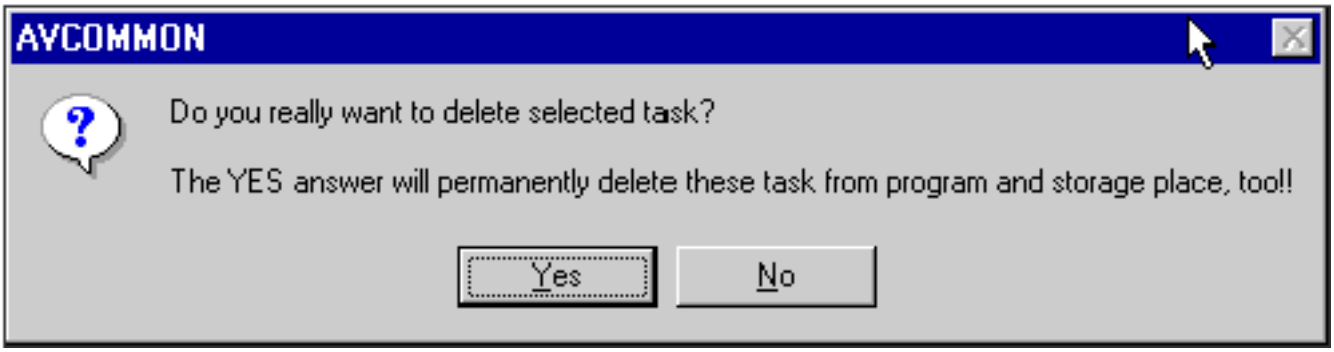

Fig. 72: “Delete” Menu Command Dialog

- The “Create Desktop Shortcut” command creates a shortcut to the task on the desktop of the computer. This shortcut can start the task without having to start AVAST32 first.
- The “Show float help” function displays the AVAST32 Help. You can also display Help by using the “F1” key.

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5.3.2 “Results” Tab

The “Results” tab contains the results of virus scanning or integrity checking tasks (Fig. 73). Note that the “Tree Control’s” in the left pane are similar to those found in Windows “Explorer” application. The right pane contains the columns: “Name,” “Infection,” “Attribs,” and “Content.”

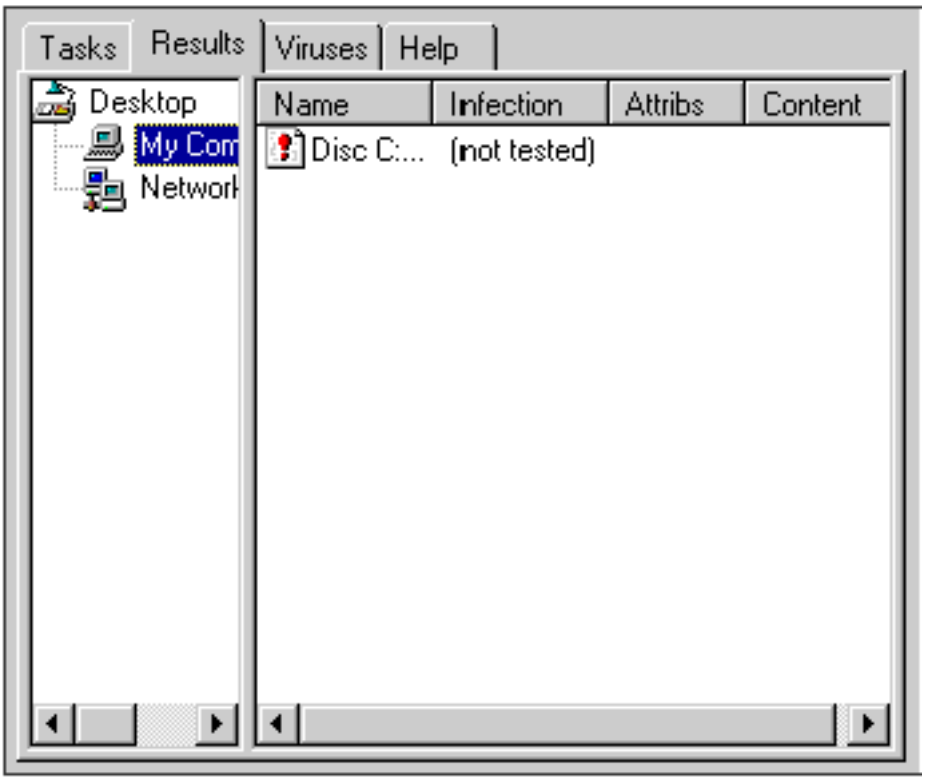

Fig. 73: “Results” Tab

AVAST32 sums the results of the tests in the folders found in the ““Tree Control”” of the left pane. You will find the location of suspicious files here; that is, those that show virus infection and those that have changed since the last check. “Changed” files are new files or those files that AVAST32 has not found in its internal database of files, such as deleted or moved files.

AVAST32 deals with the boot sectors of the disks and the memory in the same way it deals with files, which means that in case of changes AVAST32 inserts them into the “Tree Control." You will find them in the “My Computer” folder.

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AVAST32 inserts suspicious files into the “Tree Control” according to their real path on your hard drive. This means that if the tree contains a folder, this folder should contain the suspicious file. If you want to see if a folder has a suspicious file(s), use your left mouse button to select it. If there are any suspicious files, you will see them in the right pane of the “Results” tab in the “Name” column.

5.3.2.1 “Name” Column and Icons

AVAST32 adds an icon in front of each suspicious file name to help you figure out what has happened to a particular file.

5.3.2.1.1 “Blue” Plus Sign

A “blue” plus sign (Fig. 74) means that the file next to it is new and 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.

Fig. 74: “Blue” Plus Sign

5.3.2.1.2 Green Minus Sign

The “green” minus sign (Fig. 75) signals that a file is missing. If you, for example, have emptied the recycle bin since the last scan, AVAST32 will report files are missing from the “Recycled” folder. AVAST32 notifies you when temporary files disappear as well.

Fig. 75: “Green” Negative Sign

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5.3.2.1.3 “Red” Exclamation Mark

A “red” exclamation mark (Fig. 76) indicates that an error has occurred while working with the file. The error could occur for various reasons, the most frequent case, however, is an error accessing the file; i.e. the file is locked by another application.

Fig. 76: “Red” Exclamation Point

5.3.2.1.4 “Yellow” Question Mark

A “Yellow” question mark (Fig. 77) indicates that a file is a repaired OLE document and that AVAST32 is unsure of the file’s status after repairing or removing a macrovirus from the file. If you need to find out whether the file marked this way differs from the one that is stored in the database, you need to scan the integrity of the file again.

Fig. 77: “Yellow” Question Mark

5.3.2.1.5 “Green” Ball

A “Green” ball (Fig. 78) indicates, similarly to the yellow question mark, that a file has been corrected. Unlike the question mark, however, it will only appear next to a file that is not an OLE document and has successfully been corrected. The files marked this way are recorded in the database of the files.

Fig. 78: “Green” Ball

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5.3.2.2 The “Infection” Column

The “Infection” column contains the name of the virus with which the file is likely to have been infected. The column, however, is appropriate only on the condition that the file in question has really been scanned for the presence of viruses. If it has, and the column is empty, it means that none of the viruses known has been found in the file in question. However, if the column contains a virus name, the file is very likely infected! If the file has not been tested, the column contains the text “(not tested)."

5.3.2.3 The “Attribs” Column

The “Attribs” column shows changes in attributes and the date and time of the last recording. If the file integrity was checked, and the column is empty, this means the parameters of the file have not been changed since the time of the last scan. If this is not the case, the file contains “!!!” (three exclamation marks).

5.3.2.4 The “Content” Column

The “Content” column shows the content or the size of the file has changed. Under Windows NT, this column will also indicate the change in the security information of the file. If the file integrity has been checked and this column is empty, this means there have been no changes in the file content since the last scan. If this is not the case, the file contains “!!!” (three exclamation marks).

5.3.2.5 “Results” Tab Pop-up Menu

The “Results” tab pop-up menu (Fig. 79) always effects selected or highlighted files in the right pane or folders in the left pane of the page. The function selected for the folder in question will be performed with all the files that it contains, as well as with the files situated in all subfolders.

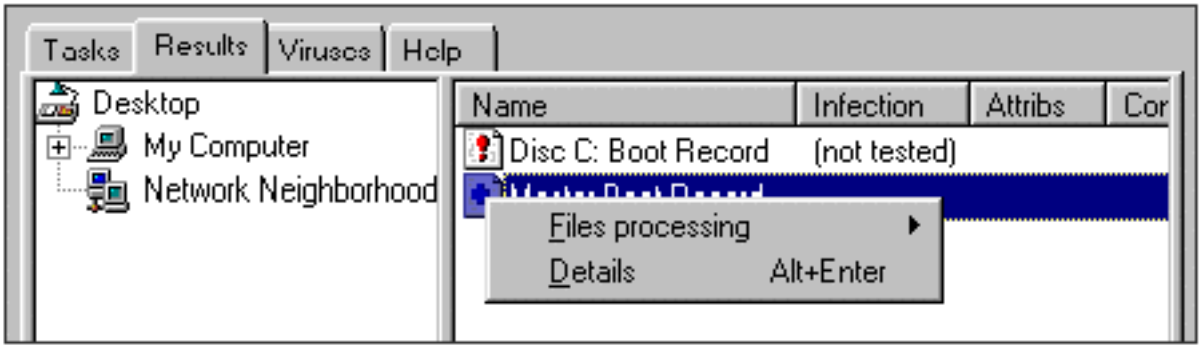

Fig. 79: “Results” Tab Pop-up Menu

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5.3.2.4 Results Tab "Details" Menu Title

Use the "Details" menu title to display the dialog that contains more information (Fig. 80). When you select it, a "Differences in selected files" dialog appears with information about the selected file (Fig. 67), such as its state, attributes, date of creation and the last modification, and the length of the file. It might also provide the name of the virus that infected the file. This original state of the file (it is stored in the internal database) and the current state of the file are both shown.

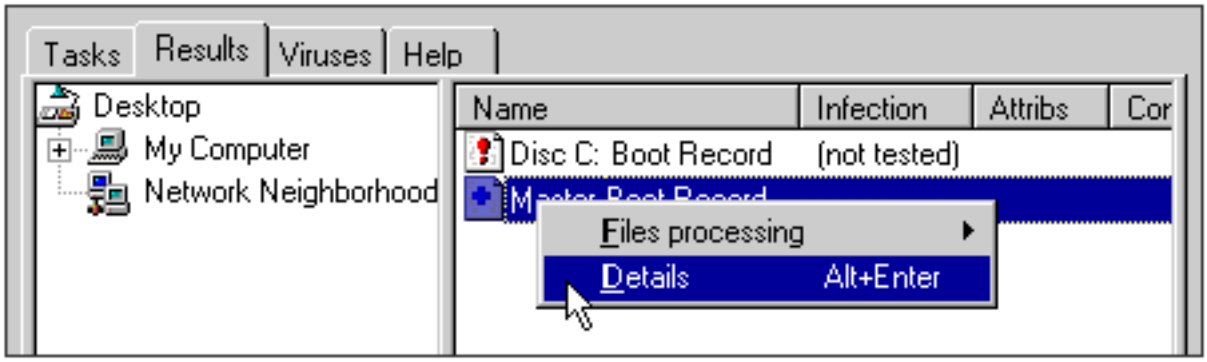

Fig. 80: "Details" Menu Title

You can also the hot key "Alt + Enter" can be used to display the dialog.

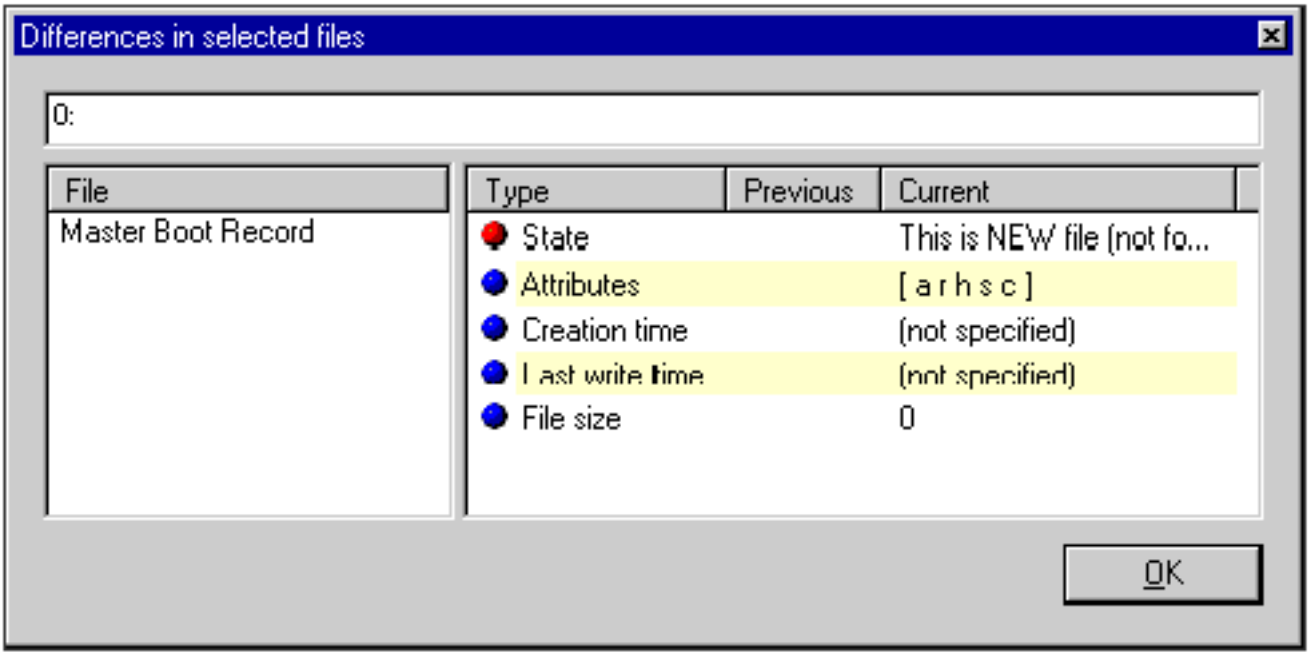

Fig. 81: "Differences in selected files" Dialog

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5.3.2.2.5 “File Processing” Menu Command

The “File processing” pop-up menu title (Fig 82) contains the menu commands for repairing and otherwise working with suspicious files. They are the “Accept,” “Repair,” “Move/Rename,” and “Delete” menu commands.

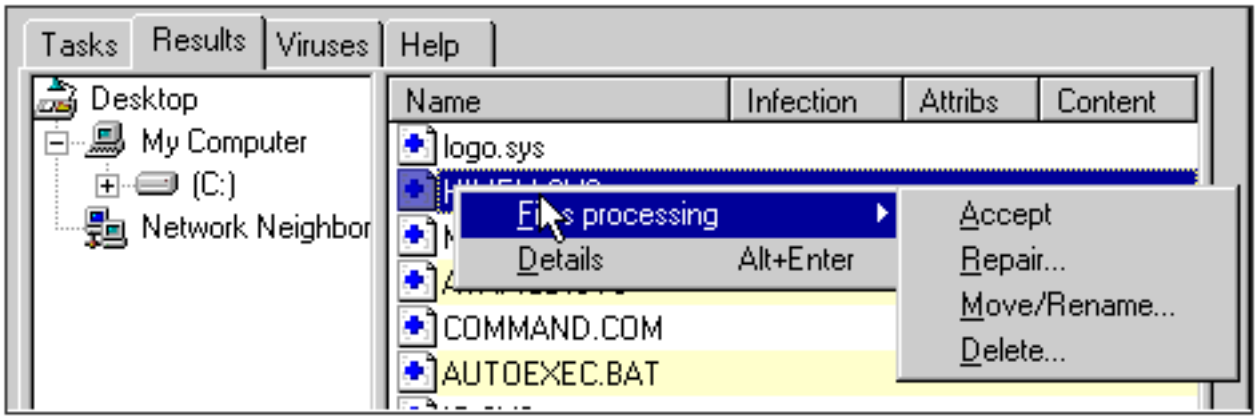

Fig. 82: “File processing” Pop-up Menu Title

5.3.2.5.1 “Accept” Menu Command

Use the “Accept” menu command to let AVAST32 know that you are aware of the changes in files and that it should not report them any more. “Accepted” files disappear from the list of suspicious files and, if there are no more suspicious files in the original folder, the folder disappears as well. The ”Accept” menu command also records the current state of the file into the internal database. This means that the file’s current state will be the “start state” next time you scan the integrity of your files.

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5.3.2.5.2 “Repair” Menu Command

Use the “Repair...” menu command to return marked files to their original state. When you select the file and the “Repair...” menu command, you will see the dialog illustrated in Fig. 83. The “Repair...” menu command has several options depending on whether the file to be corrected is an OLE document or a non-OLE document. Press the “Repair” button to repair the file. Press the “Cancel” button to close the dialog without changing files.

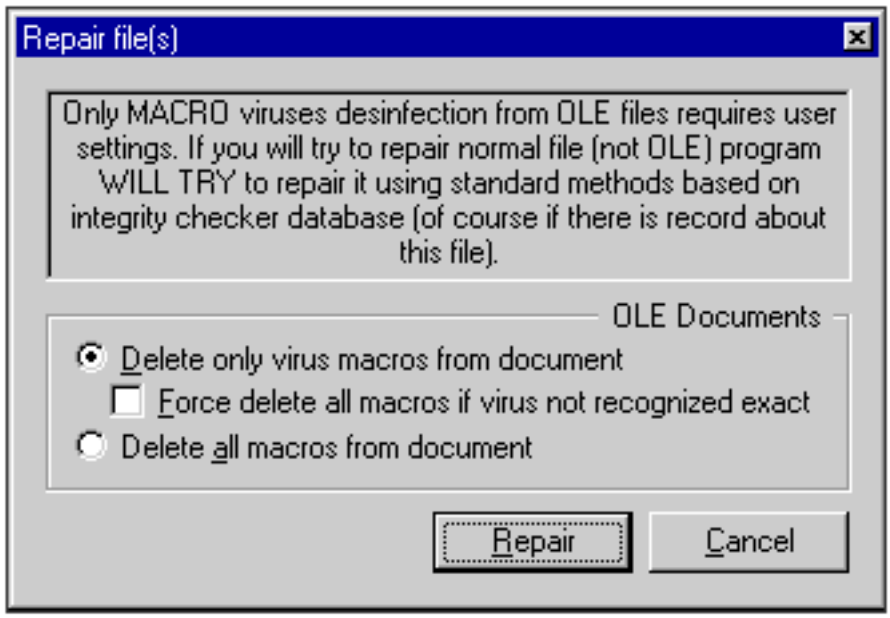

Fig. 83: “Repair...” Menu Command

You can repair up to 95% of the infected files if you use integrity checking scans. If you want to repair the files successfully, you need to periodically update the AVAST32 File Database. To do this, run the “Scan + Check: All local disks” task or the “Check: All Local Disks” task from time to time, and to record authorized changes in the files into the internal database with the “Accept” command.

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5.3.2.5.2.1 Repair an OLE Document

If AVAST32 is repairing a file that is an OLE document, you will be able to preset some parameters. If it is repairing a file that is not an OLE document, any presets will be ignored. The default setting is to remove only those macros that contain a virus. If AVAST32 is repairing a file that is an OLE document, you have several options:

- CHECK (✓) or turn "ON" the "Delete only virus macros from the document" radio button to only remove macros from documents that contain a virus. The other macros will remain untouched.
- CHECK (✓) or turn "ON" "Delete all macros from document" radio button to remove all macros from an OLE document, whether they contain a virus or not.
- CHECK (✓) or turn "ON" the "Force delete all macros if virus not recognized exactly" radio button to remove all macros even if a virus is only partially recognized.

5.3.2.5.2.2 Repair a Non-OLE Document

If you are repairing a non-OLE document, AVAST32 will try to repair an infected or changed file using the AVAST32 File Database that was created when you ran the "Scan + Check: All local disks" task or the "Check: All Local Disks" task. This is how AVAST32 repairs selected files. It records important information on the status of individual files, such as checksums and contents and compares the current results against the previous file profile.

