AVG 9 Anti-Virus plus Firewall

User Manual

Document revision 90.16 (19.11.2009)

Contents

1. Introduction

This user manual provides comprehensive documentation for **AVG 9 Anti-Virus plus Firewall**.

Congratulations on your purchase of AVG 9 Anti-Virus plus Firewall!

AVG 9 Anti-Virus plus Firewall is one of a range of award winning AVG products designed to provide you with peace of mind and total security for your PC. As with all AVG products **AVG 9 Anti-Virus plus Firewall** has been completely re-designed, from the ground up, to deliver AVG's renowned and accredited security protection in a new, more user friendly and efficient way.

Your new **AVG 9 Anti-Virus plus Firewall** product has a streamlined interface combined with more aggressive and faster scanning. More security features have been automated for your convenience, and new 'intelligent' user options have been included so that you can fit our security features to your way of life. No more compromising usability over security!

AVG has been designed and developed to protect your computing and networking activity. Enjoy the experience of full protection from AVG.

2. AVG Installation Requirements

2.1. Operation Systems Supported

AVG 9 Anti-Virus plus Firewall is intended to protect workstations with the following operating systems:

- Windows 2000 Professional SP4 + Update Rollup 1
- Windows XP Home Edition SP2
- Windows XP Professional SP2
- Windows XP Professional x64 Edition SP1
- Windows Vista (x86 and x64, all editions)
- Windows 7 (x86 and x64, all editions)

(and possibly higher service packs for specific operating systems)

2.2. Minimum & Recommended HW Requirements

Minimum hardware requirements for **AVG 9 Anti-Virus plus Firewall**:

- Intel Pentium CPU 1,5 GHz
- 512 MB of RAM memory
- 390 MB of free hard drive space (for installation purposes)

Recommended hardware requirements for **AVG 9 Anti-Virus plus Firewall**:

- Intel Pentium CPU 1,8 GHz
- 512 MB of RAM memory
- 510 MB of free hard drive space (for installation purposes)

3. AVG Installation Options

AVG can be installed either from the installation file available on your installation CD, or you can download the latest installation file from AVG website (http://www.avg.com/).

Before you start installing AVG, we strongly recommend that you visit AVG website (http://www.avg.com/) to check for a new installation file. This way you can be sure to install the latest available version of AVG 9 Anti-Virus plus Firewall.

We recommend you to try out our new AVG Download Manager tool that will help you set up the installation file in your required language!

During the installation process you will be asked for your license/sales number. Please make sure you have it available before starting the installation. The sales number can be found on the CD packaging. If you purchased your copy of AVG on-line, your license number will have been delivered to you via e-mail.

4. AVG Download Manager

AVG Download Manager is a simple tool that helps you select the proper installation file for your AVG product. Based on your input data, the manager will select the specific product, license type, desired components, and language. Finally, **AVG Download Manager** will go on to download and launch the appropriate installation process.

Warning: *Please note that AVG Download Manager is not suitable for downloading of network and SBS editions and only the following operating systems are supported: Windows 2000 (SP4 + SRP roll-up), Windows XP, Windows Vista a Windows 7.*

AVG Download Manager is available for download at AVG website (http://www.avg.com/). Following please find a brief description of each single step you need to take within the **AVG Download Manager**:

4.1. Language Selection

In this first step of **AVG Download Manager** select the installation language from the roll-down menu. Note, that your language selection applies only to the installation process; after the installation you will be able to change the language directly from program settings. Then press the ***Next*** button to continue.

4.2. Connectivity Check

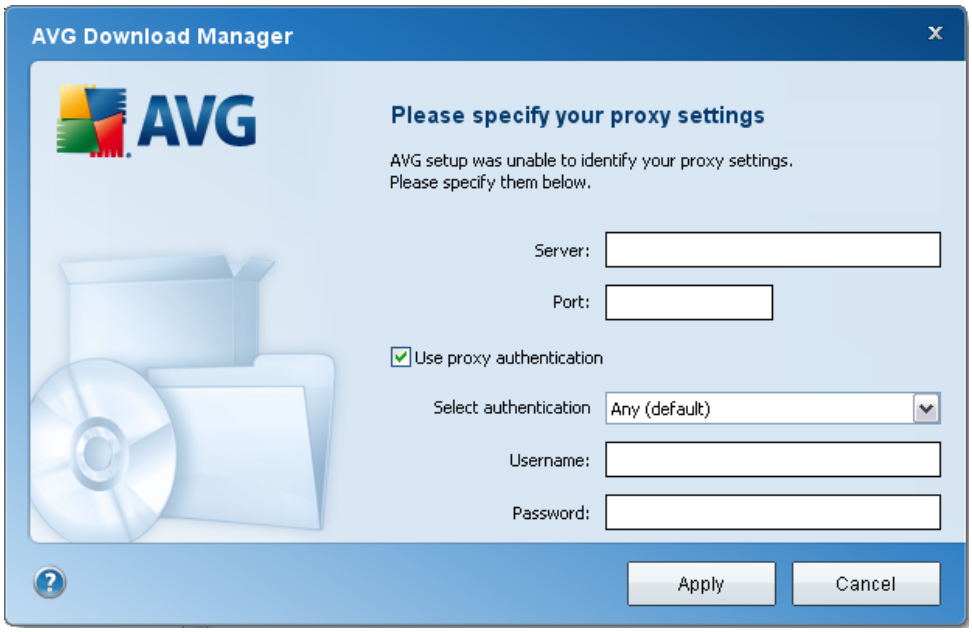
In the next step, **AVG Download Manager** will attempt to establish an Internet connection so that updates can be located. You will not be allowed to advance the download process until the **AVG Download Manager** is able to complete the connectivity test.