The AVAST32 algorithms used to repair files are only able to repair the files infected by a virus. Thus, they cannot be used to repair or undo edits from rewritten or edited files.

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5.3.2.5.2.3 The “Move/Rename...” Menu Command

Use the “Move/Rename...” menu command to move the suspicious files to another folder or to rename them. When you use the left mouse button to select the “Move/Rename...” menu command, a dialog will appear (Fig. 84).

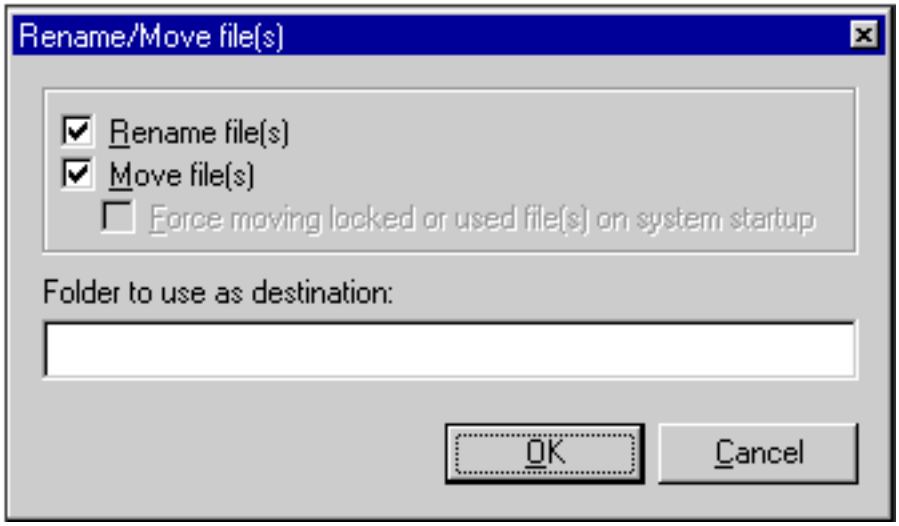

Fig. 84: “Move/Rename...” Dialog

This dialog contains three check boxes, the “Rename file(s),” “Move file(s), and “Force moving locked or used file(s)” check boxes.

5.3.2.5.2.3.1 “Rename file(s)” check box

Use the “Rename file(s)” check box to change the extension of marked files. You would do this if you wanted to renamed a file to distinguish it from the other similar files or if you wanted to prevent an executable file from running. If the file contained a virus, it could lead to the infecting the computer. Once a file is renamed, the existing extension is replaced with the new one. The proper name of the file will remain unchanged.

If the program finds an unknown type of the file during the renaming, it will ask you how the extension 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 the same extension.

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5.3.2.5.2.3.2 “Move file(s)” check box

CHECK (✓) or turn “ON” the “Move file(s)” check box to move selected files to a new folder. Once the check box is turned “ON,” enter the path to the folder where you want to move the files. Enter in the “Folder to use as destination” text box.

Use the “Force moving locked or used file(s) on next OS startup” check box if you want to move the selected files the next time you start your computer. This is great if you want to save time and have the computer help you with the task the next time you restart your computer.

The default is that “Move file(s)” check box and “Force moving locked or used file(s) on next OS startup” check box are checked or turned “ON.”

5.3.2.5.2.4 The “Delete...” Menu Command

The last command in the “File processing” pop-up menu is the “Delete...” menu command. When selecting it, you will see a dialog that offers two ways of deleting files (Fig. 85); the “Delete file(s) using Recycle bin” radio button and the “Delete file(s) unrecoverable” radio button.

Fig. 85: “Delete Files” Dialog

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5.3.2.5.2.4.1 "Delete file(s) using Recycle bin" Radio Button

CHECK (✓) or turn "ON" the "Delete file(s) using Recycle bin" radio button if you want to delete the marked files by moving them to the recycle bin. If you do this, you can restore the deleted files at any time. This is highly recommend for less experienced users.

If you use Microsoft Windows NT version 3.51, this radio button will not be available to you and you will have to use the "Delete file(s) unrecoverable" procedure.

5.3.2.5.2.5 "Delete file(s) unrecoverable" Radio Button

CHECK (✓) or turn "ON" the "Delete file(s) unrecoverable" radio button to delete unrecoverable files. Once this procedure is used, you will not be able to restore them.

If the "Delete file(s) unrecoverable" radio button is selected, the check box "Force deleting lock or used file(s) on next system startup" will be available. If you cannot delete the file (e.g. it is used by another application), you can wait to delete it the next time you restart your computer system.

The "Force deleting lock or used file(s) on next system startup" is NOT CHECKED or "OFF" by default. The "Delete file(s) using Recycle bin" radio button is checked or turned "ON" by default. After pressing the "Delete" button all the marked files will be deleted in the way selected. The "Cancel" button will close the dialog.

5.3.3 "Viruses" Tab

Use your left mouse button to click the "Viruses" tab if you are interested in more detailed information about viruses that AVAST32 currently recognizes. This page contains a complete, alphanumerically sorted list of all the basic types of viruses.

The "Virus" tab is similar to the other tabs in that it is divided into left and right panes. Note that the "Virus" tab "Tree Control's" in the left pane are similar to those found in Windows "Explorer" application. The left pane is filled with alphabetically arranged folders. Each folder contains with the names of viruses.

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The top right pane contains the columns that describe the characteristics of each virus. The columns are named: “Name,” “File,” “Macro,” “Boot,” “Memory,” “ITW,” and “Care.” The bottom right pane contains a description of a virus that you have selected in the top right pane.

5.3.3.1 “Name” Column

To find a particular virus like the Azusa-B virus (Fig 86), use your left mouse button to click the “A” folder in the left column. Once you do that, the names of all the viruses beginning in “A” will appear in the “Name” Column in the left pane. Scroll down until you see the Azusa-B virus.

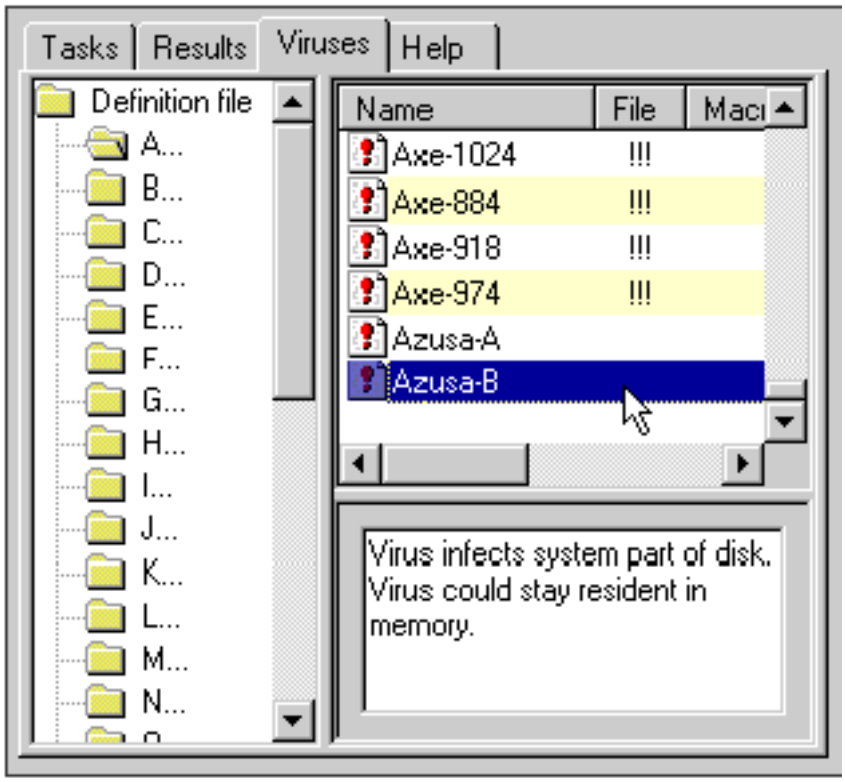

Fig. 86: “Name” Column

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5.3.3.2 File, Macro, Boot, Memory Columns

The File, Macro, and Boot columns (Fig 87) in the upper right pane name a specific virus and how it can infect your computer. Viruses can infect a part of an executable file; as a macro in certain document ("macroviruses"); or by rewriting your hard disk's boot sector (the sector which is read when you start up your computer). If there is a "!!!" (three exclamation marks) under the File, Macro, and/or Boot column, it means that this virus can infect the computer system that way.

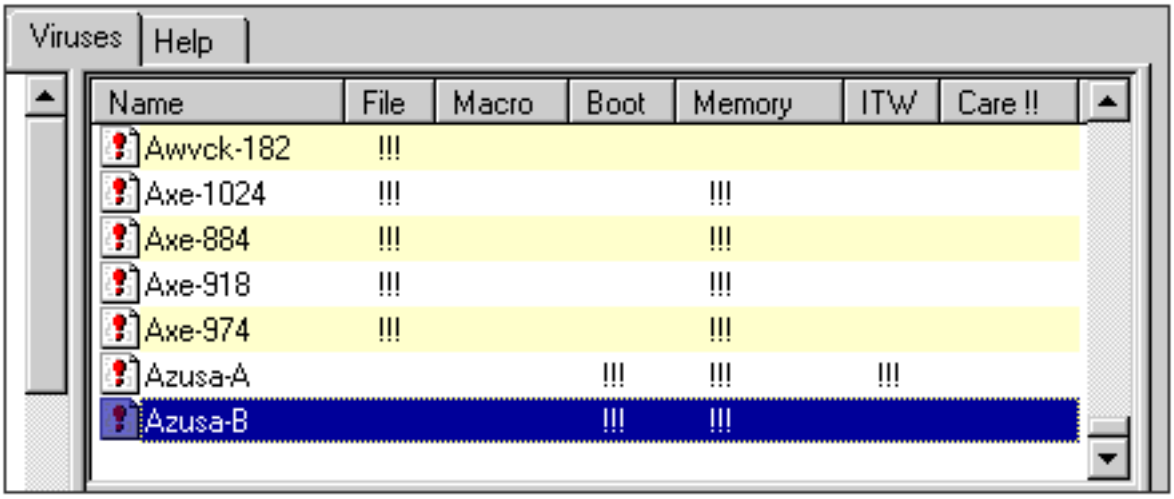

Fig. 87: File, Macro, and Boot Columns

5.3.3.2 Memory, ITW, and Care!! Columns

The "Memory" column notes whether the virus may be present in the operating memory of the infected computer (if it is a resident task). The ITW column notes whether the virus is situated on the ITW list, which is the list of the most frequent-found viruses. The Care!! Column (for "Take Care!!") warns you that a virus is dangerous to remove or alter. Trying anything may seriously damage your data. Only an expert should remove these viruses! Please call our technical support department!

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5.3.4 “Help” Tab

The “Help” tab contains the AVAST32 Help (Fig. 88). If you have problems with AVAST32, we ask you to look through the help files first. If you do not find what you are looking for there, contact our technical support Appendix A: Contact SecureNet.

You must have Acrobat Reader installed on your computer to display AVAST32 Help. If you do not have it installed, you must exit AVAST32. After you install the Acrobat Reader (which is included on the AVAST32 CD-ROM or diskettes), then start AVAST32 again.

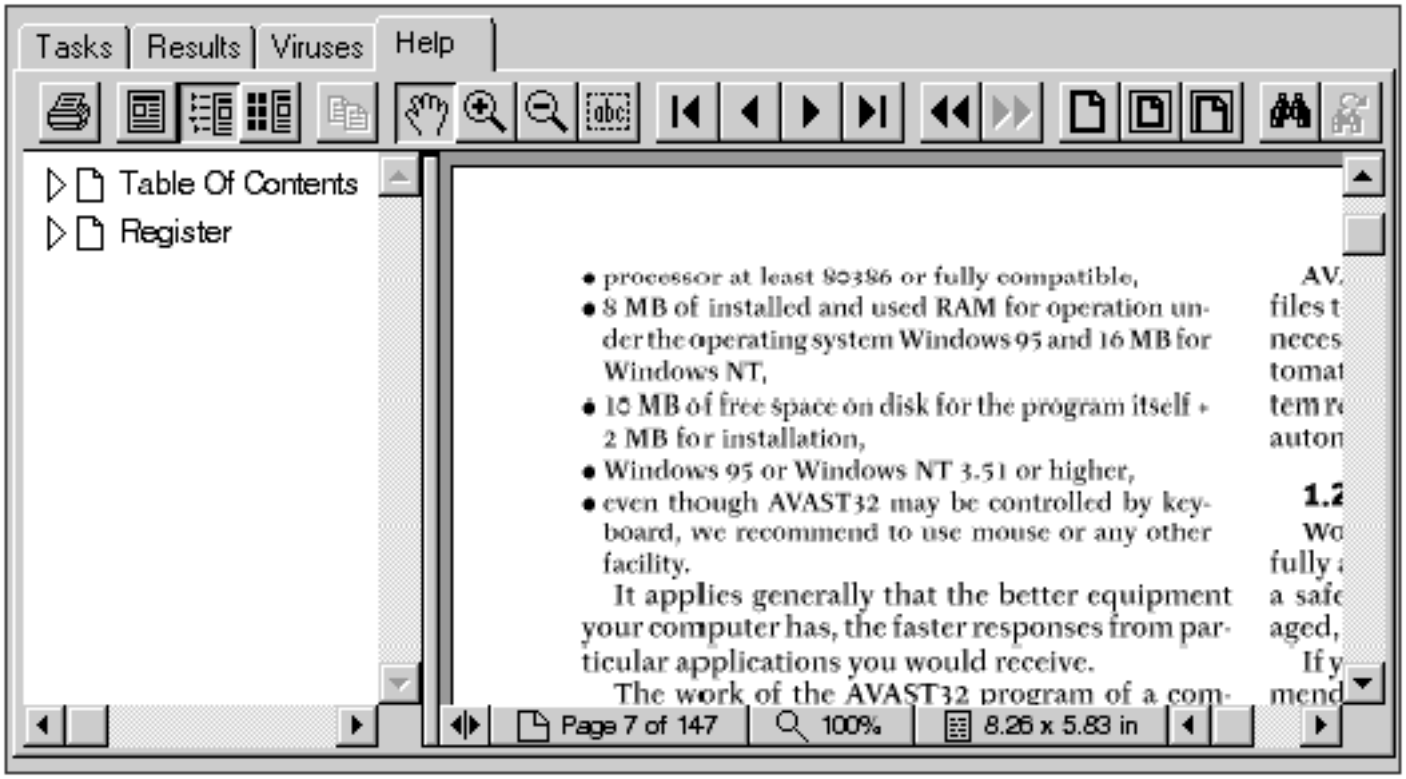

Fig. 88: “Help” Tab

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5.3.4.1 Floating “Help” Window

The AVAST32 Help can be either a part of AVAST32 as the “Help” tab, or in a “floating” window. The “Floating Help” window is an unattached window that and can be placed anywhere on the screen (Fig. 89).

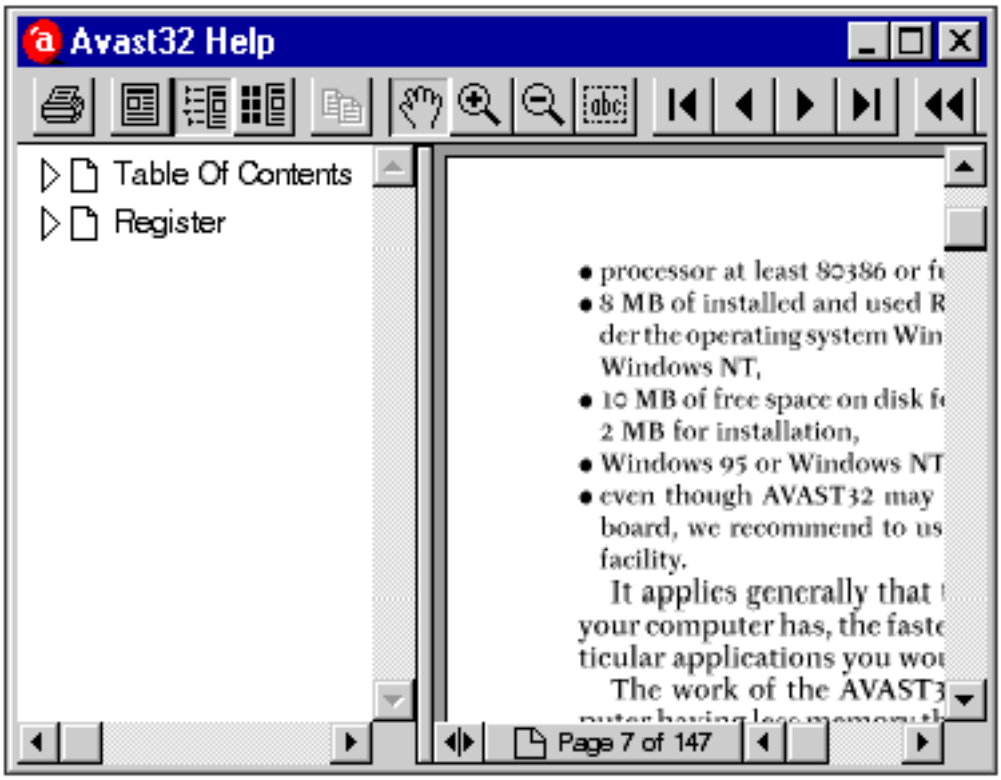

Fig. 89: AVAST32 ““Floating Help”” Window

The ““Floating Help”” window can be called up from a pop-up menu or by pressing the F1 key. To close the “Floating Help” window, press on the “Esc” key.

If the “Floating Help” window is open, you cannot access Help via the “Help” tab. Other than that, controls used to operate the “Help” tab or ““Floating Help”” window are the same.

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5.3.4.2 Help Tab and Floating “Help” Window Controls

There are six sets of buttons that you can use to operate the Help text: The Help “Printer” button, the Help “Views” buttons, the Help “Text” buttons, the Help “Movement” buttons, the Help “Size” buttons, and the Help “Find” and “Search” buttons.

5.3.4.2.1 Help Printer Button

The AVAST32 “Printer” button (Fig. 90) is used to print all or part of AVAST32 Help text.

Fig. 90: AVAST32 Help Printer Button

When you use your left mouse button to click on it, a “Print” dialog will appear that will allow you to select the print range, print quality and copies to print. You also have the options of printing to a file or fitting the printed page on the size of paper you have in your printer.

5.3.4.2.2 Help Views Buttons

The next three buttons (Fig. 91) help you to see several AVAST32 Help views.

Fig. 91: AVAST32 Help “Views” Buttons

If the first button, the AVAST32 Help “Page” button, is pressed, only Help text is displayed.

If the next button, the AVAST32 Help “Bookmarks and Page” button, is pressed, a left pane will open and any AVAST32 Bookmarks will be displayed. Bookmarks can be a hypertext list of chapters and sections within the AVAST32 Help Text (note: not used at this time).

If the third button, the AVAST32 Help “Thumbnails and Page” button, is pressed, a left pane will open and small pictures of each AVAST32 Help page are displayed. To move to a particular page, use your left mouse button to click the picture of that page.

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5.3.4.2.3 Help Text Buttons

The following four buttons (Fig. 92) allow you to manipulate the Help text. Note that each time you click on a button, the mouse pointer changes to look like that button:

Fig. 92: AVAST32 Help Text Buttons

If you select the first button, the “Hand” button, the mouse pointer changes into a Hand pointer and you will be able to move the text page within the help window. If you place the Hand pointer in the Help window and press the left mouse button, you can move the text page around

If you select the second button, the “Zoom-in Magnifying Glass” button, the mouse pointer changes into a Plus Magnifying Glass pointer and can be used to magnify the text. If you place the Plus Magnifying Glass pointer in the Help window and press the left mouse button, it magnifies the text to twice its size.

If you select the third button, the “Zoom-out Magnifying Glass” button, the mouse pointer changes into a Minus Magnifying Glass pointer and can be used to reduce the text. If you place the Minus Magnifying Glass pointer in the Help window and press the left mouse button, it reduces the text to half its size.

If you select the fourth button, the “Text Selection” button, the mouse pointer will change into a Text pointer and can be used to select Help text. If you place the Text pointer in the Help window, press and hold the left mouse button, and draw the Text pointer across the text—you will be able to copy the text. You can do this by pressing the Control key and the “C” keys or by using the Copy menu command under the “Edit” menu title after you select the text.

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5.3.4.2.4 Help Movement Buttons

The following six buttons (Fig. 93) move you through the Help text (the other parameters, such as “Zoom,” will remain unchanged):

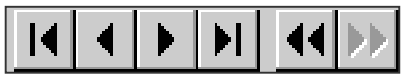

Fig. 93: AVAST32 Help Movement Buttons

Press the first button, the “First Page” button, to go back to the first page of the Help.

Press the next button, the “Previous Page” button, to go back one page in the AVAST32 Help text. Press the next button, the “Next Page” button, if you want to go forward one page in the AVAST32 Help text. Press the “Last Page” button if you want to go to the last page of the AVAST32 Help text.

The next button, the “Go Back” button, remembers where you have been and can step you back through your trip through the AVAST32 Help text. Unlike the “Back” button, it is not limited to linear steps. The next button, the “Go Forward” button, remembers where you were before you used the “Go Back” button and can step you forward to your original spot in the Help text. Unlike the “Next Page” button, it is not limited to linear steps.

The “Previous Page” button is “grayed out” (or NOT selectable) if you are on the first page. The “Next Page” button is “grayed out” (or NOT selectable) if you are on the last page.

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5.3.4.2.6 Help Size Buttons

The following three buttons (Fig. 94) change the help page size according to preset dimensions:

Fig. 94: AVAST32 Help Size Buttons

The first button, the “100% Zoom” button, resets the page size to 100% no matter how big the Help window is. The second button, the “Fit Page in Window” button, fits the total page to the space available in the Help window. The third button, the “Fit Page Width in Window” button, fits the page width to the space available in the Help window. If the width of the window changes, the width of the displaying of the page changes as well.

5.3.4.2.7 Help Find & Search Buttons

The following three buttons (Fig. 95) find text in the AVAST32 Help text:

Fig. 95: Help Find & Search Buttons

The first button, the “Find” button, finds any text in the AVAST32 Help text. The second button, the “Find Again” button, repeats the last search. The third and fourth button, the “Search Previous” button and the “Search Next” button, search through all special indexes of documents created with Adobe Acrobat Catalog. The “Find” button looks for words by reading every word on every page. By comparison, the “Search Previous” button searches full-text indexes created by Adobe Acrobat Catalog.

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5.4 Find Virus Dialog

If a task like “Scan: interactive selection” finds a virus, AVAST32 displays a warning dialog (Fig. 96). The text will change depending on the task that found the virus and the virus that is found.

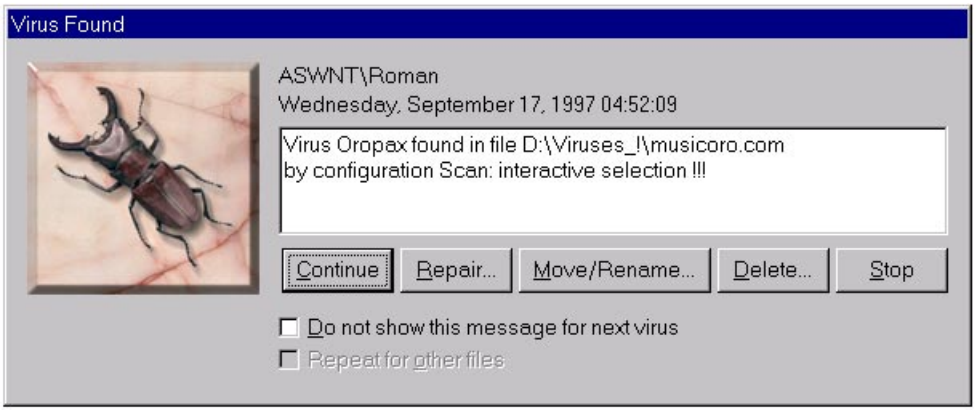

Fig. 96: “Scan: interactive selection” Warning Dialog

- Use the “Continue” button to inform AVAST32 that it should continue running the task in question. For more information about fixing the infected file, see 5.3.3 “Viruses” Tab.
- Use the “Repair...” button to repair the infected file. After repairing the file, you may continue performing the task.
- Use the “Move/Rename...” button to move the infected file to another folder and/or to change its extension. After moving and/or renaming the file, the task will continue running.
- Use the “Delete...” button to delete the infected file from the disk. After the dialog closes, the task that found the virus will continue to run.
- Use the “Stop” button to stop the current task from running.

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The virus-warning dialog has two other options.

- CHECK (✓) or turn “ON” the “Do not show this message for next virus” check box to request that AVAST32 NOT display the warning message if it finds another virus during the run of the current task. This check box is NOT CHECKED or turned “OFF” by default.
- CHECK (✓) or turn “ON” the “Repeat for other files” check box if you want AVAST32 to continue to find other infected files. The check box is only available if the “Do not show this message for next virus” check box is NOT CHECKED or turned “OFF.” This check box is NOT CHECKED or turned “OFF” by default.

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5.5 Select Areas to Test Dialog

Occasionally AVAST32 will require you to select files, folders, and possibly entire disks for tests. The “Open” dialog (Fig. 97) that appears enables the user to select one or more files, folders or disks at the same time, making the job of testing a little easier.

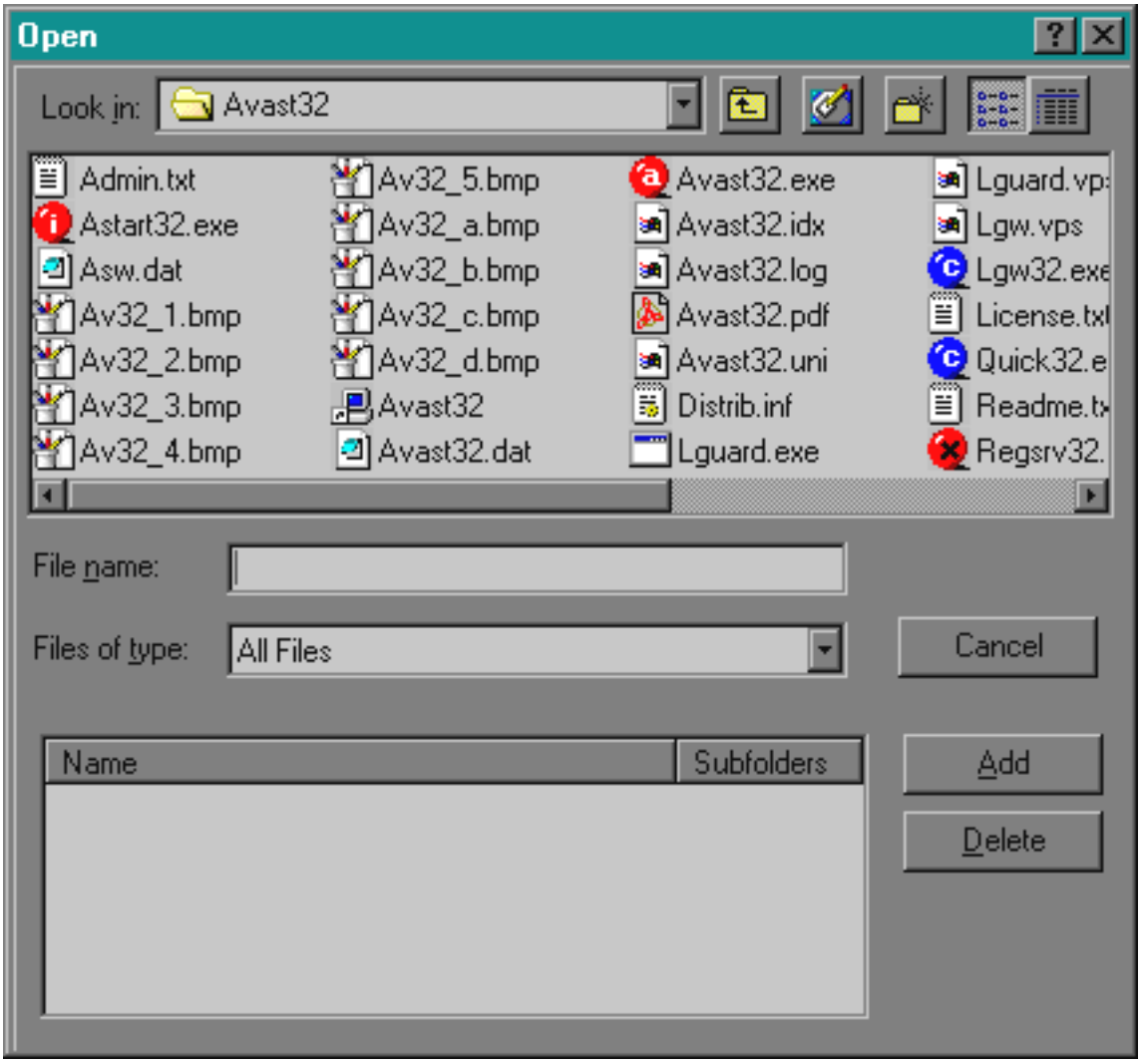

Fig. 97: “Select the Areas to Test” Dialog

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When the dialog appears, the user selects the required file, folder, or entire disk by using the left mouse button to select the item. You then click the “Add” button to add the selected item to the list in the lower part of the dialog. This way the user will continue until the list contains all the areas that need testing are in the list.

If you made a mistake during your selection, or if you simply do not want to test one or more of the selected areas, simply remove it from the list. Remove by selecting it, then pressing the “Remove” button. Testing will NOT be performed on any area removed from the list.

Once you have selected all of the areas you want to test, click the “OK” button and the testing will begin. If you press the “Cancel” button (or if you close the dialog in any other way), all tests on selected areas will be canceled.

- End Chapter 5 -

CHAPTER 6

CUSTOMIZE AVAST32

Use the “Options” menu title to customize AVAST32. There are six menu commands under the “Options” menu title: Main console…, Resident protection…, Command line scanner…, License…, Common…, and Update Virus Database….

Selecting any menu title opens a dialog with tabs. Each tab is marked with balls of different colors. Generally, inexperienced users can safely use controls marked with a “Blue” ball. However, those marked with a “Red” ball are for experienced users only. If you decide to change any of the “Red” ball options, please understand that they can seriously affect the functionality of AVAST32.

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6.1 "Main Console..." Menu Command

When you select the "Main Console" menu command, a tabbed dialog will appear with four Tabs: Basic, Enhanced, Files, and Warning.

6.1.1 "Basic" Tab

The "Basic" tab allows you to customize AVAST32 (Fig. 98). AVAST32 allows user to maintain individual settings. Changes in settings here will not take effect until you restart the program.

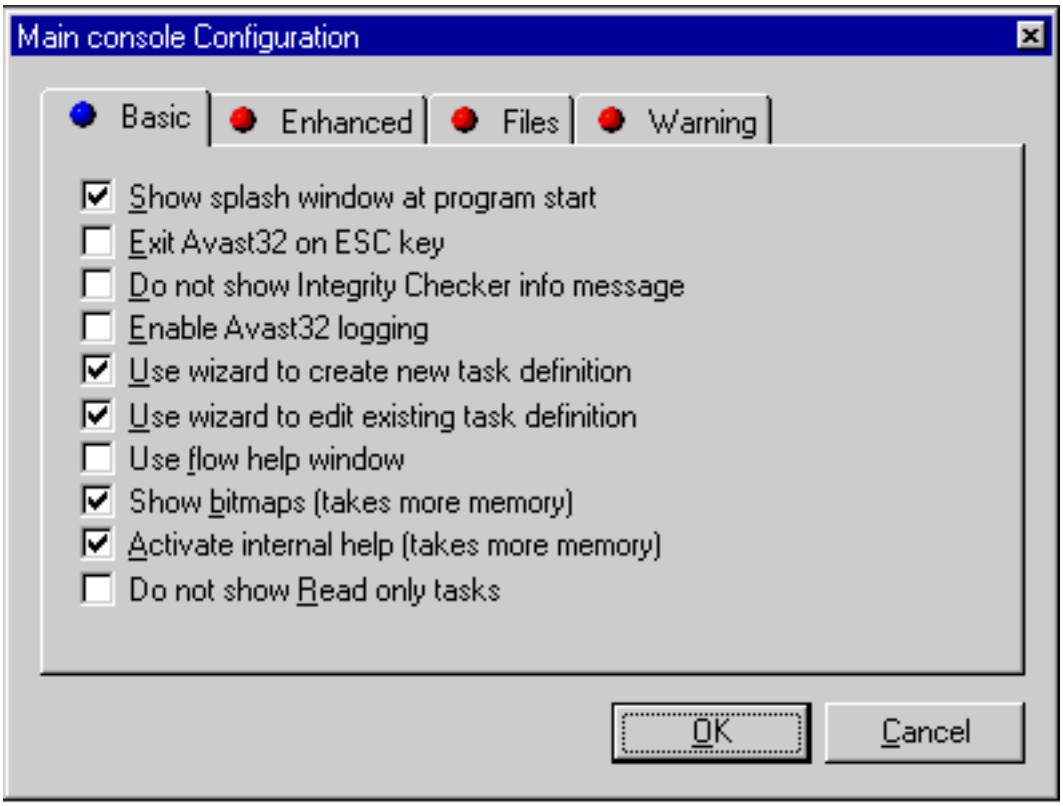

Fig. 98: "Basic" Tab

- CHECK (✓) or turn "ON" the "Show splash window at program start" check box to show the AVAST32 splash window when you start the program. Do NOT CHECK or Turn "OFF" this option if you want to speed up the program start or just avoid the splash screen. This check box is CHECKED (✓) or turned "ON" by default.

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- CHECK (✓) or turn "ON" the "Exit Avast32 on Esc key" check box if you want to be able to quit AVAST32 by pressing ESC key. This is useful for experienced users who prefer shortcut keys. This check box is NOT CHECKED or turned "OFF" by default.
- CHECK (✓) or turn "ON" the "Do not show Integrity Info message" check box if you do not want to display integrity checking message dialogs. If this check box is NOT CHECKED or turned "OFF," a message dialog appears when at least one of tested file has been changed. It also includes a prompt to display task results. When the "Yes" button is pressed, the "Enhanced" User Interface "Results" tab appears. This check box is CHECKED (✓) or turned "ON" by default.
- CHECK (✓) or turn "ON" the "Enable Avast32 logging" check box to enable logging. This means that all AVAST32 activities will be logged in the "AVAST32.log" text file located in AVAST32 folder. This includes information about viruses that are found and different users as well. This check box is NOT CHECKED or turned "OFF" by default.

If you are using Windows NT, AVAST32 will try to write log information into the system log file. You can view this file via the "Event Viewer" program in the "Programs/Administrative tools" folder. If the program is unable to write to the system log file, it will write log information in the "AVAST32.log" text file located in AVAST32 folder. Logging works particularly well in the network environment as it makes it possible to scan the activity of individual users.

- CHECK (✓) or turn "ON" the "Use wizard to create new task definition" check box to activate the Task Wizard that will guide you through the creation of a new task (see Chapter 4: Create New Tasks). We recommend beginning users CHECK this check box. This check box is CHECKED (✓) or turned "ON" by default.
- CHECK (✓) or turn "ON" the "Use Wizard to edit existing configuration" check box to activate the Task Wizard, when you change existing tasks (see Chapter 4: Create New Tasks). This check box is CHECKED (✓) or turned "ON" by default.

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- CHECK (✓) or turn “ON” the “Use “Floating Help” window” check box to open the AVAST32 Help in a floating window. This check box is NOT CHECKED or turned “OFF” by default.
- CHECK (✓) or turn “ON” the “Show bitmaps” check box to display bitmap images in the AVAST32 main window. The images illustrate the activities that will be performed and make working with the program more pleasant. Their use, however, requires more RAM memory, so if you do not have enough RAM memory, or if you simply do not care for the pictures, do not CHECK (✓) or turn “ON” the check box. The check box can only change AVAST32 – it will not remove the images in the WARN32 and QUICK32 dialogs. This check box is CHECKED (✓) or turned “ON” by default.
- CHECK (✓) or turn “ON” the “Active internal help” check box to automatically launch AVAST32 Help and keep it in memory. If the check box is NOT CHECKED, the AVAST32 Help will only be loaded at the user's request; i.e., after the selection of the appropriate item of the menu, or after pressing the “F1” key. If you have enough operating memory and if you often look up information in the AVAST32 Help, we recommend checking the box as it helps display AVAST32 Help faster. This check box is CHECKED (✓) or turned “ON” by default.

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6.1.2 "Enhanced" Tab

Changes in the "Enhanced" tab (Fig. 99) are global in nature in that changes are stored with AVAST32. This means these changes will affect all users of a particular computer. Changes on this tab will take effect after program restart.

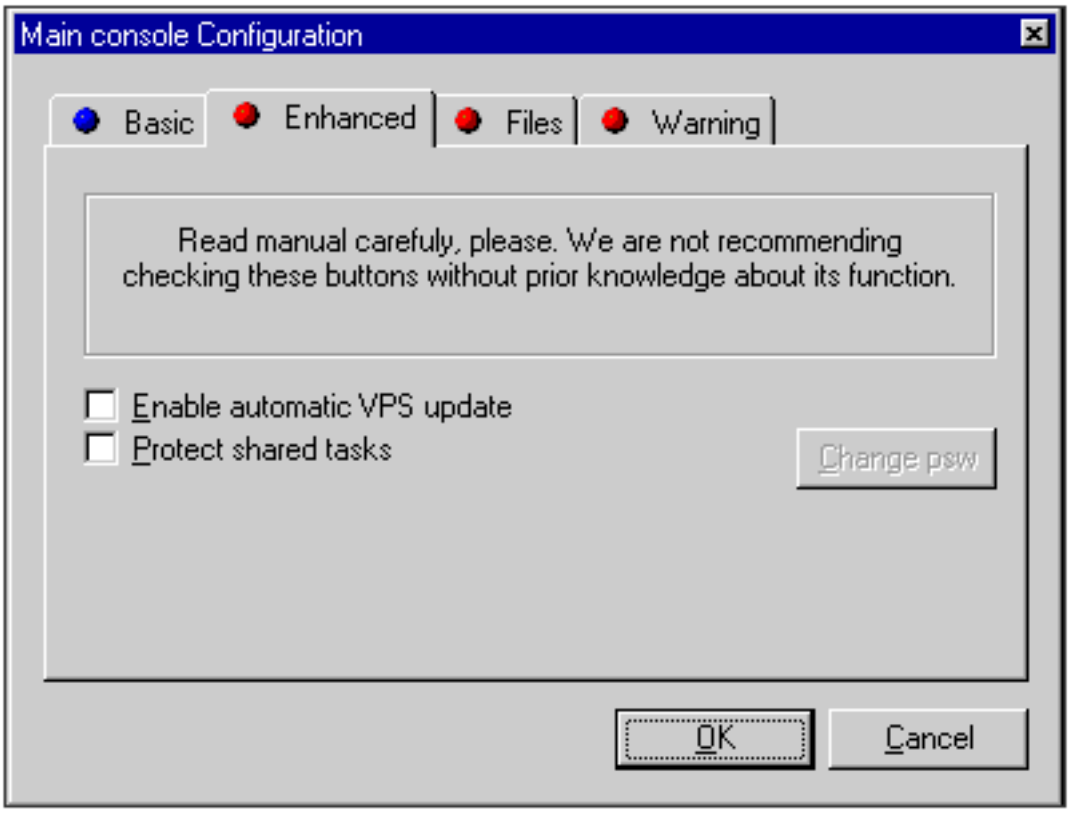

Fig. 99: "Enhanced" Tab

- CHECK (✓) or turn "ON" the "Enable Automatic VPS update" check box to automate the VPS file update. The VPS contains the database of known viruses. If the check box is CHECKED (✓) or turned "ON," AVAST32 will automatically search the preset folder (Chapter 6.6, the text box "Source filename") after its start-up. If it finds a newer file than the existing one, it automatically replaces the existing .VPS file with the newer one. Otherwise, nothing will happen with the existing .VPS file. This check box is NOT CHECKED or turned "OFF" by default.

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- CHECK (✓) or turn "ON" the "Protect shared tasks" check box to protect shared tasks by setting up a password. After you have checked or turned "ON" the "Protect shared tasks" check box, a "Change Password" dialog appears (Fig. 100). Once you have activated password-protection, you can only disable password protection if you know the current password.