- If the test shows no connectivity, make sure you are really connected to Internet. Then click the ***Retry*** button

- If you are using a Proxy connection to the Internet, click the ***Proxy Settings*** button to specify your proxy information:

- If the check has been successful, press the ***Next*** button to continue.

4.3. Proxy Settings



If **AVG Download Manager** was not able to identify your Proxy settings you have to specify them manually. Please fill in the following data:

- ***Server*** - enter a valid proxy server name or IP address
- ***Port*** - provide the respective port number
- ***Use proxy authentication*** - if your proxy server requires authentication, tick this check box.
- ***Select authentication*** - from the drop-down menu select the authentication type. We strongly recommend that you keep to the default value (*the proxy server will then automatically convey its requirements to you*). However, if you are a skilled user, you can also choose Basic (*required by some servers*) or NTLM (*required by all ISA Servers*) option. Then, enter a valid ***Username*** and ***Password*** (optionally).

Confirm your settings by pressing the ***Apply*** button to follow to the next step of **AVG Download Manager**.

4.4. Download Files to Install

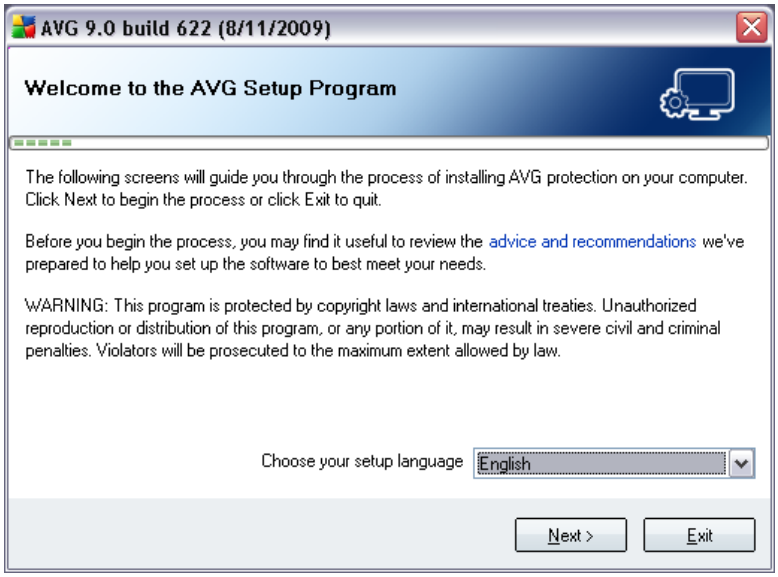
Now, you have provided all information needed for the **AVG Download Manager** to start the installation package download, and launch the installation process. Further, advance to the AVG Installation Process.

5. AVG Installation Process

To install **AVG 9 Anti-Virus plus Firewall** on your computer, you need to get the latest installation file. You can use the installation file from the CD that is a part of your box edition but this file might be out-of-date. Therefore we recommended getting the latest installation file online. You can download the file from AVG website (http://www.avg.com/), the ***Support Center / Download*** section. Or, you can make use of our new ***AVG Download Manager*** tool that helps you create and download the installation package you need, and launch the installation process.

The installation is a sequence of dialog windows with a brief description of what do at each step. In the following, we offer an explanation for each dialog window:

5.1. Installation Launch



The installation process starts with the ***Welcome to the AVG Setup Program*** window. In here you select the language used for the installation process. In the lower part of the dialog window find the ***Choose your setup language*** item, and select the desired language from the drop down menu. Then press the ***Next*** button to confirm and continue to the next dialog.