Fig. 100: "Change Password" Dialog

6.1.2.1 Enter a Password for a Shared Task

If shared tasks are password-protected, only users with a valid password can edit, make a private copy of such a task, or create a desktop shortcut. No actions will be permitted without a valid password. The "Get Password" dialog allows you to change a password-protected task (Fig. 101).

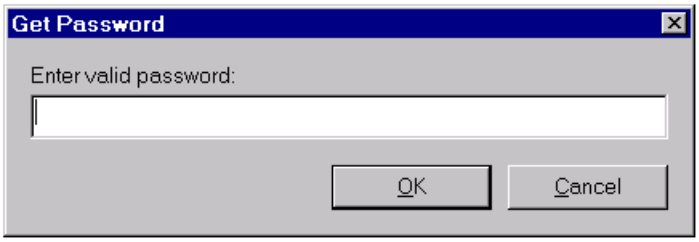

Fig. 101: "Get Password" Dialog

If the password is correct, you can change the task. You are required to enter the password only once each session as the program remembers the correct password. Entering a password is only required when restarting AVAST32.

Once a task is password-protected, AVAST32 adds a “Change psw” button to the “Enhanced” tab on the “Main Console Configuration” dialog. If you use your left mouse button to press it, a dialog will appear that will ask for the valid password before you can change the task in question. If you do not have the current correct password, you will not be able to change the password!

6.1.3 “Files” Tab

The “Files” tab (Fig. 102) allows you to select which file types an AVAST32 task can affect. Please note that changing the controls on this tab will change for all the users of this computer. The changes will take effect after the program restart.

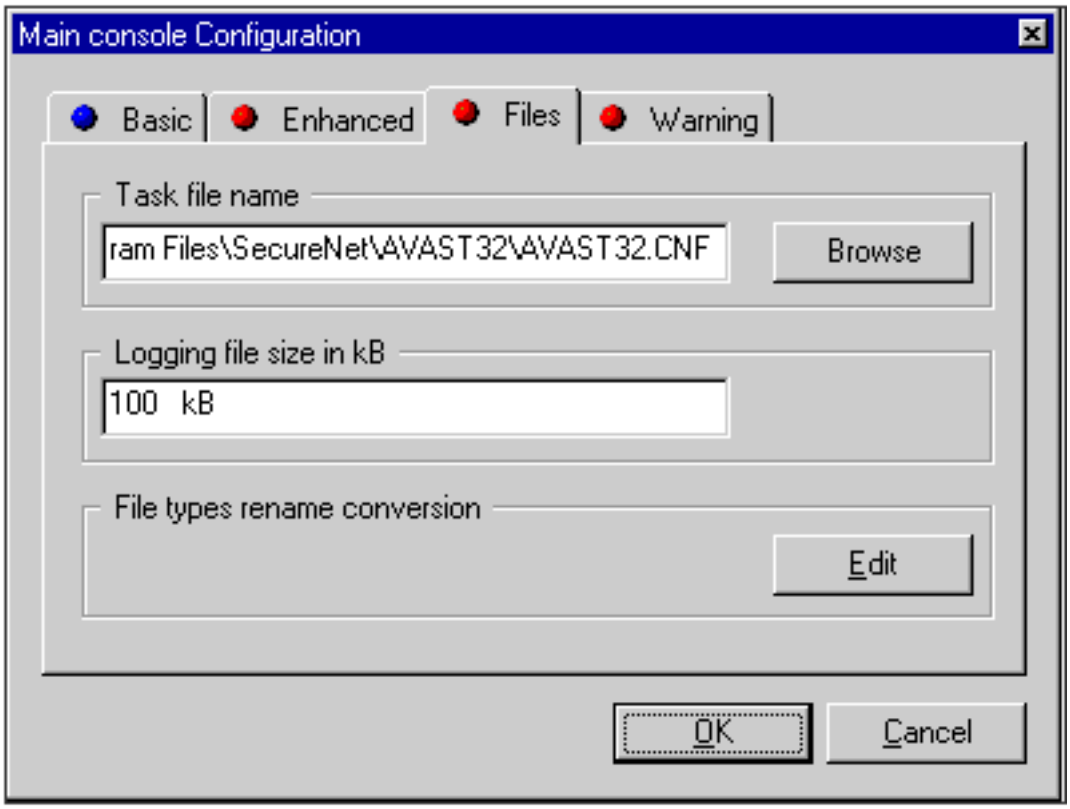

Fig. 102: “Files” Tab

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6.1.3.1 “Task File Name” Text Box

The user can change the name of the configuration file using the “Task file name” text box (*.CNF), including the path or using the Browse button. The Browse button allows you to pick the configuration file via standard system dialog for opening the files (Fig. 103). AVAST32 automatically places the name of the selected file in the “Task file name” text box. The .CNF file located in AVAST32 folder is the default .CNF file, but you might have a special reason for using another pre-configured .CNF file.

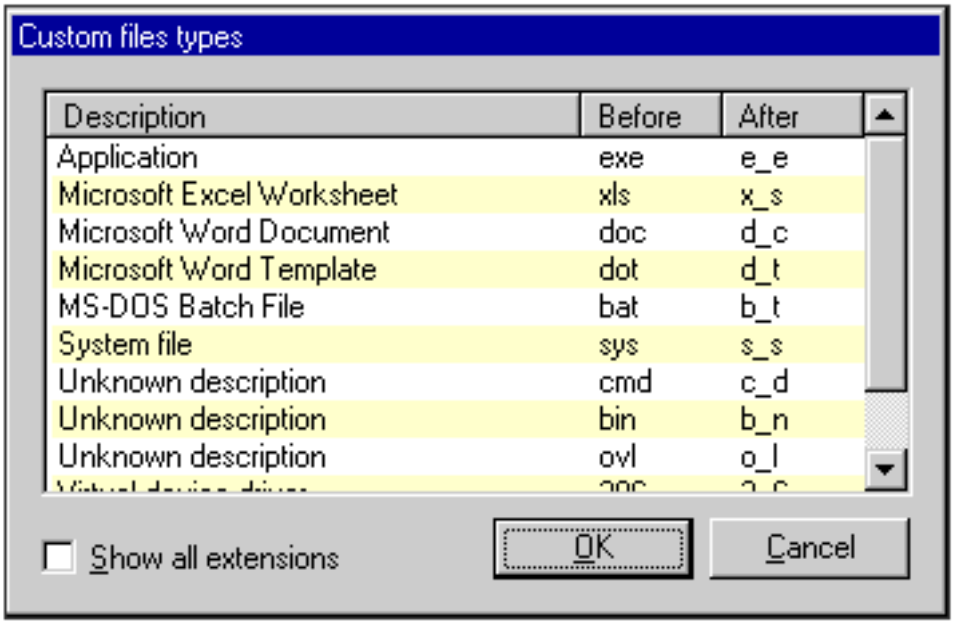

Fig. 103: “Custom File Types” Dialog

6.1.3.2 “Logging file size in KB” Text Box

Use the “Logging file size in KB” text box to set the maximum size of the log file. The size of the file is stated in kilobytes (KB). This means that when the log file reaches the specified size, AVAST32 deletes the first third of this file. Thus, AVAST32 deletes the oldest data from the file and the space for new data is created. The default maximum size of the logging file is 64 KB. The value in the text box only works for Microsoft Windows 95 users and if logging is enabled.

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6.1.3.2 "Edit" Button

The "Edit" button opens the dialog where the user can set up new extensions for file types (Fig. 104).

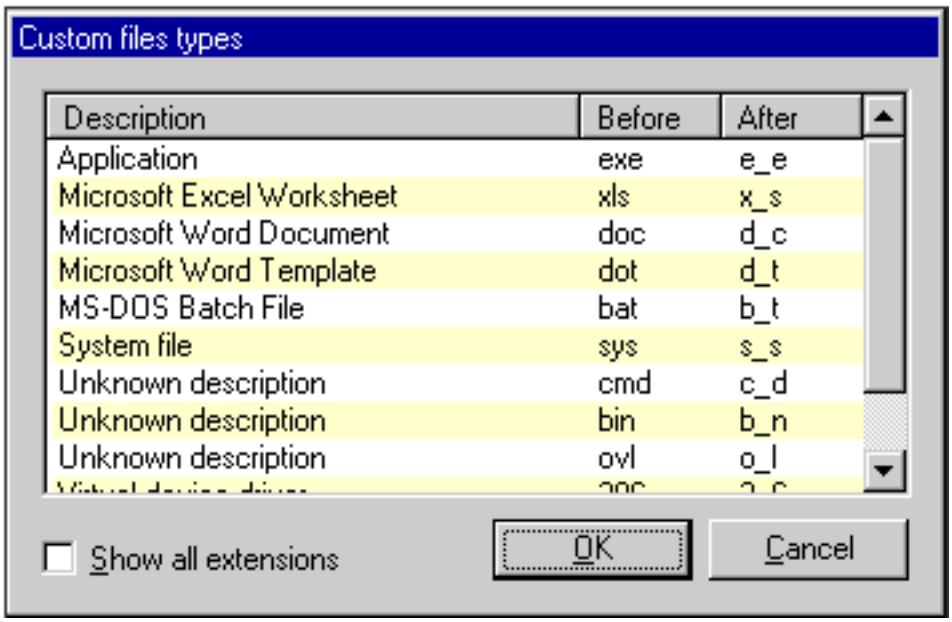

Fig. 104: "Custom File Types" Dialog

The dialog contains the list of known file types and their extensions in the "Before" column. The "After" column contains the extensions that will replace the existing ones when renaming file types. To see all file types on your computer, use your left mouse button to CHECK (✓) or turn "ON" the "Show all extensions" check box.

The extensions listed in this dialog show up on the "Enhanced" User Interface "Results" tab (Chapter 5.3.2) to rename files that have been changed or those that have a virus. If this is the case, it is suitable (especially for executable files) to rename them so even if they start up an infection can be avoided.

If you would like to change the extension of a type of a file, first select it and then click on it using the left button of the mouse. Thus, you will be able to edit it. Confirm the new extension by pressing the "Enter" key.

If you are satisfied with the changes you have made with the file extensions, press the "OK" button. If you prefer to use the default extensions or cancel your changes, use your left mouse button to click the "Cancel" button.

6.1.4 “Warning” Tab

Use the “Warning” tab to select the computers (Fig. 105) to send a warning message to various computer and users if a virus has been found.

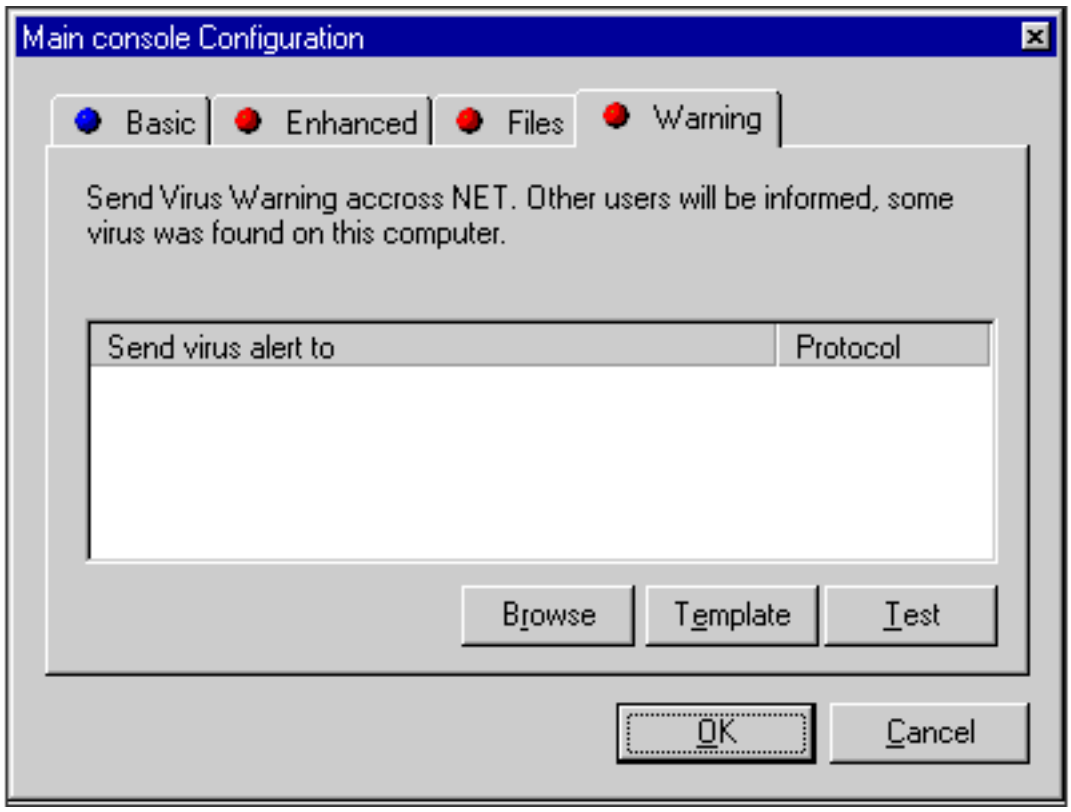

Fig. 105: “Warning” Tab

The list of selected computers is stored for AVAST32 as a whole, which means that its change will influence all users. The changes will take effect after the program restart.

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6.1.4.1 Add a Computer to the "Warning" Tab

You can add a computer to the "Warning" tab in two ways. First, you can add a computer using the "Template" button. Second, you can add a computer using the "Browse" button.

6.1.4.1.1 Template Button

The user can add a computer's name to the list of selected computers with the "Template" button.

- Step 1: Use the left mouse button to press the "Template" button if you want to speed up the selection of one or more computers. When the "Template" button is pressed, a pop-up menu appears with the following options:

  "Internet" sends the warning via a valid URL address
  "Microsoft" sends the warning via Microsoft Exchange
  "Internal" sends the warning over the local network

- Step 2: After you select the appropriate option, an "Edit for valid address or name..." is added to the list. Right click the "Edit for valid address or name..." to edit. When finished press "Enter" key.

6.1.4.1.2 Browse Button

The user can add a computer's name to the list of selected computers with the "Browse "button.

- Step 1: Use the left mouse button to press the "Browse" button if you want to speed up the selection of one or more computers. When the "Browse" button is pressed, a pop-up menu appears with the following option:

  "Internal" sends the warning over the local network.

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- Step 2: After selecting the “Internal” option, a “Browse for Computer” dialog will appear (Fig. 106). Use the tree menu to select the computer you want to add to the list. Use your left mouse button to click the computer name you want to add. When finished press “Enter” key.

Fig. 106: “Browse for Computer” Dialog

To delete a computer from a list click on it and press “Del” key. You can also change the parameters of listed computers from the “Warning” tab. Click on “Protocol” column for protocol change.

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6.1.4.1.3 Test Button

If you are not sure about message delivery, try the connection by pressing the "Test" button. A test message will be send to all selected computers. The "Warning" tab's list of selected computers to be sent a warning message is blank by default.

6.2 "Resident protection..." Menu Command

Use the "Resident protection..." menu command (Fig. 107) to change the resident protection settings (for more information, see Chapter 9: RGW32 Program). When you select the "Resident protection..." menu command, the "Resident support Configuration" dialog appears. You then have four options: "Show process information," "Log events," "Do not test diskette while OS shut down," and "Password before Resident support switch."

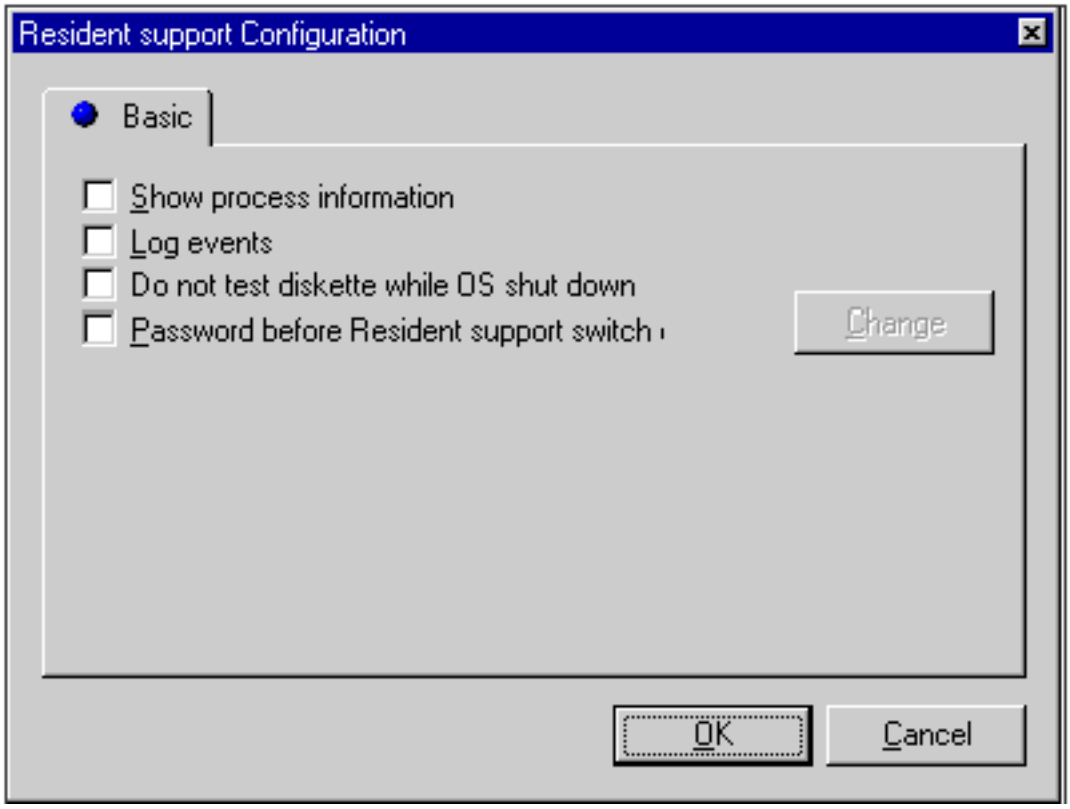

Fig. 107: "Resident Support Configuration" Dialog

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- CHECK (✓) or turn “ON” the “Show process information” check box if you want information about running resident activities. If the check box is CHECKED (✓) or turned on, information about running resident activities will appear on the right bottom of the desktop. If the check box is NOT CHECKED, no information will appear. This check box is NOT CHECKED or turned “OFF” by default.
- CHECK (✓) or turn the “ON” the “Log events” check box to save information about resident activities in the log file (for detailed information see 6.1.1 “Basic” Tab, “Enable Avast32 logging” check box). This check box is NOT CHECKED or turned “OFF” by default.
- CHECK (✓) or turn “ON” the “Do not test diskette while OS shut down” check box to disable testing diskettes while shutting down the OS. This check box is NOT CHECKED or turned “OFF” by default.
- CHECK (✓) or turn “ON” the “Password before Resident support switch” check box to change the password on the Resident support switch. This check box is NOT CHECKED or turned “OFF” by default.

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6.3 “Console scanner... Configuration” Menu Command

When you select the “Console scanner Configuration” menu command (Fig. 108), a tabbed dialog will appear with one tab: “Basic.” Use this dialog to log events and set display options for the command line scanner (program for virus scanning) which is started from command line (for more information, see Chapter 8: LGW32 Program).

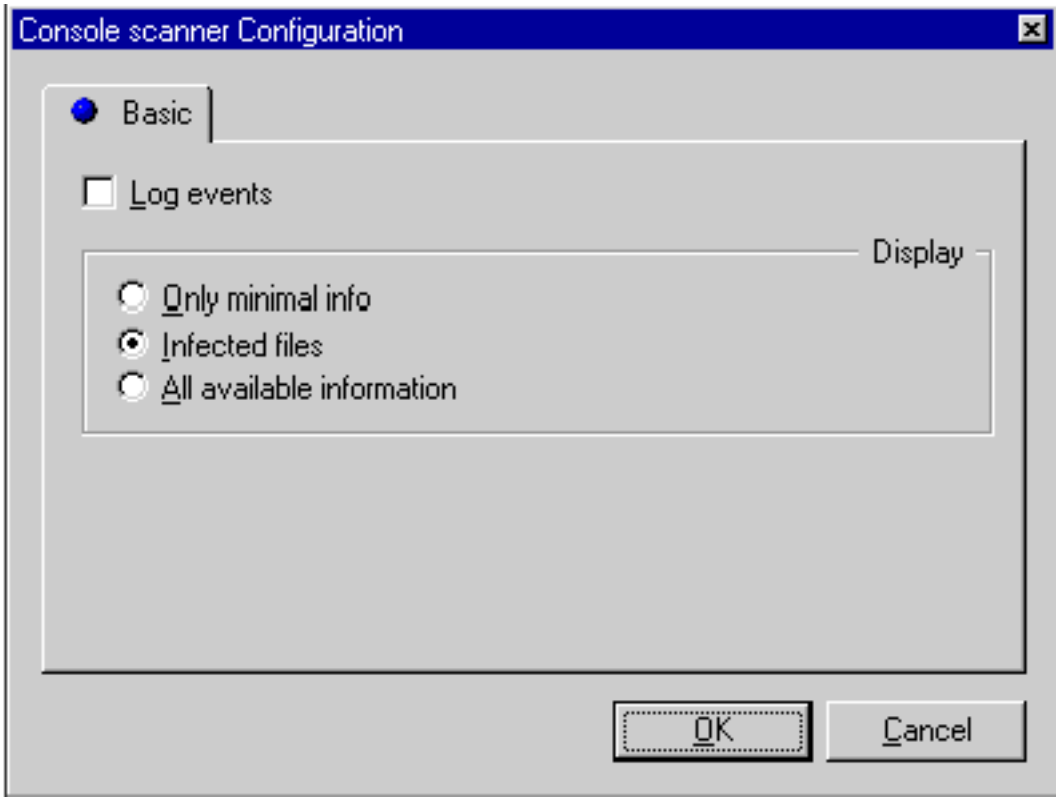

Fig. 108: “Console scanner Configuration” Dialog

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You can also set options for amount of information displayed, usually a command line window:

- Use the “Only minimal info” radio button to only show the command line scanner’s header.
- Use the “Infected files” radio button to show the console scanner header, infected files, and the name of viruses. AVAST32 also displays the table containing the whole test.
- Use the “Available information” radio button to show all information about scanner activities and results.

The amount of displayed console scanner information can be also set via command line parameter (see 8.1.11 The /V[N|I|A] Parameters). If this is the case, the “Console scanner configuration” menu command settings on this dialog are disregarded.

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6.4 “License...” Menu Command

Use the “License…” menu command to enter the Activation Key (serial number) of the program (Fig. 109). It also contains information about the number of licenses that have been purchased which will save you time if you decide to purchase other licenses. Once you enter or change the serial number on this dialog, AVAST32 is ready to use.

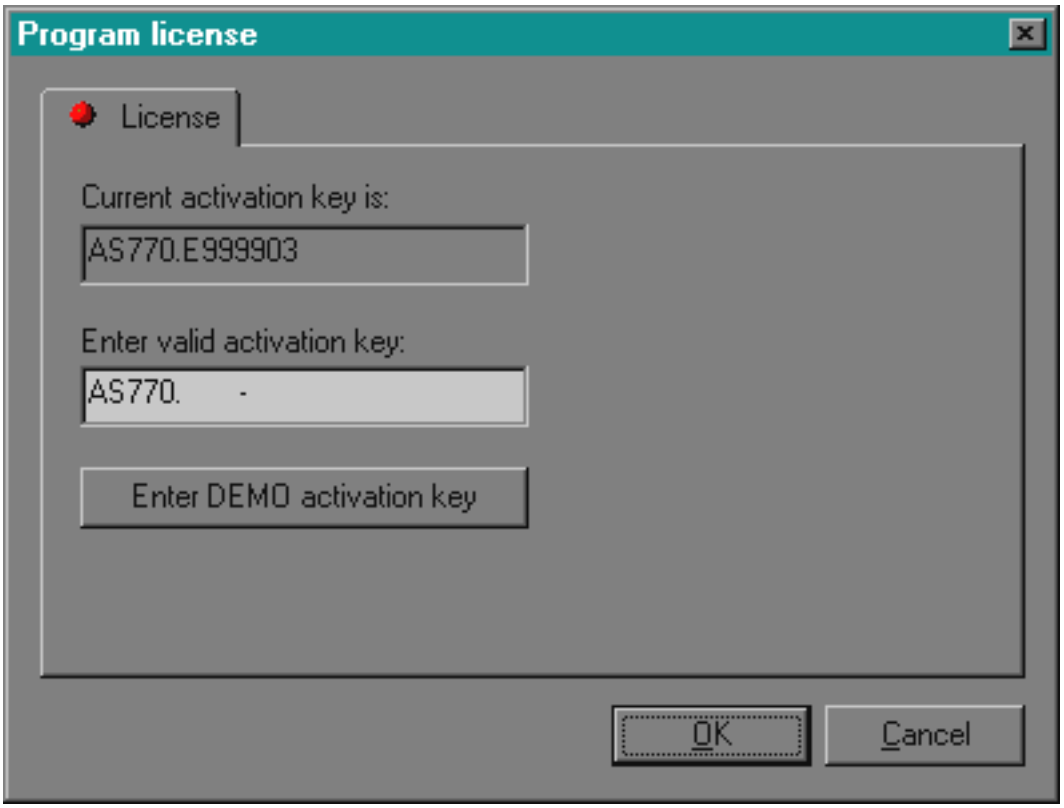

Fig. 109: “License” Dialog

The current serial number is located in the text boxes in the “Current serial number” text boxes. To activate your ownership, enter the purchased serial number in the “Enter valid serial number” text boxes, then use your left mouse button to click the “OK” button. If the serial number inserted is not valid or if you have made a mistake, you will receive an error message.

If you using a demo copy of AVAST32 and wish to purchase it, this is also where you enter your purchased Activation Key (serial number). Enter the new license number in these text boxes to activate your ownership. For more information about the serial number and errors, see Appendix D: Activation Key & Licenses.

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6.5 “Common...” Menu Command

Use the “Common…” menu command to change common AVAST32 controls. This is a global change, that is, this change effects all the users on the current computer. When you select the “Common…” menu command, a “Common parameters” dialog (Fig. 110) appears with four tabs: Basic, Language, Test server, and Database server.

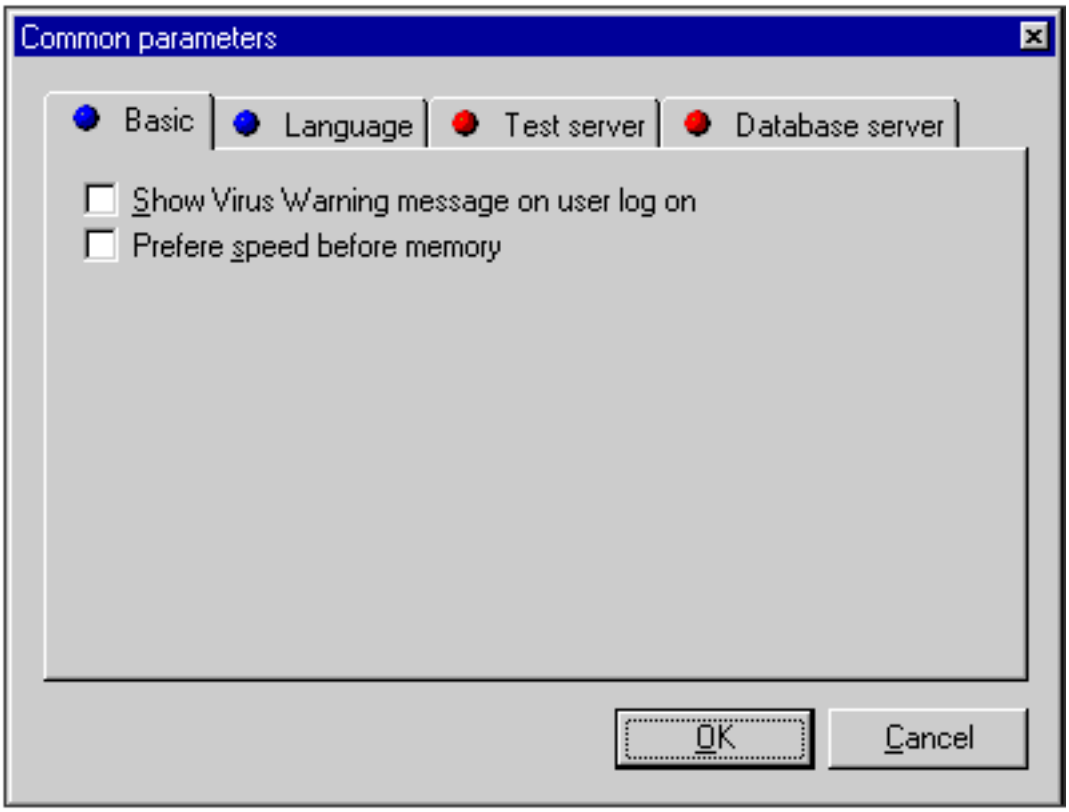

Fig. 110: “Common Parameters” Dialog

6.5.1 “Basic” Tab

The “Basic” tab includes two options, the “Show Virus Warning message on user log on” check box and the “Prefer speed before memory” check box.

- CHECK (✓) or turn “ON” the “Show Virus Warning message on user log on” check box to show a warning message when a user logs onto the system. AVAST32 displays a warning message if a virus was found during the last start-up of the computer. This means that you will know right away if you are using an infected computer. The check box is NOT CHECKED or turned “OFF” by default.

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- CHECK (✓) or turn “ON” the “Prefer speed before memory” check box to set up how AVAST32 deals with the “VPS32.DLL” file. If the check box is NOT CHECKED or turned “OFF,” AVAST32 will run faster. If the check box is CHECKED or turned “ON,” AVAST32 will run slower, but you will preserve the operating speed of your computer. The check box is NOT CHECKED or turned “OFF” by default.

6.5.2 “Language” Tab

Use the “Language” tab to switch among languages supported by AVAST32 (Fig. 111), if they are available. The current language is marked with “Green” ball and the others with “Blue” ball.

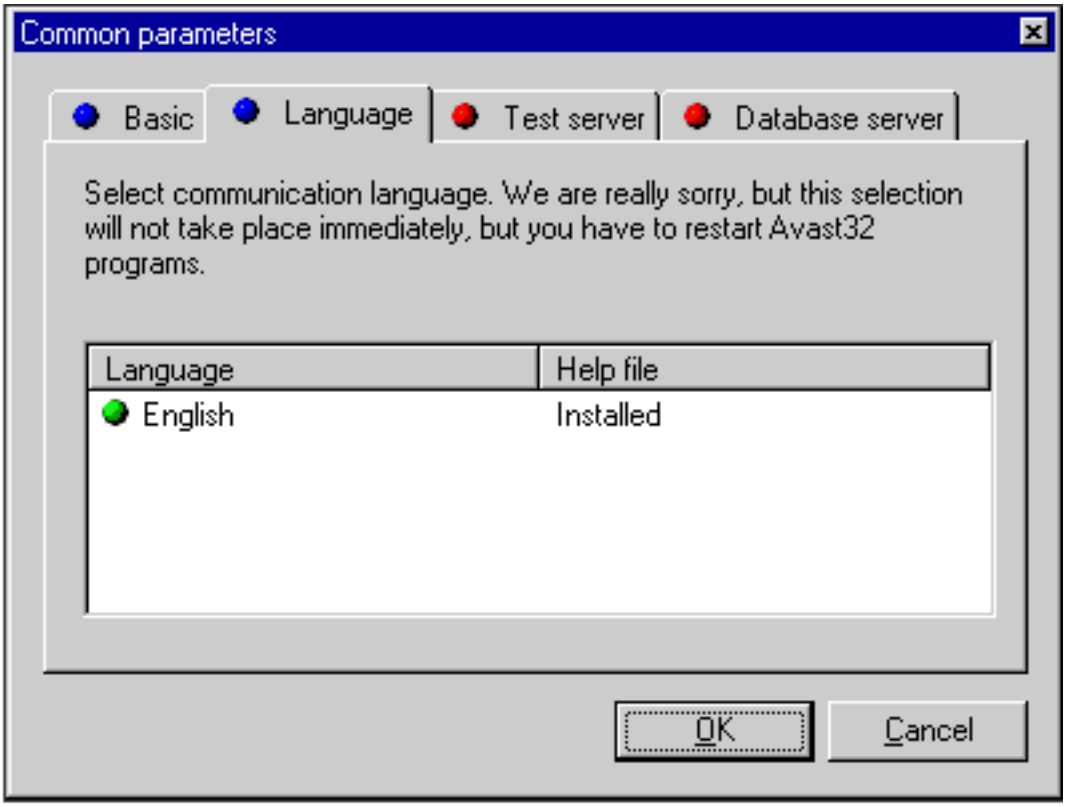

Fig. 111: “Language” Tab

To change languages in AVAST32, click the appropriate language with the left mouse button. This change will take effect the next time you restart your computer or log on your network. AVAST32 stores this language setting for each user separately so this change will affect the current user only.

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6.5.3 “Test server” Tab

Use the “Test server” tab to set basic testing server parameters (Fig. 112). This is a global change, that is, this change effects all the users on the current computer.

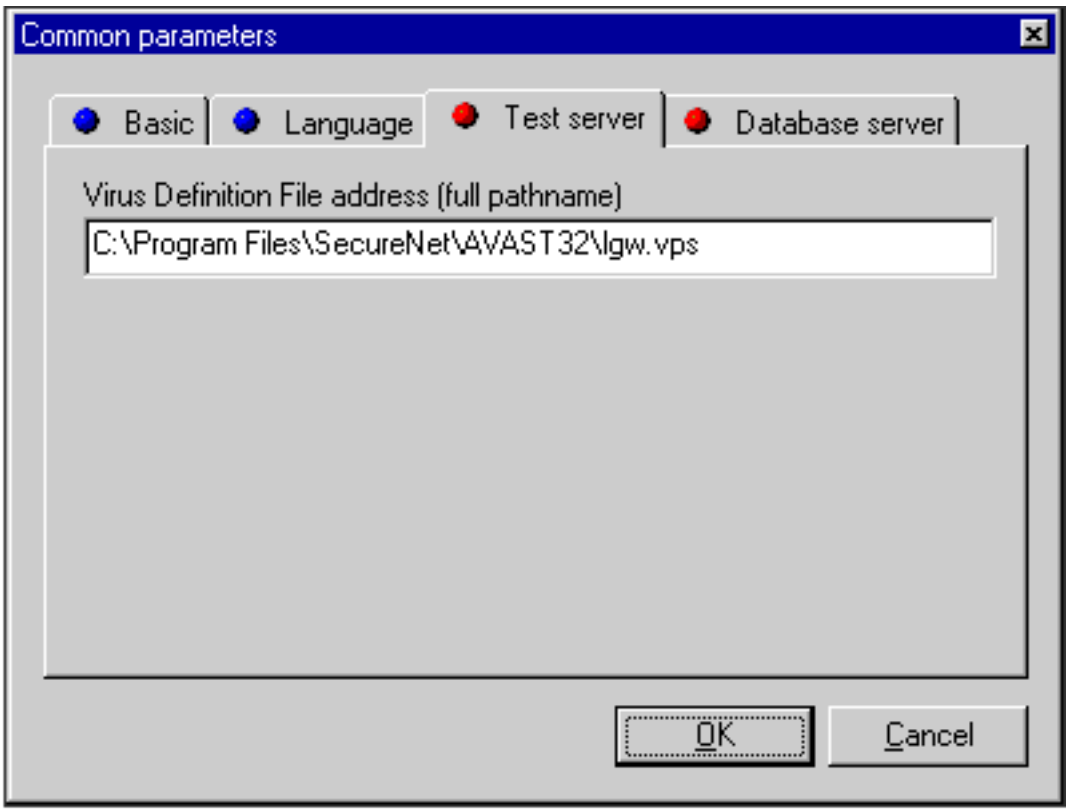

Fig. 112: “Test Server” Tab

The “Virus Definition File address” text box contains the name and complete path name of the VPS file, i.e. of the file containing the database of the known viruses. It is a very important file. If you set an incorrect VPS file, AVAST32 might fail to recognize viruses, or alternatively, it might find more false-positives than is necessary. The default value is the name of the “lgw.vps” file located in the AVAST32 folder.

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6.6 "Update VPS" Menu Command

Use the "Update VPS" menu command to update the virus database file (VPS). Updates are available on the Internet at www.SecureNet.org. These updates have the most current list of viruses available so you should look for a new one every month or so. While you can copy LGW.VPS file manually into the necessary folders, we do not recommend this. It is much easier to use the "Update VPS" menu command. After you select the "Update VPS" menu command, the "Update virus database" dialog (Fig. 113) appears.

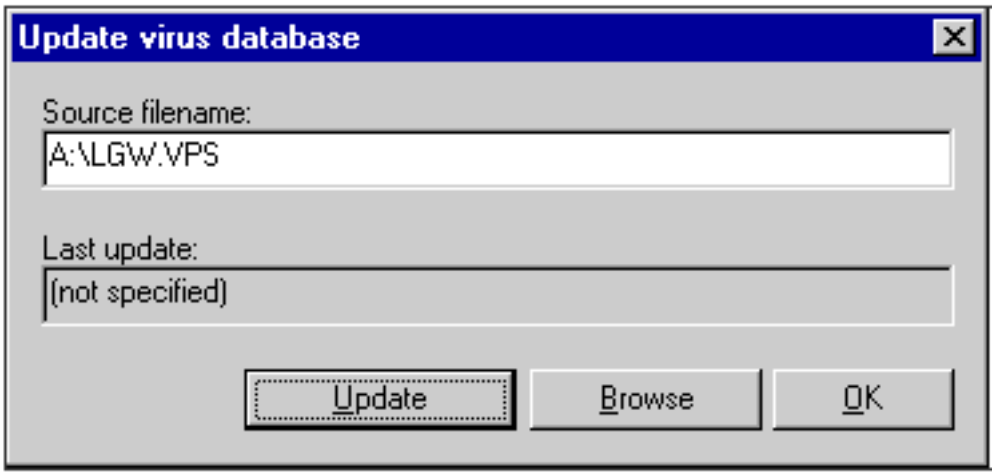

Fig. 113: "Update Virus Database" Dialog

- Step 1: To update your VPS virus list, enter the path into the "Source file name" text box.

The VPS file update can be also performed automatically. If you have installed AVAST32 from the CD-ROM disc, the text box will contain the default path "<cd>:\AVS\LGW.VPS" where the identification of your CD-ROM unit is written instead of <cd>. In the case of diskette installation, the path is "A:\LGW.VPS." The "Last update" text box contains date and time of the last VPS file update (if there was any).

- Step 2: When you are ready, use your left mouse button to press the "Update" button. AVAST32 performs the update only if the specified LGW.VPS file is newer than the current one.

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6.7 Customize Using the AVAST32 Control Panel

You can set up all AVAST32 features without starting the main AVAST32 program. Just press the “Start” button and choose “Settings” menu title from the “Control Panel” menu command (Fig. 114).

Fig. 114: “AVAST32 Configuration” Control Panel

Click the “Avast32 configuration” item in the Control Panel window. A dialog with two tabs will appear; “Programs” and “Tabs.”

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6.7.1 “Programs” Tab

Use the “Programs” tab to customize AVAST32 (Fig. 115). After clicking on the appropriate item, a dialog will appear in which you can change program setting via controls.