Attention: *Here, you are selecting the language for the installation process only. You are not selecting the language for the AVG application - that can be specified later on during the installation process!*

5.2. License Agreement

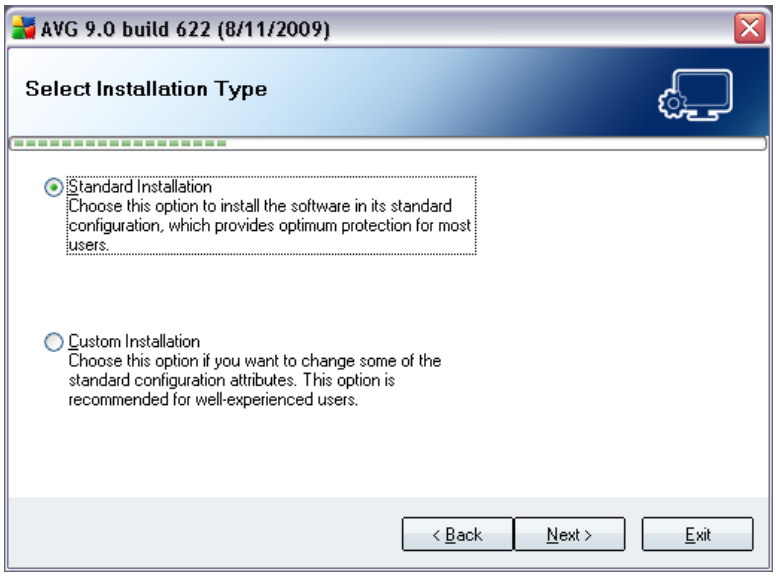
The ***License Agreement*** dialog provides the full wording of the AVG license agreement. Please read it carefully and confirm that you have read, understood and accept the agreement by marking the ***I have read license agreement*** check box and pressing the ***Accept*** button.

If you do not agree with the license agreement press the ***Don't accept*** button, and the installation process will be terminated immediately.

5.3. Checking System Status

Having confirmed the license agreement, you will be redirected to the ***Checking System Status*** dialog. This dialog does not require any intervention; your system is being checked before the AVG installation can start. Please wait until the process has finished, then continue automatically to the following dialog.

5.4. Select Installation Type



The ***Select Installation Type*** dialog offers the choice of two installation options: ***standard*** and ***custom*** installation.

For most users, it is highly recommended to keep to the ***standard installation*** that installs AVG in fully automatic mode with settings predefined by the program vendor. This configuration provides maximum security combined with the optimal use of resources. In the future, if the need arises to change the configuration, you will always have the possibility to do so directly in the AVG application.

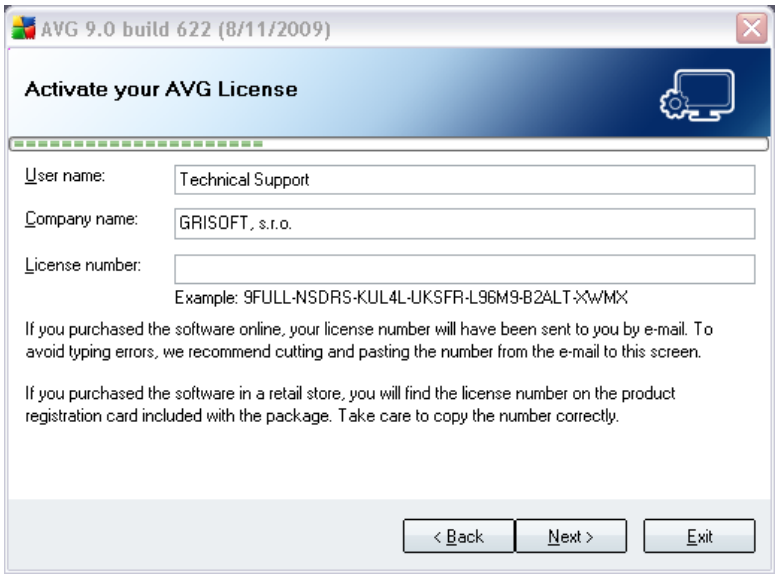
Custom installation should only be used by experienced users who have a valid reason to install AVG with non-standard settings. E.g. to fit specific system requirements.

5.5. Activate your AVG License

In the ***Activate your AVG License*** dialog you have to fill in your registration data. Type in your name (***User Name*** field) and the name of your organization (***Company Name*** field).

Then enter your license/sales number into the ***License Number*** text field. The sales number can be found on the CD packaging in your **AVG 9 Anti-Virus plus Firewall** box. The license number will be in the confirmation email that you received after purchasing your **AVG 9 Anti-Virus plus Firewall** on-line. You must type in the number

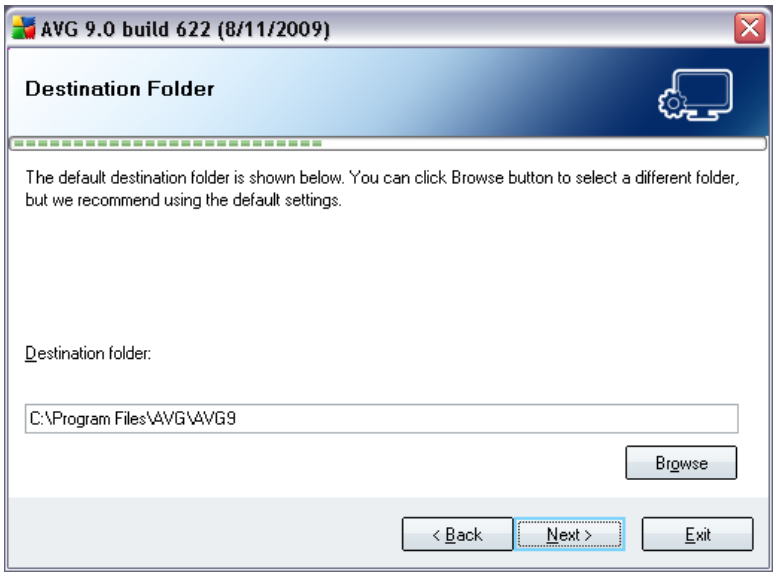
exactly as shown. If the digital form of the license number is available (*in the email*), it is recommended to use the copy and paste method to insert it.



Press the ***Next*** button to continue the installation process.

If in the previous step you have selected the standard installation, you will be redirected directly to the ***AVG Security Toolbar*** dialog. If custom installation was selected you will continue with the ***Destination Folder*** dialog.

5.6. Custom Installation - Destination Folder

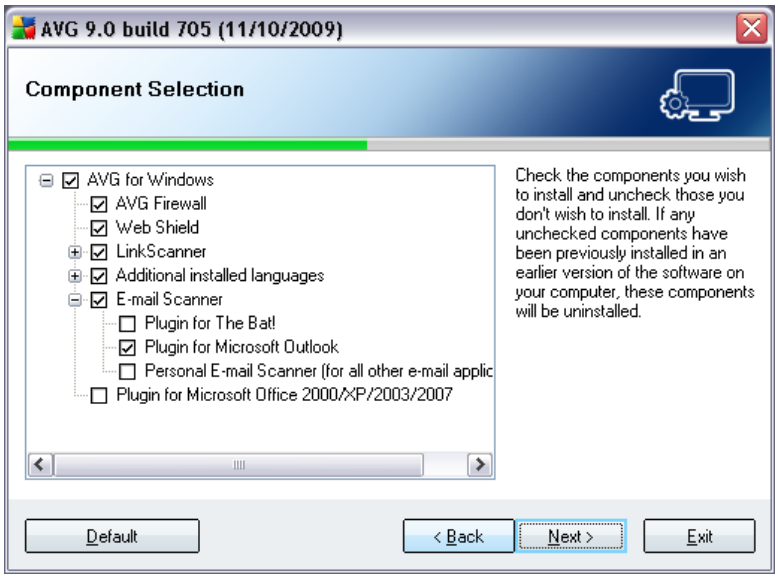


The ***Destination Folder*** dialog allows you to specify the location where **AVG 9 Anti-Virus plus Firewall** should be installed. By default, AVG will be installed to the program files folder located on drive C:. In case the folder does not exist yet, you will be asked in a new dialog to confirm you agree AVG creates this folder now.

If you want to change this location, use the ***Browse*** button to display the drive structure, and select the respective folder.

Press the ***Next*** button to confirm.

5.7. Custom Installation - Component Selection



The ***Component Selection*** dialog displays an overview of all **AVG 9 Anti-Virus plus Firewall** components that can be installed. If the default settings do not suit you, you can remove/add specific components.

However, you can only select from components that are included in your purchased AVG edition. Only those components will be offered to be installed within the Component Selection dialog!

- ***Language selection***

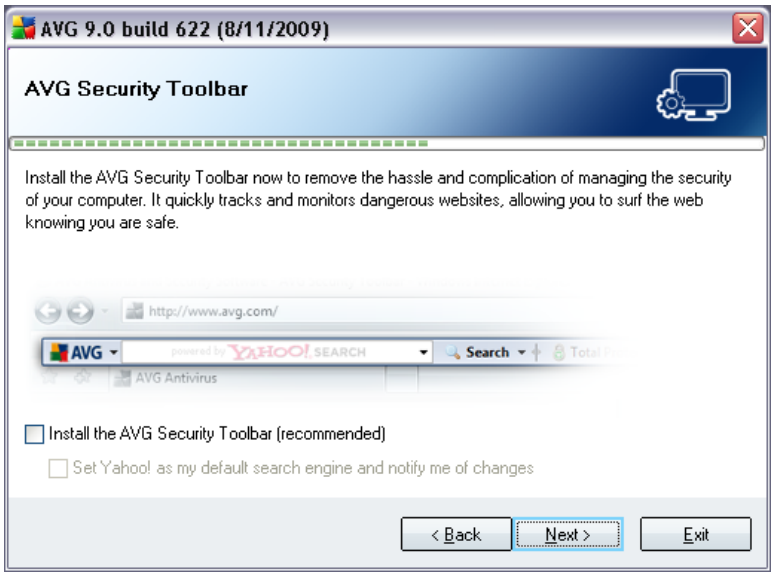
  Within the list of components to be installed, you can define which language(s) AVG should be installed in. Check the ***Additional installed languages*** item and then select the desired languages from the respective menu.