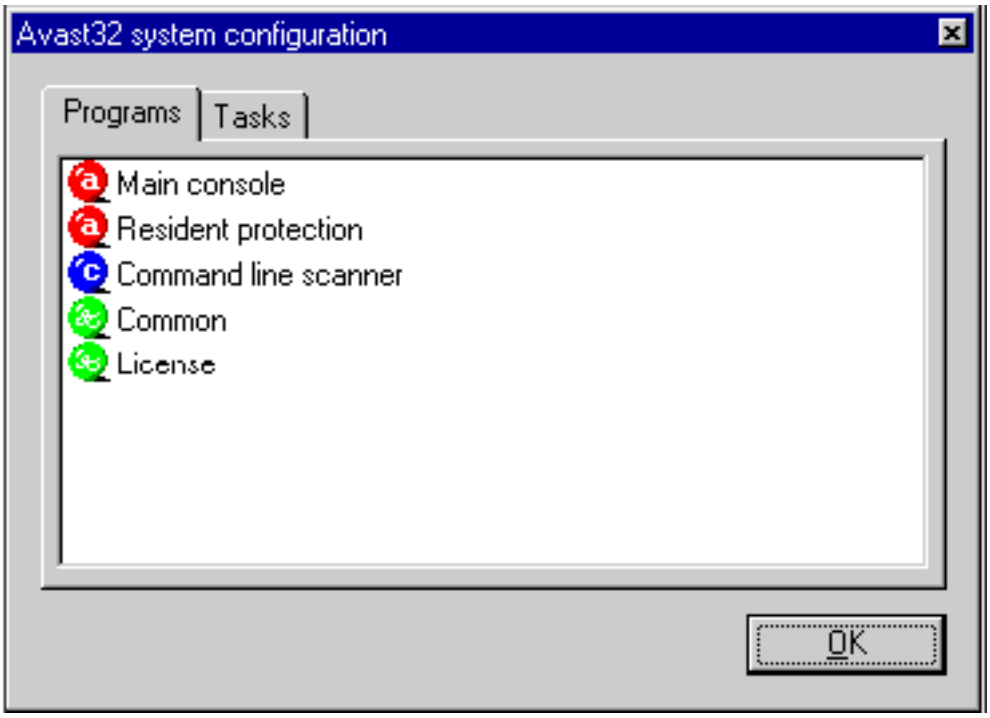

Fig. 115: “Programs” tab

The “Programs” tab contains the following items:

- Use the “Main console” option to customize AVAST32. See 6.1 “Main Console...” Menu Command for more information.
- Use the “Resident protection” option to change the resident part of AVAST32 (for more information about the RGW32 program, see Chapter 9).
- Use the “Command line scanner” option to change the basic settings of the virus scanning program which is designed for command line (LGW32 program, see Chapter 8).
- Use the “License” option to change the serial number of AVAST32. See Appendix D: Activation Key & Licenses for more information.

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6.7.2 “Tasks” Tab

Use the “Tasks” tab to customize current AVAST32 tasks (Fig. 116). This task list is similar to the task list in the “Simple” or “Enhanced” User Interface. When you click the task name you would like to change, a dialog will appear.

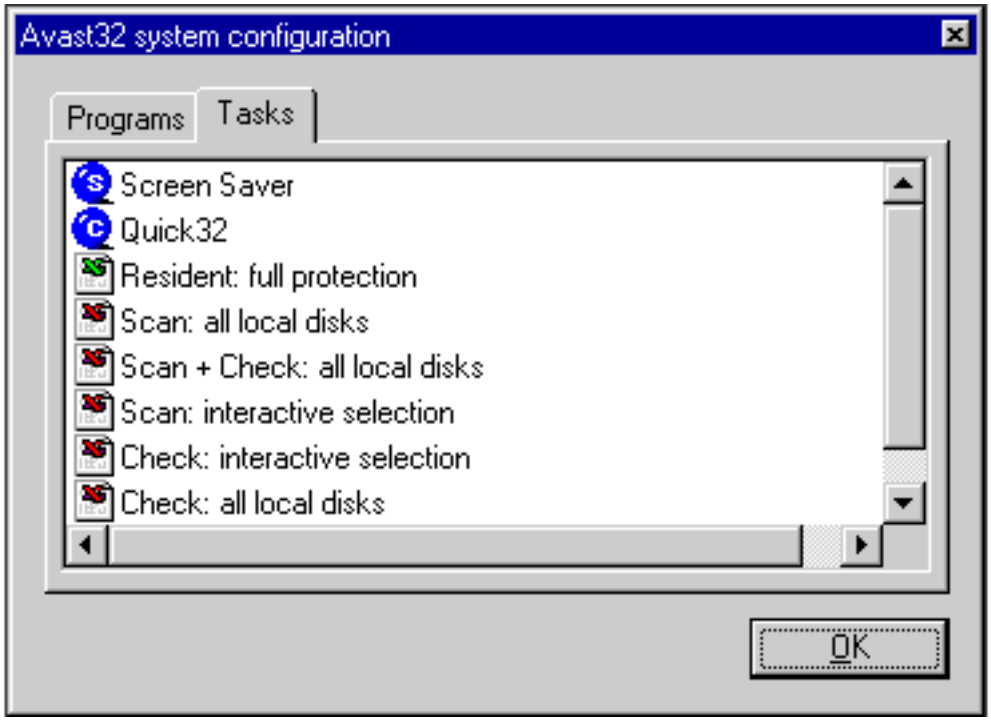

Fig. 116: “Tasks” Tab

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6.7.3 Control Panel Pop-up Menu

To display the Control Panel pop-up menu, use your right mouse button to click the task list located on the "Tasks" tab (Fig. 117).

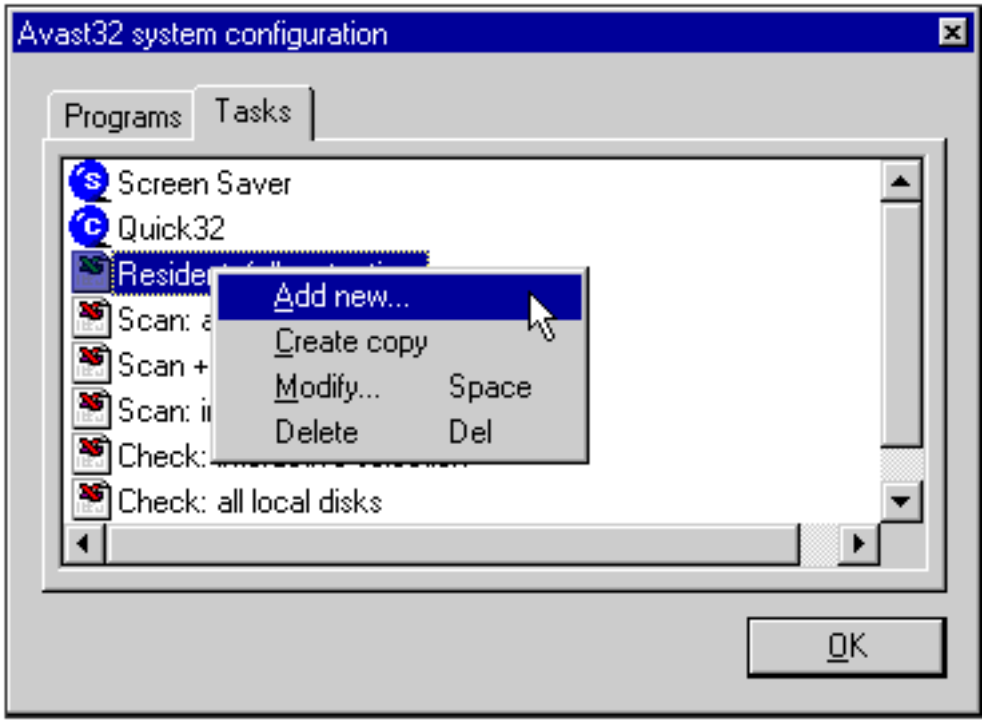

Fig. 117: "Control Panel" Pop-up Menu

- Use the "Add new" menu command to create new AVAST32 tasks (for more information, see Chapter 4: Create New Tasks).
- Use the "Create copy" menu command to create a copy of a highlighted or selected task. The new copy of the task will have the same parameter settings as original task. If the person creating the copy does not know the password, the copy is created as a "private" task and not a "shared" one.
- Use the "Modify" menu command to modify a task. The user will need the password if the task is password protected.
- Use the "Delete" menu command to delete appropriate tasks from a task list.

If you perform any change with tasks via "Control panel" while the AVAST32 program is running, the changes will take effect after AVAST32 restart!

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6.7.4 Use Sounds to Announce Events

You can select sounds that AVAST32 will play when it finds a virus or for other events. Do this from the “Sound” Control Panel that is located in the Control Panel folder.

- Step 1: To select a sound for an event, use your left mouse button to click the “Start” button. Locate the “Settings” menu and select the “Control Panel” menu command. This will open the ”Control Panel” window.
- Step 2: Use your left mouse button to double-click the “Sounds Control Panel” icon. This will open the “Sounds Property” window (Fig. 118).

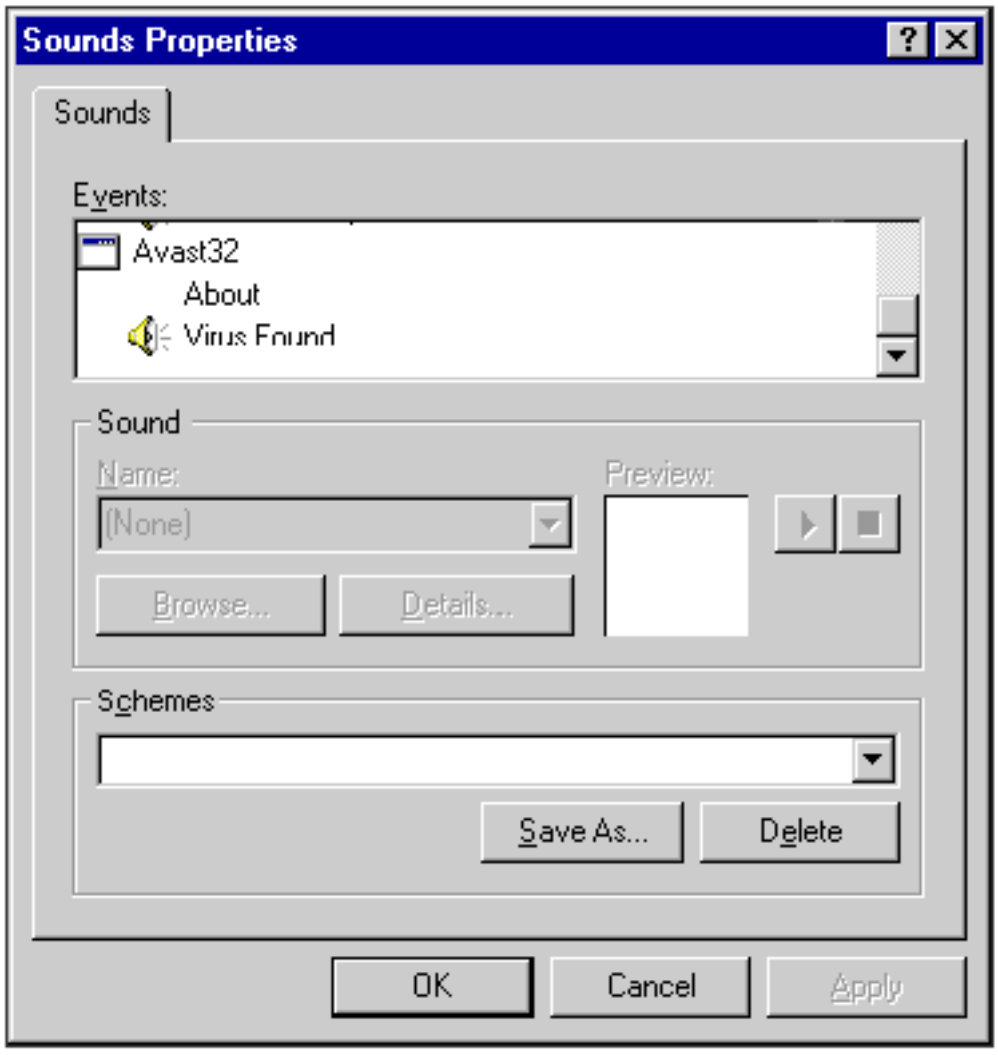

Fig. 118: “Sounds Properties” Dialog

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- Step 3: Scroll down to the “Avast32” option in the “Events” text window, then choose the event to which you would like to attach a sound file.
- Step 4: Click the OK button to select the sound and attach it to an event.

- End Chapter 6 -

CHAPTER 7

HOW TO REMOVE A VIRUS

We recommend reading this chapter thoroughly. No matter how accurate an antivirus program is, it cannot keep your computer free of virus infection without your help. Keep in mind that you are the most important part of the AVAST32 virus infection system. Without you and your support, no antivirus program can keep your computer free of viruses—no matter how good it is!

7.1 Do I Have a Virus or Not?

You are probably reading this because AVAST32 has warned you that it has found a virus on your computer. What does that mean? Unfortunately, just because AVAST32 warns that it has found a virus does not always mean that there is really a virus.

Before you start deleting files, you must find out whether the "suspicious" file is really infected. Sometimes AVAST32 may indicate a virus, but there is, in fact, no infection. When this happens, we say that the AVAST32 has given you a positive warning that is false—a false-positive. Different situations can cause false-positives.

Figuring out whether you have a virus is really a process of deduction. To do so correctly, you must first eliminate the false-positives. False-positives come in two varieties: normal computer activities that cause virus warnings and other computer activities that cause virus warnings. Eliminate the false-positives possibilities, and you are probably in the clear. If not, you probably have a virus.

AVAST32 was set up to minimize false-positives. We include over 4 GB of code to protect against false-positives. Nevertheless, false-positive warnings can still occur. If you get a false-positive warning, please contact us. You will help us to improve our product and you yourself will have a greater sense of safety.

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7.2 False-Positives Caused by Normal Computer Activity

Viruses activities sometimes mimic normal activities that occur on your computer. Files change all the time, new files are created, and files are deleted. While these might be normal activities, viruses also change files, create new files, and delete files. Unfortunately, AVAST32 cannot ignore these activities if there is a possibility that there is a virus and will warn you if you request it. This way AVBAST32 allows you to decide whether you have a virus.

False-positives can be caused by:

- Changes in files
- New files
- Changed files
- Deleted files
- Special cases
- Microsoft Windows 95 and NT operations

7.2.1 Caused by Changes in Files

Interpreting changes in files is not easy because each computer's files and integrity settings are different. Moreover, the way AVAST32 processes information may differ on a case-by-case basis. Thus, it is not possible to write a "cookbook" that describes all situations. We can only provide general advice, suggestions, and procedures that might be helpful in analyzing your particular situation. In this case, AVAST32 might warn you about finding new files, changed files, deleted files, and other special cases.

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7.2.2 Caused by New files

If AVAST32 reports that it has found new files, there may be several reasons why this is so. The easiest explanation is that a new file has been added by the installation of a new software program and is not yet in the file database. The solution to this is simple, when asked just accept it and AVAST32 will add it to the files database.

Also, he new file found by AVAST32 may be a temporary file that was created by a program for a special need and the program is currently using it or it "has forgotten" to delete it. The decision to delete or change the file may be very difficult, so you must not act without thinking. In addition, throwing a file in the "recycle bin" to delete it will just cause AVAST32 to "find" a new file in a new location.

Viruses also create new files so you must pay close attention to the new files created by installing a new software program. If you have questions, you should call the publishers of the software products and ask them which files were specifically created by their installation, including the folder names where their new files are saved.

7.2.3 Caused by Changed Files

There are many possible reasons for a change in a file. In addition, operating systems like Microsoft Windows 95 and NT modify the files on your computer very intensively. Each program start-up or editing of a document results in a change that AVAST32 will detect and announce to you. When you receive a warning, you must decide which change is valid and which is not.

For example, you are the usually the cause of changes in text files, while a change in the COMMAND.COM file is usually caused by a virus. However, nothing is 100% sure, which is why destroying viruses is so hard. While these two examples are simple to diagnose, many other files changes are not quite as easy to see. For example, changes in Microsoft Word documents (*.DOC) are not easy to diagnose. You may have caused the change by simply reading the document or a "macrovirus" may have attacked the document in question.

Nevertheless, there are a few general rules you can apply. If the changed file is an executable program (extensions .EXE, .SYS, .DLL, .BIN, .VXD, .SCR, etc.), the change is much more suspicious than if you find a document or data file has been changed. Nevertheless, be careful, even here you may find some exceptions.

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7.2.4 Caused by Deleted Files

When a file is gone, there are not many clues to help you figure out what happened. Repairing such a file is only possible by using special operating system tools or by reconstructing from backup copies. By the way, when was the last time you made backup copies of your data?

7.2.5 Caused by Special Cases

There are several special cases when AVAST32 is signaling an error because it cannot access a file. This could be because a virus has changed a file or it could be a perfectly valid reason for this. You can only find out by close examination.

In the majority of cases, you will not be able to scan a file because it is being used by another program. This file is locked and the operating system or another software application will not allow you to access it. If another user or the operating system ties up the files, it may not be apparent that this is the case. Although the files are tied up and are not really a problem, Avast32 will still not be able to scan these files and you will be left wondering “why?”

Another reason you may not be able to access a file is that you are working with the operating system that protects certain files. For example, if you are using Windows NT with NTFS, you must have administrator rights to modify individual files. If do not, the file will remain unchanged.

7.2.6 Caused by Microsoft Windows

The way Microsoft Windows 95 and NT use virtual memory can sometimes cause a false-positive warning because virus “signatures” in the RAM memory can also appear on the disk in the “virtual” memory. If this happens, AVAST32 will give a false-positive warning about the WIN386.SWP file (in the Windows NT system it is the PAGEFILE.SYS file). This false-positive may have started in a .DOC file that was changed and then mirrored in the WIN386. SWP file. You can avoid this by opening the file in the Word program, selecting “Save as” and saving it under the same name. Attention! Be careful that the false-positive warning is just that and not a macrovirus.

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7.3 False-Positives Caused by Other Computer Activities

We have already learned about the normal computer activities that can trigger an AVAST32 virus warning. However, there are other kinds of activities that can trigger an AVAST32 virus warning as well. These warnings are usually caused by:

- Running multiple virus scanners
- Running a scanner that is immunizing files
- Prank software programs you installed on your computer
- Computer or program failure

7.3.1 Caused by Multiple Scanners

AVAST32 may give a false-positive warning if you are using several different virus scanners from different companies at the same time or one after the other. The reason for this is simple. Each of the scanners needs to have viruses in RAM memory at some time or another. If both scanners have the virus in memory at the same time, or if this memory is transferred into virtual memory and later used without cleaning, this information can cause of the false-positive.

You will have false-positives if you use virus scanners from other sources that are written “improperly,” i.e. they do not clean their RAM memory after scanning. Find out whether the other scanners you use clean RAM memory when they are finished scanning. If they don’t, this could cause of a false-positive. It is harder to figure out when other virus scanners clean the RAM memories when they are done. In the scanner does, you may have a virus in RAM memory.

Finding out whether a virus warning is a false-positive can be easy, but it can be time-consuming. When you receive a virus warning, stop your work with all applications and shutdown your computer. Then, use the power switch to turn off your computer. Turn it on again and start-up your computer. Start the virus scanner that announced the presence of a virus in the memory. If it does not announce the virus’ presence repeatedly, try to repeat what you were doing before you received the warning, then start testing for viruses again. Again, if you do not find a virus in RAM memory, it is a false-positive.

AVAST32 virus scanners thoroughly clean your computer’s RAM memory. What is more, it keeps all the information and virus samples coded while it is working. It only decodes the virus information when it scans. Once it has used this information, it deletes it. This means that there cannot be more than one decoded sample of a virus in RAM memory at a time.

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7.3.2 Caused by Immunizing Files

Some virus scanners “immunize” files to find out if it has a virus. “Immunizing” a file means that a virus scanner adds a checksum to each scanned file. Then, if the virus scanner finds a specific kind of change while testing, it will warn you that a virus has infected the file. However, this process can create a false-positive and cause other problems with application programs and data files.

One way the immunizing process can create a false-positive is if two scanners immunize, then test the same file. If this happens, both will see changes and both the products will report that the file might have a virus. Another way this can create problems is that this kind of testing physically changes a file. Beyond the copyright problems of changing original files, changing the program code can prevent it from working the same way as it did before the change.

This happens because some software programs check themselves over before starting-up, and these programs will not work if there are changes. Furthermore, immunizing causes changes in data files might not only corrupt the data itself, but could cause the software program to have trouble opening or using data files.

AVAST32 does not modify a file in any way while it is testing it. It only reads information contained in a file and does not change one bit of code unless there is a virus in the file. Even if AVAST32 saves information about files, it saves it into an independent file. If AVAST32 finds a virus, some changes to the file will occur if you ask AVAST32 to fix the file. Even so, AVAST32 performs the process with a copy of the file and only after the file is fixed, is the file written back to the disk with its original name.