- ***E-mail Scanner plug-ins***

  Click the ***E-mail Scanner*** item to open and decide on what plug-in is to be installed to guarantee your electronic mail security. By default, ***Plugin for Microsoft Outlook*** will be installed. Another specific option is the ***Plugin for The Bat!*** If you use any other e-mail client (*MS Exchange, Qualcomm Eudora,...*), go for the ***Personal E-mail Scanner*** option to secure your e-mail communication automatically no matter what e-mail program you run.

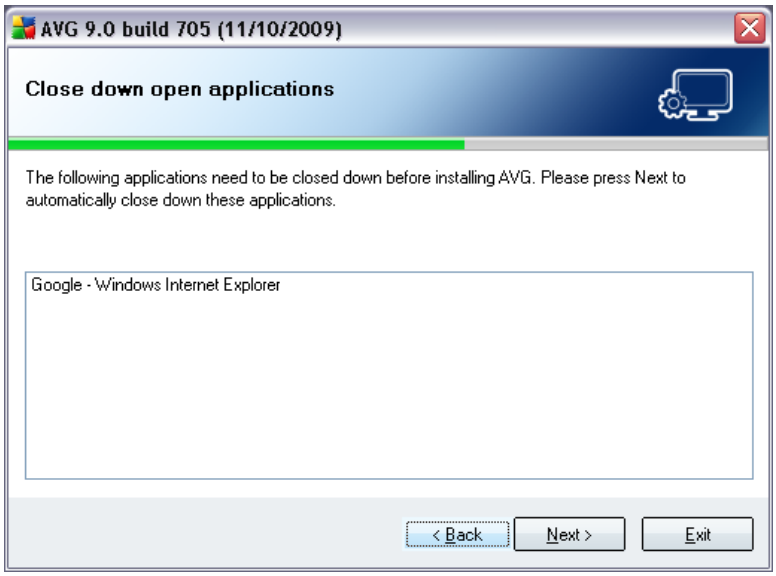
Continue by pressing the ***Next*** button.

5.8. AVG Security Toolbar



In the ***AVG Security Toolbar*** dialog, decide whether you want to install the ***AVG Security Toolbar*** (*verification of search results of the supported Internet search engines*). If you do not change the default settings, this component will be installed automatically into your Internet browser (*currently supported browsers are Microsoft Internet Explorer v. 6.0 or higher, and Mozilla Firefox v. 2.0 or higher*) a to provide you with comprehensive online protection while surfing the Internet.

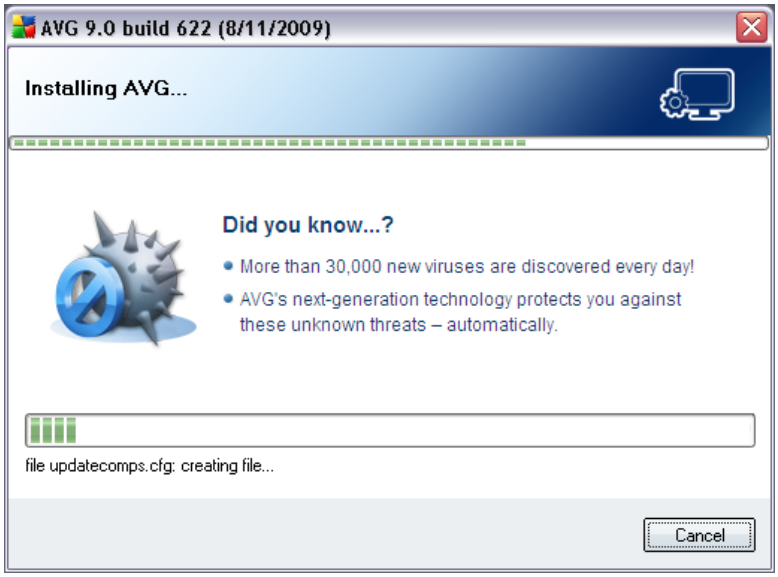
5.9. Close down open applications



The ***Close down open applications*** dialog appears during the installation process only in case there are some other clashing programs running on your computer at the moment. Then, the list of programs that need to be closed in order to sucessfuly finish the installation process will be provided. Press the ***Next*** button to confirm you agree to close down the respective applications, and to continue to the next step.

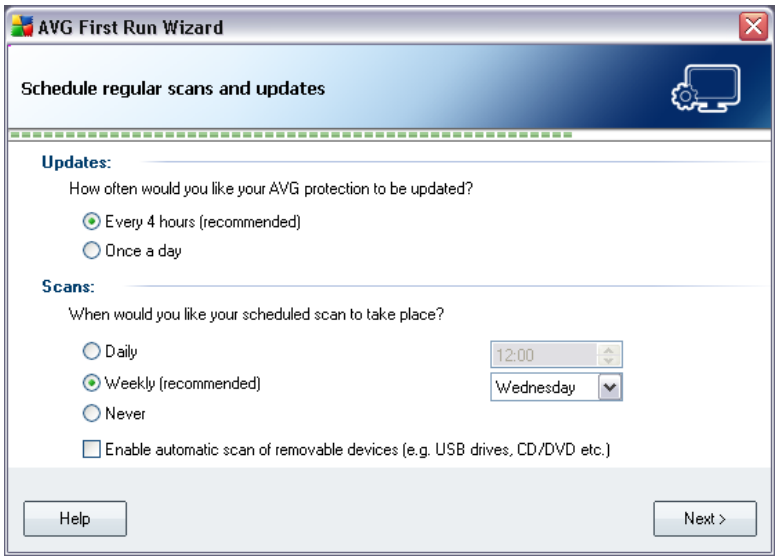
5.10. Installing AVG

The ***Installing AVG*** dialog shows the progress of the installation process, and does not require any intervention:



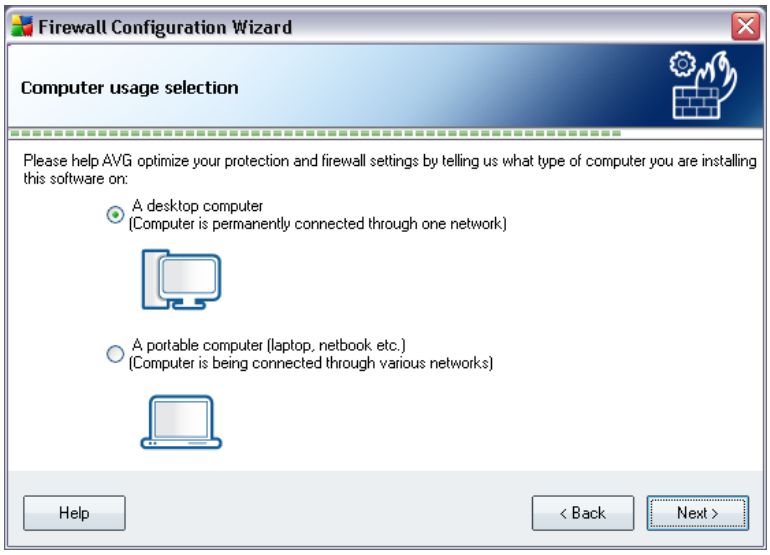
After the installation process is finished, you will be redirected to the next dialog automatically.

5.11. Schedule regular scans and updates



In the ***Schedule regular scans and updates*** dialog set up the interval for new update files accessibility check-up, and define time when the scheduled scan should be launched. It is recommended to keep the default values. Press the ***Next*** button to continue.

5.12. Computer usage selection



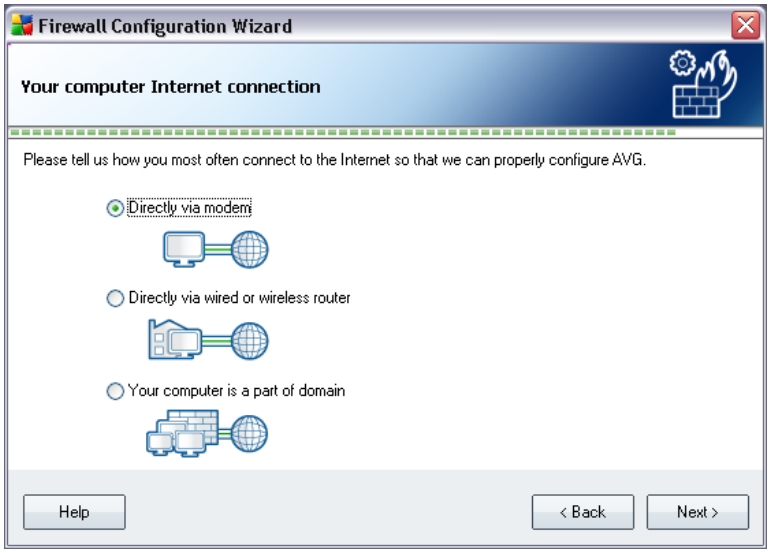
In this dialog, the ***Firewall Configuration Wizard*** asks what type of computer you use. For instance, your notebook, that connects to the Internet from many different locations (*airports, hotel rooms, etc.*) requires security rules that are stricter than those of a computer in a domain (*company network, etc.*). Based on the selected computer usage type the ***Firewall*** default rules will be defined with a different security level.

You have two alternative options to select from:

- ***A desktop computer***
- ***A portable computer***

Confirm your selection by pressing the ***Next*** button and proceed to the next dialog.

5.13. Your computer networking design



In this dialog, the ***Firewall Configuration Wizard*** asks how your computer is connected to the Internet. Based on the selected connection type the ***Firewall*** default rules will be defined with a different security level.