7.3.3 Caused by Prank Programs

If your computer starts to behave unexpectedly, even suspiciously, a virus may not have caused it. It may be a prank program installed on your computer by a colleague, downloaded off the Internet by you, or sent by email.

How do you recognize a “prank” from a real virus? Prank computer programs usually announce what they are eventually. Also, if you have a lot of graphic content, you probably have a prank program. Viruses cannot use many graphic images because pictures are too large. Last if you continue to have problems after the ”prank” has run, you probably have a virus.

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7.3.4 Caused by Equipment or Program Failure

You will seldom have a false-positive warning from a virus that mimics equipment or program failure. While these kinds of problems are sometimes mysterious and a hacker might have a virus write “Memory Error” on the screen, you will probably not have to deal with this kind of virus. There are products available today can help you figure out whether you are having equipment failure.

7.4 You have a Virus!

If you have eliminated the false-positives (normal computer activities that cause virus warnings and other activities that cause virus warnings) and you still have questions about whether a file has a virus--you probably have a virus.

Probably the first question that comes to mind when you really have a virus is “Why me?” Keep in mind with the way information is passed from computer to computer, it would be more strange if you didn’t get a virus at some time.

The only people who are really in danger are those who bury their heads in the sand and disregard the signs that they might have a virus. If you act correctly, the infection need not cause any serious harm.

- What should you do first?
- What kind of virus has infected my computer?
- What are combined (multipartite) viruses?
- Viruses that remain installed in RAM memory.
- Viruses that attack your files.
- Viruses that attack system areas of hard disks.
- What are macroviruses?

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7.4.1 What should I do first?

What do you do when you receive your first virus warning? The most important thing is not to panic. In your haste, you might cause more damage than the virus would have if you left it to run its course. If you are the least bit hesitant, call your Administrator if you are on a network, or if you are an individual, call SecureNet technical support.

If you decide to investigate on your own, exit all software programs and save your data. If you need to finish a program that is still running, do so. You will probably be able to do so because only a few viruses depend on time to damage your computer. However, avoid starting up other programs if it is possible.

Also, if possible do not turn off your computer using the power switch because this is catastrophic for your data. However, if your computer is frozen (the mouse pointer is frozen, nothing moves on the screen), you may have to turn off the computer using the power switch.

Now it is time to plan your attack. Of course you need to remove the virus, but first you need to try to discover the exact or at least the most probable source of the infection. This might be a friend who “loaned” you the latest release of a well-known game, an email, or a downloaded file. If you can figure this out, this will help you figure out how long you have had the virus in your computer.

Do not underestimate trying to find the cause of the infection. To do so might be the first step to a repeated infection!

It is also very important to think about whether you have sent the virus to other places. It does not matter whether you use a company computer and your company has sent thousands of infected diskettes or you have sent an email with an attached virus to your friend. In both cases it is best to inform others who might also be damaged by the infection. Do it at once!

Just remember that the embarrassment you might feel about getting a virus is much less than the anger that others might feel about being infected by you. If you are a company, the trust of your customers could be lost forever if they found out about the infection and learned that you knew about it and did not inform them.

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One of the most important questions that you must ask is whether you have backed up your data on the infected computer. Any time you have or remove a virus, you risk losing all the data on your hard disks, even if a trained and highly experienced expert carries out the removal. One false step and all of your data may be gone in a flash.

Next, if you do not have any current backup copy, it is important to make one now. Moreover, you must make it knowing that the data you are currently saving will contain the virus you have just found. That also means that each time you retrieve a file from your backup, you might be reinfecting your computer system. However, you have no other choice.

Here is a summary of what to do if your computer is infected by a virus:

- Finish your work, do not rush, but do not delay either.
- Find out as much information on the virus as possible.
- Shut down your computer system using the “Shut Down” menu command on the Microsoft Windows Start button.
- Once you shut down the computer, turn off the computer through the power switch.
- Think about the probable source of the infection. This will help you to know how long you have been infected.
- Inform all those you may have infected.
- Make a backup copy of your data if it is necessary. Do not leave anything to chance!

If you have performed the above steps, you may now attempt to remove the virus. Critically assess your own skills and experience with the computer. If you do not understand computers, we do not recommend you try to remove the virus by yourself. However, if you understand the following, you may try it without any specialized help. If you work in a company, contact your Administrator or the person responsible for computers.

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7.4.2 What Kind of Virus has Infected my Computer?

It is important to find out what kind of virus is present in your computer. The next steps will help you find that important information. The main types of viruses are the following:

- Combined (multipartite) viruses
- Viruses that remain in RAM memory
- Viruses that attack your files
- Viruses that attack the system areas of disks
- Macroviruses

The following text assumes you are using Microsoft Windows 95 or Microsoft Windows NT. Removing viruses under the MS-DOS system differs from the procedures described here.

7.4.3 Combined (Multipartite) Viruses

Combined viruses are simply those viruses that attack a combination of the files, disk system areas, and RAM memory at the same time. They must be removed in the following order:

- First, remove RAM memory viruses. It is not possible to remove a virus from the disk if it is present in RAM memory.
- When removing viruses from your hard disk, you must first remove viruses from the disk system areas.
- Remove viruses in data or application files last.

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7.4.4 Remove Viruses in RAM Memory

RAM memory viruses are not only found in RAM memory, they are almost sure to be present somewhere on the hard disk. However, a virus may be present in the memory, be on your hard drive, but not be active on your hard drive at the same time.

For example, imagine that you are copying the infected file from a diskette to a diskette. To do this, you not only use physical storage on both source and target diskette, but the file has to be in RAM memory to move from diskette to diskette. This means that the virus can exist in memory even after the copying operation.

Thus, it is important to remove a virus from your RAM memory before you remove it from your hard disk. The reason for this is simple: even if you remove it from your hard drive, the virus will re-attack each program or disk system area that you try to treat. In addition, you cannot eliminate a virus in the memory at the time when it is present in it. Of course, there are some exceptions, but not usually.

Viruses developed exclusively for Microsoft Windows 95 and NT do not exist today, and none of the several rare examples is capable of remaining memory. If the situation changes, we will inform you accordingly. In addition, viruses that enter the MS-DOS operating system when the computer starts up or when you are working in the DOS window, are usually only found in RAM memory.

To remove a virus in RAM memory: First, boot the system from a clean boot diskette that you have created on a computer that you know is not infected. While you may use a disk created using MS-DOS 5.0 and higher, it is recommended that you use a clean boot diskette for your currently installed operating system. The easiest way to do this is to create a system disk using the Add/Remove Program icon in the Control Panel folder.

Under the Windows NT, you will seldom find viruses in RAM memory. Generally, most viruses attack hard disk system areas—specifically the master boot record, system and/or data files.

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7.4.5 Remove Viruses from Files

Using AVAST32, removing viruses from the files is simple. Your main problem will be to decide how to remove the virus. If you periodically use the AVAST32 integrity checking tasks and have a current version of the database at your disposal, you have the best chance of not losing any data.

AVAST32 can restore the files infected by approximately 95% of different types of viruses. As long as the files are not damaged beyond repair, this is almost as reliable as restoring your files from the backup copies. This is because AVAST32 looks to see whether it has managed to restore the file to the last bit.

If you do not consistently run AVAST32 integrity checking tasks and do not have a current version of the AVAST32 File Database at your disposal, the fixing things is more difficult. Even so, you still have a chance of getting your computer back up and working. However, you will have to reinstall files from the original program diskettes or their copies. This however, will be a lot of work because you must uninstall, fix any viruses, and reinstall the previously infected programs. Plus, you will lose your program settings, but you will eventually be back to work.

Uninstalling software programs is more than just deleting them from the disk. In the case of AVAST32, you must uninstall them using the Add/Remove Programs icon in the Control Panel folder. This gets complex when you are trying to uninstall a program that has a virus in a connected file. In that case, you have may have no choice but to delete the infected file, run the virus scanner again, then reinstall the software program and hope that all the remnants of the prior installation will be no problem.

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7.4.6 Remove Viruses from System Tracks

Quite a few viruses attack the system areas of hard disks. However, only a few of them are “combined viruses” which not only infect files and spread with the help of files. Therefore, we can say that if you have found a virus in the system area of a disk (boot virus), it probably happened when you were trying to start-up the computer from the diskette. An exception to this is “OneHalf” virus that spreads by means of files. However, similar viruses are rare.

To remove a virus attacking the disk system tracks running Microsoft Windows 95 and NT systems: First, start up your computer from a system diskette that is free from virus infection and run the FDISK /MBR program. After you have performed this command successfully, AVAST32 removes the virus from system areas.

When you are done, if you can restart your computer, you have practically won. With your computer running, you can use the system tools to repair your system files. If the virus managed to damage your system files to the point that you cannot restart your computer, it can be a disaster. In this case, the only thing that can save you is a good, recent backup of your files.

7.4.7 Remove Macroviruses

Macroviruses are viruses that spread through documents. At present, these viruses are some of the most numerous viruses in the world. Most of the time, they attack the documents of the Microsoft Word application, but recently they have started to appear also in other office applications.

AVAST32 can remove Macroviruses. To do this we recommend that you save the virus-infected documents on to a diskette, 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 technical support.

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CHAPTER 8

LGW32 PROGRAM

Most of the time, you will use AVAST32 to do all your virus scanning and removal. However, expert users might prefer a command line interface rather than a graphic one. The LGW32 program operates similarly to the AVAST32 task that scans for the presence of known viruses. Since both the AVAST32 and LGW32 programs use the services of the VPS32 testing server, their results are identical. The only difference between them is that the LGW32 program uses a command line, unlike the very user-friendly environment of AVAST32.

8.1 LGW32 Command Line

The basic command structure of the LGW32 program looks like this:

LGW32 [@<task name> | [+ | -] <area name>[-][<parameter>, ...]]

To run an AVAST32 task, write the character "@" (the "at" sign) and then its name. If the task name 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 LGW32 program will scan the set areas. It is possible to set several parameters in LGW32 program at once.

8.1.1 Adding the Plus "+" and Minus "-" Signs

Add a "plus" sign before an area name tests subfolders, while adding a "minus" sign disables the testing of subfolders. For example, to test all of "D:" hard drive except for the "D:\Viruses" folder, you would type:

-D:\Viruses

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8.1.2 The /?, /H, /HELP Parameters

The LGW32 program supports the following parameters: /?, /H, /HELP. If you add "/?," "/H," or "/HELP" to the command line, "Help" will be available. You can switch to different sections by using numerical keys, which always identifies the number of the page to be displayed. After pressing any key you will return to the command line.

8.1.3 The /A Parameters

Add "/A" to the command line to scan for the presence of all viruses including those that do not attack the given type of the file. As a result, AVAST32 will scan files with the .COM extension for viruses which usually only attack .EXE files.

8.1.4 The /C[+] Parameters

Add "/C[+]" to the command line to scan complete files. The program will switch to this mode automatically by itself after finding a virus. The "+" (plus) character will also scan compressed files by internally decompressing, scanning, and recompressing.

8.1.5 The /E[A|E|O|<types>] Parameters

Add "/E[A|E|O|<types>]" to the command line to select the types of files to be scanned. The letter "A" means that all the files will be scanned, the letter "E" identifies the executable files, and finally, the letter "O" identifies the OLE documents. You may also directly specify the types of the files to be scanned. You may scan as many files as you like as long as commas separate them. If the parameter is not specified, only the executable files and the OLE documents will be scanned.

8.1.6 The /X[types] Parameters

Add "/X[types]" to the command line to NOT scan whichever types of files you have specified. This way it is possible to set up scanning for all the files except for the text ones (the TXT extension). The parameter has the same effect as the "Red" ball at the name of the type on the list of the types to be scanned in AVAST32 (see Chapter 4.4.4).

8.1.7 The /L[-] Parameters

Add "/L[-]" to the command line to turn logging "ON." For more information about logging, see 6.1.1 "Basic" Tab.

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8.1.8 The /M Parameters

Add "/M" to the command line to start a memory test. However, the /M parameter only tests RAM memory.

8.1.9 The /R[<name>] Parameters

Add "/R[<name>]" to the command line to create a progress report. If the file name is not specified, the progress will be written into the "LGW32.RPT" file in a currently valid directory.

8.1.10 The /S<name> Parameters

Add "/S<name>" to the command line to play a sound after the first virus has been found. In order for LGW32 to play the sound, you need a sound card and appropriate drivers.

8.1.11 The /V[N|I|A] Parameters

Add "/V[N|I|A]" to the command line to display information about different files on the monitor screen. The letter "N" will disable the listing; the letter "I" will enable only the listing of the infected files; and "A" will list all the files found.

8.1.12 The /U<name>[,<name>] Parameters

Add "/U<name>[,<name>]" to the command line to specify the name of the computer or domain to which a virus warning will be sent. At least one name must be written after the parameter.

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8.1.13 The /Z[+|V] Parameters

Add "/Z[+|V]" to the command line to remove macroviruses found in OLE documents even if the macrovirus has not been fully recognized. The sign + will delete all the macros in the document. The letter "V" will automatically remove of all macros from the infected document. If no character is added after the switch, only macros containing a virus will be removed from the OLE document. When the LGW32 program ends, it returns a special information to the operating system. This code can later be tested either by the program which launched it, or on the command line by means of the IF ERRORRLEVEL command. The return code of the LGW32 program can have only the following values:

- 0 - program has finished normally, no virus found
- 1 - program has found a virus
- 10 - time, for which program demonstration version could be used, has expired
- 11 - program cannot be run, probably wrong installation
- 255 - serious error at the program run

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CHAPTER 9

RGW32 PROGRAM

The RGW32 program runs all the resident tests. This means that if you start-up a resident task in AVAST32, the RGW32 program controls it. If it is running, there will be a “Red” ball icon with a small “a” in the right part of the Windows Task Bar in the Windows System Tray (Fig. 119). To display the “RGW32” dialog, use the left mouse button to double-click this icon.

Fig. 119: Windows System Tray

Use the “RGW32” dialog (Fig. 120) to modify running tasks.

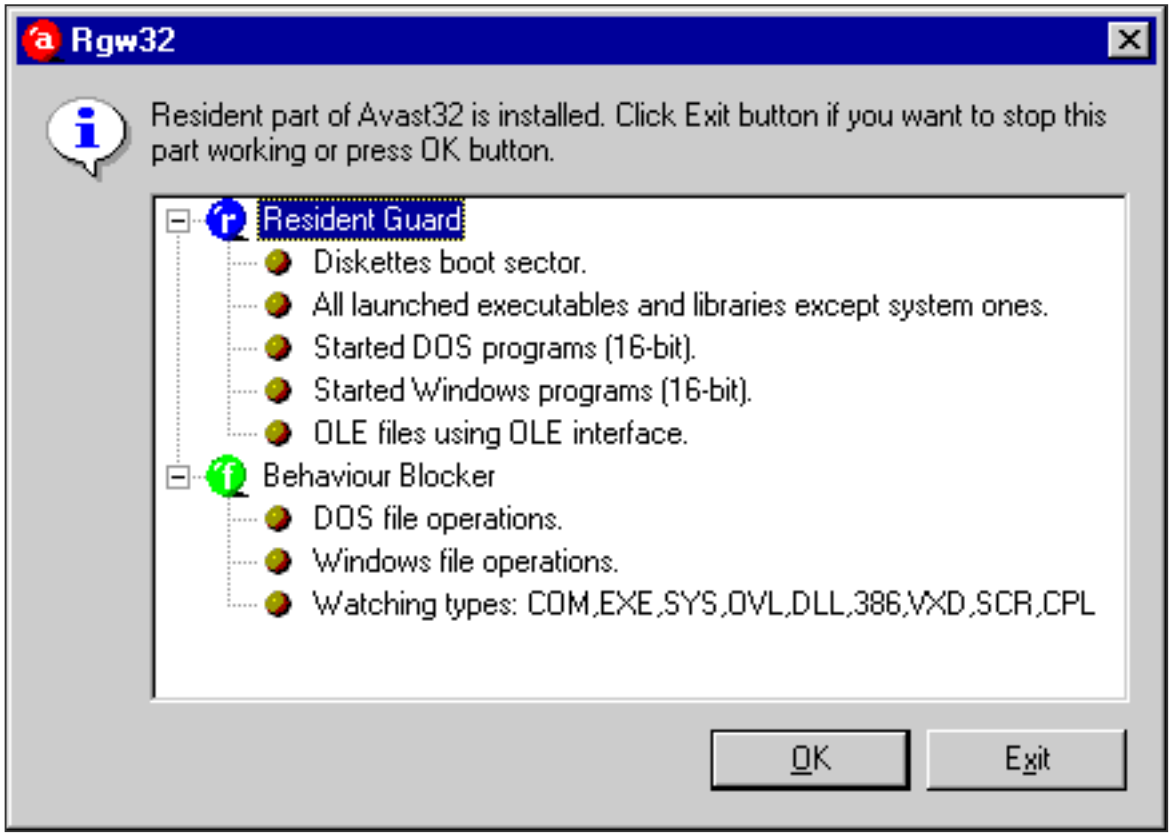

Fig. 120: “RGW32” Dialog

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For example, if you want to cancel a running task, all you have to do is open the “RGW32” dialog. Regular tests are sorted into two basic groups: “Resident Guard” and “Behaviour Blocker.” If you want to see the list of tests, use your left mouse button to open the “Tree Control." When you do that, the individual tests will be displayed. It is possible to set several parameters in RGW32 program.

The command line of the RGW32 program looks like this:

RGW32 <name>

The <name> parameter specifies the resident task that RGW32 will run. If the parameter is not specified or if no task with this parameter exists, the program will display an error message. Only one resident task can run at the same time on a computer. If any other resident task is started, the first task is canceled.

If the task also contains some non-resident activities, these activities and their settings are ignored - resident tests will only be performed if selected. While a test is operating or finished, the RGW32 program does not send any return codes to the operating system or other application.

RGW32 dialogs can appear during its operation. For example, RGW32 can warn about a dangerous operation within a file or finding of a virus in the boot sector of an inserted diskette. It can also warn about a virus in a program being run or in an OLE document opened using an OLE function. The following describes some of the possible dialogs.

9.1 Behaviour Blocking Warnings

As we have already mentioned, the RGW32 program manages all the resident tests. One of these tests is the “Behaviour Blocker.” If a RGW32 starts up task that contains the “Behaviour Blocker” option CHECKED or turned “ON,” then all operating system operations are monitored (for more information, see 4.3.1.15 “Behaviour Blocker” Page).

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Any time a suspicious operation is attempted, the RGW32 program will display a warning (Fig. 121) and wait until the user lets it know what to do.

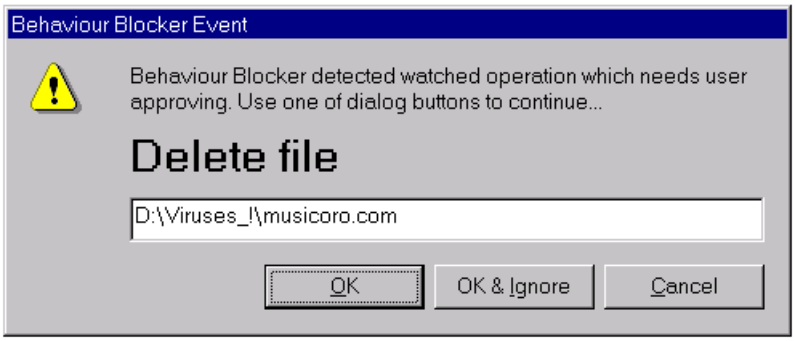

Fig. 121: Virus Warning

The warning dialog contains a text box with the name of the suspicious file and three buttons:

- Click the “OK” button to perform the suggested operation on the suspicious file.
- Click the “OK & Ignore” button will perform the suggested operation on the suspicious file. Moreover, the RGW32 program will not show any more warning dialogs until the RGW32 test is finished.
- Click the “Cancel” button to stop RGW32 from performing the operation on the suspicious file. This means that the file has not changed and RGW32 will probably warn you the next time that you access the same file.

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9.2 RGW32 Warnings

The RGW32 program can also scan programs as they start up, OLE documents opened with the help of OLE functions, and boot sectors of diskettes inserted in the disk drive. The RGW32 program will perform these tests if they were CHECKED (✓) or turned “ON” on the “Test” tab. It will report if it finds boot virus or a virus in a running application or in an OLE Document.

If you insert a diskette into the disk drive, RGW32 will scan the boot sector to see whether it contains a virus. If it finds a virus, it will display a warning message (Fig. 122). You can continue to work with the diskette because a virus cannot cause problems until it starts up or becomes active. The purpose of the warning message is to advise you of possible danger.

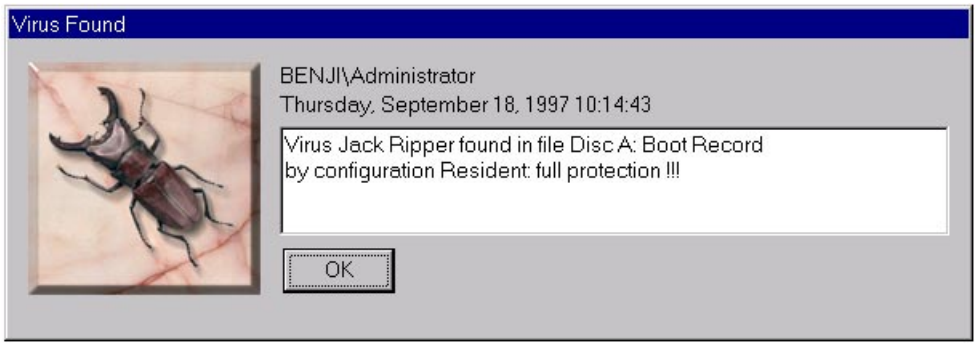

Fig. 122: Virus Warning

RGW32 will also display the warning message illustrated in Fig. 122 if it discovers a known virus in an executable program, or if the user attempted to open an OLE document containing a virus. In order for the RGW32 program to display the message, you must start up a task containing the “Executable and OLE documents protector” option. If you click the “OK” button, you can continue your work.

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CHAPTER 10

QUICK32 PROGRAM

The QUICK32 program is similar to the AVAST32 and LGW32 programs as you use it to scan a file for the presence of the known viruses. However, unlike AVAST32 or LGW32, it can only be accessed from a pop-up menu and can only scan one file, one folder or one hard disk at a time (Fig 123).

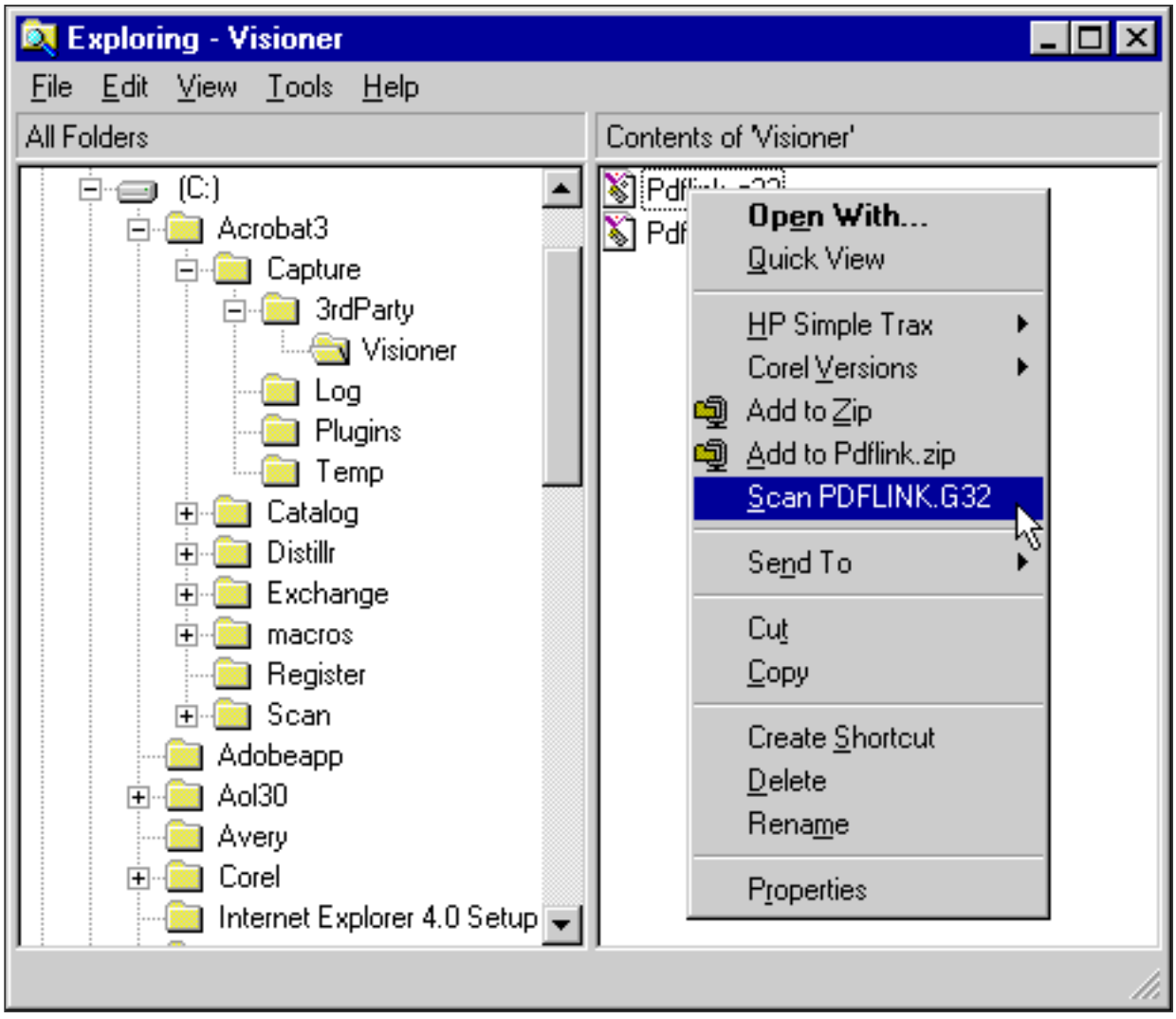

Fig. 123: Microsoft Windows Explorer

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The QUICK32 program is a perfect virus scanning solution if you are using Microsoft Windows Explorer or if you are looking in a desktop window at a file list. In that case, use your right mouse button to select a particular file, folder or hard drive for a virus and a pop-up menu will appear. Use your left mouse button to select the “Scan…” menu command, and QUICK32 will scan the file, folder, or hard drive. This is the only time QUICK32 is useful. Otherwise, it is much more convenient to use the AVAST32 or LGW32 programs.

The QUICK32 program is preset to scan all the files for the presence of all viruses. Compressed files are scanned first in their compressed form, then they are internally decompressed, scanned, and then recompressed again. The QUICK32 program does not send any return codes.

The QUICK32 command line looks like this:

QUICK32 <name>

The <name> identifies the name of the file, folder, or hard drive that you want to scan, including its path. If an external application passes a folder or hard drive name to QUICK32 as a parameter, it only test the executable files and OLE documents. In addition, it will scan all the subfolders. Review QUICK32 progress with a small “Red” ball icon you’ll find in the right part of the task bar (Fig. 124).

Fig. 124: Windows System Tray

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Use the left button of the mouse to double-click this icon and a dialog with the name of the file being currently scanned (Fig. 125) will appear. If you want to close the program, press the “Exit” button. Press the “OK” button will close the window.

Fig. 125: “QUICK32” Dialog

If the QUICK32 program finds a virus, a warning dialog appears. 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.

- End Chapter 10 -

CHAPTER 11

WARN32 PROGRAM

The purpose of the WARN32 program is to warn a user that a virus has been discovered in his or her computer. If the displaying of the warning message is turned "ON," It runs automatically when a computer starts up.

The command line of the program reads as follows:

WARN32

As you can see, the program does not need additional parameters to operate. In addition, it does not send any return code. When it starts up, the WARN32 program looks into the operating system register to see whether there is a virus on your computer (this information is provided by the AVAST32, LGW32, and QUICK32 programs). If it finds a virus, the program will display a warning message.

The warning message informs the user of the last infected file that was found, the name of the virus that infected the file, and the name of the task that discovered the virus.

- If WARN32 does not find a virus, the program ends without sending any message about its operation. The user may not even notice that it was running.
- If WARN32 displays a warning message, you should call for technical assistance. For this reason, a beginner should not start the WARN32 program.
- If WARN32 displays a warning message after you have logged on to a network, contact the Network Administrator or any other authorized person immediately.

The removal of the WARN32 program message from the desktop itself is not sufficient, you must also take steps to take care of the problem as the warning message will be displayed the next time the computer is started up!

- End Chapter 11 -

CHAPTER 12

AVAST32 SCREEN SAVER

AVAST32 also includes a Screen Saver that scans for viruses at the same time you are protecting your computer screen. While the scanner is running, what is being scanned will appear in a Screen Saver window that is moving on the screen. It contains information about the file currently being tested and the number of files that have already been tested. If it finds a virus, the test is stopped and a virus warning is displayed in the Screen Saver window.

The user can select several colors for the Screen Saver window. If the color depth that the monitor can display is set to a low number (less than 65536 colors), the background is set to while and the text is black. If a virus is found, the background changes to black and the text to white. If the color depth is set to over 65536 colors, the text will be white and the background blue or, if a virus is found, red. The Screen Saver can be interrupted by a key press or by moving the mouse.

12.1 Screen Saver Settings

To select the AVAST32 Screen Saver, use your left mouse button to select the Display icon in the Control Panel folder. Once there, click the “Settings” button.

The “Screen Saver” tab contains the following options:

- Screen Saver Basic Controls (screen saver descriptions, settings, and preview)
- “OK, “Cancel,” and “Apply” buttons.

When you select the “Settings” option, the “Edit existing task” dialog appears. While there are other tabs on the dialog, the two that affect the Screen Saver are the “Screen Saver” tab and the “Test” tab.

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12.1.1 "Screen Saver" Tab

This tab contains the basic controls for setting the AVAST32 Screen Saver. The "Screen Saver" dialog allows you to choose the screen saver that you wish to see when your computer is idle. Select the screen saver from a dropdown list, which appears when you click the down arrow on the right part of the text box. If no screen saver is chosen or one is not available, AVAST32 will try to choose an appropriate screen saver.

- Use the "Settings" button to choose the appropriate settings. Its functions depend on the screen saver that you choose.
- Use the "Defaults" button to set all the controls to their default value.

12.1.2 "Test" Tab

The "Test" tab contains the basic controls to set up the screen saver activities.

- CHECK (✓) or turn "ON" the "Virus scanning" check box to virus scan using the Screen Saver. The "Virus scanning" check box is CHECKED (✓) or turned "ON" by default.
- CHECK (✓) or turn "ON" the "Repeat Scanning" check box to repeat scanning operations. The "Repeat Scanning" check box is CHECKED (✓) or turned "ON" by default.
- The "Scroll Bar" in the "Speed of window moving" controls allows the user to set the speed of the window movement around the Microsoft Windows desktop. The default setting is five seconds.

12.1.3 Other Screen Saver Options

The following options are available only if the "Virus Scanning" check box is CHECKED (✓) or turned "ON" on the "Test" Page or "Task Property Sheet" tab:

"Priority" setting determines the priority of the test. A higher priority if recommended for the Screen Saver. "Types" Page or Tab sets the types of files that will be tested or ignored. "Areas" setting determines which areas will be tested or ignored. "Scanner" setting contains the controls for setting the virus scanning parameters. "Net Alert" setting contains the controls for setting the sending of warning to other computers. "Sound" setting contains the controls for making sounds when the AVAST32 Screen Saver finds a virus.

- End Chapter 12 -

APPENDIX A

CONTACT SECURENET

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- End Appendix A -

APPENDIX B

GENERAL AVAST32 INFO

The information provided in this Appendix is for expert users who want to optimize AVAST32 operation. Appendix A shows how the program works and includes brief descriptions of certain .DLL libraries.

B.1 General Information

While AVAST32 contains several programs that scan for viruses, a separate program actually does the testing. When needed, AVAST32s call this separate program and it tests the files. This not only avoids duplicating the testing code and associated data, but it cuts the running time and space needed to keep the programs on your hard disk and in RAM memory. In addition, all AVAST32s use the same procedures and libraries, which results in a drastic reduction for code needed to generate each update.

All the data about viruses is located in the LGW.VPS file. While this file might seem large now, it will only get bigger as hackers create more viruses. The LGW.VPS file is essential for the proper operation of AVAST32 and its associated programs.

B.2 AVAST32 .DLL Libraries

AVAST32 and other programs call several libraries when the antivirus functions needed. The first of them is the AvMain.DLL library, which is a Microsoft Windows dynamic library that has been around since Windows 3.1. Various AVAST32 programs call this library to initialize, “clean,” and request other antivirus services. Generally, the AvMain.DLL library provides support for most of AVAST32 operations.

The Vps32s.DLL library does the actual searching for viruses. This library is implemented as an “InProc server” working in the “Apartment” work model. It represents the COM server, which maps to the address space of the program and initializes it. This library uses several auxiliary libraries (Vps32a.DLL, Vps32e.DLL), but these auxiliary libraries perform special tasks that are not pertinent to using the AVAST32 software family.

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B.3 Optimizing Use of the LGW.VPS file

It is possible to optimize LGW.VPS file use by making sure that programs have access to all the data in the LGW.VPS file. One way to do this is to make sure that programs are not always using the LGW.VPS file, especially since it must be checked, read, and analyzed before each use. If this file is free, then AVAST32 will start up much faster.

The Vps32.EXE program helps keep the LGW.VPS file open so that AVAST32 can start faster. You will appreciate this, particularly if you are checking files for viruses using the Windows Explorer program.

- End Appendix B -

APPENDIX C

DEFAULT TASK SETTINGS

C.1 “Name” Page

The text field for the entering task name contains the text “(not specified)." The new task is private by default.

C.2 “Test” Page

Of the non-resident tests, the following two are CHECKED (✓) or turned “ON”: “Virus scanning” and “Integrity Checking.” “Simple integrity checking” is NOT CHECKED or turned “OFF.” All resident tests are NOT CHECKED or turned “OFF.”

C.3 “Priority” Page

The priority of the task is preset to a lower value than the priority of AVAST32 user interface.

C.4 “Types” Page

“All executable files” and “OLE documents” are CHECKED (✓) or turned “ON” for a new task.

C.5 “Areas” Page

“All local hard disks” is CHECKED (✓) or turned “ON” (all the hard disks which are installed directly in your computer). In addition, scanning subfolders is CHECKED (✓) or turned “ON” as well.

C.6 “Common” Page

All of the check boxes on this page are NOT CHECKED or turned “OFF.” AVAST32 will not exit at the same time as the last task and the task will only report the first virus found to external programs.

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C.7 “Scanner” Page

Check boxes that are CHECKED (✓) or turned “ON” include “Test memory” (available only under Windows 95), “Ignore virus selectiveness,” and “Test compressed files internally.” The task will scan the operating memory under Windows 95. It will ignore the characteristics of viruses. It will test all the files and the compressed files. If there is no virus found, AVAST32 will not display a message. The “Notify all found viruses” radio button is selected by default.

C.8 “Checker” Page

The “Ignore ARCHIVE attribute” check box is CHECKED or turned “ON.” This means that integrity checking will ignore the ARCHIVE attribute of thew files and it will always test the file content.

C.9 “Continue” Page

The “Task name” text field is blank. After finishing this task, no other task will be started.

C.10 “Report” Page

The “Create report file” check box is NOT CHECKED or turned “OFF.” The text box “Report file name/directory” contains the “*” (asterisk) and the check box “Overwrite existing report file” NOT CHECKED or turned “OFF.” Thus, the new task will not create a report of its activity.

C.11 “Net alert” Page

The “Send alert over the network” check box is NOT CHECKED or turned “OFF,” AVAST32 will not send a message. All other controls on this page are ignored. The check box “Send messages only to selected computers” CHECKED or turned “ON.” The list of the computers on this is empty by default.

C.12 “Message” Page

Text box for the text of the report contains the following text by default:

File %1 is infected by %2 virus.

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C.13 “Sound” Page

This contains no controls.

C.14 “Online scan” Page

The “OLE documents,” “16-bit applications Windows,” and “MS-DOS applications” check boxes are CHECKED or turned “ON.” This means that AVAST32 will scan all the applications running in your computer. The check box “Scan all except for system libraries” is CHECKED or turned “ON.”

C.15 “Online block” Page

The “DOS file operation” and “Windows file operation” check boxes are CHECKED or turned “ON.” The “Format” field is not CHECKED or turned “OFF” under the Windows 95. So AVAST32 monitors all operations except the formatting.

C.16 “Ignore” Page

The file list on this page is empty by default. This means that AVAST32 monitors all suspicious operations with all files on your computer.

- End Appendix C -

APPENDIX D

ACTIVATION KEY & LICENSES

Normally, an Activation Key (serial number) is necessary to legally use AVAST32. However, you can use an evaluation copy for three months. However, after that time, you must purchase an Activation Key. It is a sequence of characters that you enter into AVAST32's "Program license" dialog. An example of this is AABBB.CDDDDDD-EEEEEE. aVAST32 AS770.A800009-XZ2Z7Z

The "AA" contains the identification of the program, "BBB" defines the number of the program version, and the C item is the character specifying the number of available licenses. If the letter "A" is written here, then only one license has been bought, if "B" is here, then two licenses have been bought, etc. DDDDDD defines the serial number of the program and EEEEEE is the code that verifies the authenticity of the license number.

AVAST32 monitors the number of copies running in the network at any given time. If you have purchased less than ten licenses, the program will allow you to run as many licenses as you purchased, plus one. If you have purchased at least ten licenses, you can run as many licenses of AVAST32 as you purchased, plus two.

If you try to run over that amount, AVAST32 will warn you that there are more program copies running than the number of purchased licenses. If you have been warned and try to run more unauthorized copies of AVAST32, all of its copies that are still running will be closed.

- End Appendix D -

APPENDIX E

NETWORK SUPPORT

AVAST32 is designed to work well with networks. For example, when it finds a virus, AVAST32 can send a message to any of the connected users, particularly the Network Administrator. AVAST32 accomplishes this using services already provided by Microsoft Windows.

When working in a network, it is particularly important to observe the limits of the license agreement. AVAST32 monitors the number of the program copies that are running so that their number does not exceed the number of the purchased licenses. More detailed information is available in Appendix D: Activation Key & Licenses.

When working in a network, it is usually necessary to make sure all copies of a particular piece of software are up-to-date. This is particularly important for antivirus programs. To make updating the viruses databases simple, AVAST32 contains a way to automatically accomplish this task.

All that the administrator has to do is create the folder and put the updated VPS file in it. Then all copies are set up to use this folder to automatically update the .VPS file. In addition, it is also necessary to permit the actual automatic update (6.6 “Update VPS” Menu Command).

Once this is done, the update is automatically performed for each computer on the network. If one computer is down or is not connected for some reason, this is not a problem as AVAST32 always checks the update folder to see if there is a new .VPS file when it starts up. If this is the case, it will remove the old .VPS file and replace it with the newer one.

- End Appendix E -

APPENDIX F

PROGRAMMER SUPPORT

AVAST32 is mainly a consumer and business product, so it is generally not programmable in nature. However, there are some parts of it that can be especially useful for programmers. The most important are described below.

F.1 System Variable

If you are entering AVAST32 path, the name can contain a system variable enclosed between two "%" (per cent) characters. Hence, you can refer to the root folder of the system this way: "%SystemRoot%." If the system variable of the given name does not exist, then AVAST32 will ignore this part of the path.

F.2 Sending messages of the viruses found

AVAST32 can warn external programs of viruses that it finds. To accomplish this, we created the mailslot bearing the name:

"\\.\mailslot\AVAST32\VIRUSFOUND"

This mailslot contains all the information on the first virus found by a non-resident program, and the information on all the viruses found by the resident programs. It is possible to set it up so that AVAST32 sends the information on all the viruses found to the mailslot.

The message includes the names of domain, computer, user, infected file, and virus that infected the file. The data items are written to the box in the form of a string and are separated by a zero character.

- End Appendix F -

APPENDIX G

COPYRIGHT INFORMATION

Manual Design: Dennis James
PDF Implementation: Dennis James
Written & Edited by: Dennis James, SecureNet

- End Appendix G -

APPENDIX H

ILLUSTRATIONS

- End Appendix H -