You have three alternative options to select from:

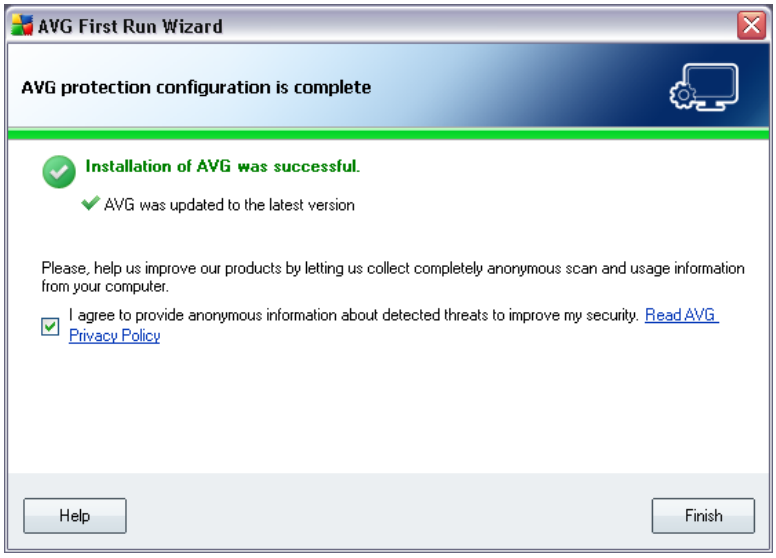
- ***Directly via modem***
- ***Directly via wired or wireless router***

- ***Your computer is a part of domain***

Select the connection type that best describes your computer connection to the Internet.

Confirm your selection by pressing the ***Next*** button and proceed to the next dialog.

5.14. AVG protection configuration is complete



Now your **AVG 9 Anti-Virus plus Firewall** has been configured.

In this dialog you decide whether you want to activate the option of anonymous reporting of exploits and bad sites to AVG virus lab. If so, please mark the ***I agree to provide ANONYMOUS information about detected threats to improve my security*** option.

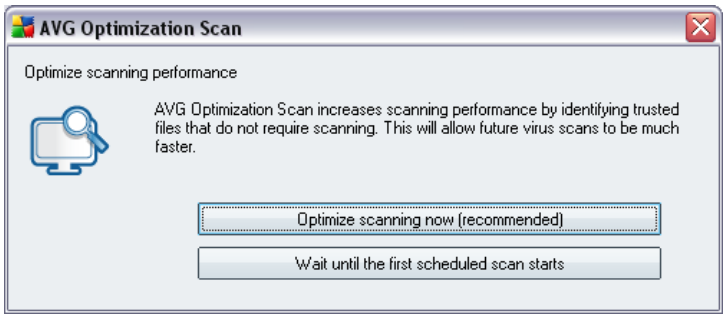
Finally, press the ***Finish*** button. Your computer restart may be required so that you can start working with AVG.

6. After Installation

6.1. Scan optimization

The scanning optimization functionality searches the *Windows* and *Program files* folders where it detects appropriate files (*at the moment those are the *.exe, *.dll and *.sys files*) and saves the information on these files. With the next access these files will not be scanned again and this reduce the the scanning time significantly.

Once the installation process is over you will invited via a new dialog window to optimize scanning:



We recommend to use this option and run the scanning optimization process by pressing the ***Optimize scanning now*** button.

6.2. Product Registration

Having finished the **AVG 9 Anti-Virus plus Firewall** installation, please register you product online on AVG website (http://www.avg.com/), ***Registration*** page (*follow the instruction provided directly in the page*). After the registration you will be able to gain full access to your AVG User account, the AVG Update newsletter, and other services provided exclusively for registered users.

6.3. Access to User Interface

The ***AVG User Interface*** is accessible in several ways:

- double-click the AVG icon on the system tray
- double-click the AVG icon on the desktop

- from the menu ***Start/Programs/AVG 9.0/AVG User Interface***

6.4. Scanning of the whole computer

There is a potential risk that a computer virus has been transmitted to your computer prior to **AVG 9 Anti-Virus plus Firewall** installation. For this reason you should run a ***Scan of the whole computer*** to make sure there are no infections on your PC.

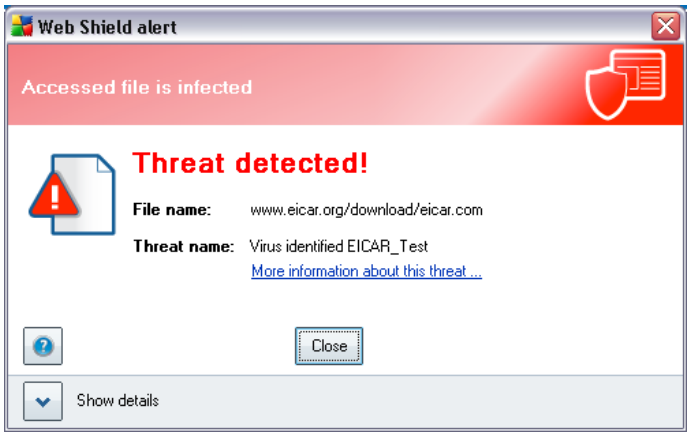
For instructions on running a ***Scan of the whole computer*** please consult the chapter ***AVG Scanning***.

6.5. Eicar Test

To confirm that **AVG 9 Anti-Virus plus Firewall** has been installed correctly you can perform the EICAR test.

The EICAR test is a standard and absolutely safe method used to test antivirus system functioning. It is safe to pass around, because it is not an actual virus, and does not include any fragments of viral code. Most products react to it as if it were a virus (*though they typically report it with an obvious name, such as "EICAR-AV-Test"*). You can download the EICAR virus from the EICAR website at www.eicar.com, and you will also find all necessary EICAR test information there.

Try to download the ***eicar.com*** file, and save it on your local disk. Immediately after you confirm downloading of the test file, the ***Web Shield*** will react to it with a warning. This notice demonstrates that AVG is correctly installed on your computer.



From the http://www.eicar.com website you can also download the compressed version of the EICAR 'virus' (*e.g. in the form of eicar_com.zip*). ***Web Shield*** allows

you to download this file and save it on your local disk but then the ***Resident Shield*** detects the 'virus' as you try to unpack it.

If AVG fails to identify the EICAR test file as a virus, you should check the program configuration again!

6.6. AVG Default Configuration

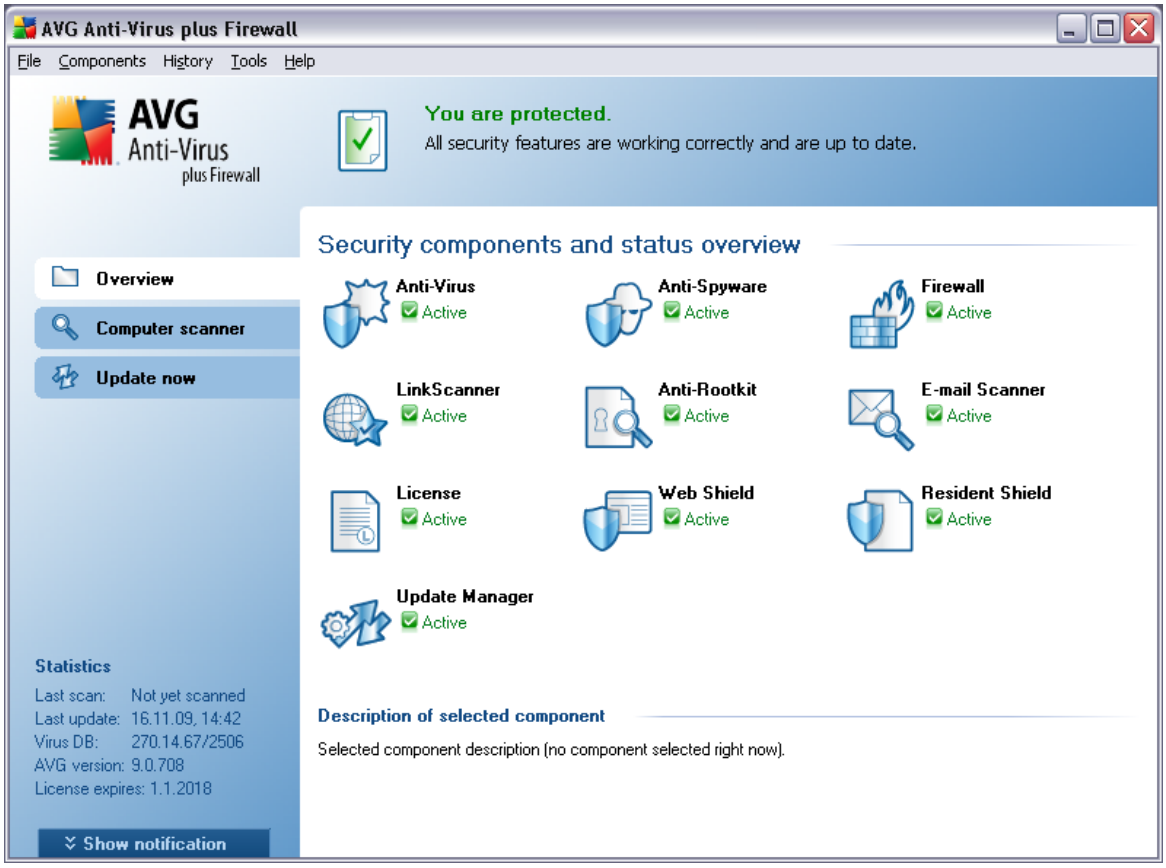
The default configuration (*i.e. how the application is set up right after installation*) of **AVG 9 Anti-Virus plus Firewall** is set up by the software vendor so that all components and functions are tuned up to achieve optimum performance.

Unless you have a real reason to do so, do not change the AVG configuration! Changes to settings should only be performed by an experienced user.

Some minor editing of AVG components settings is accessible directly from the specific component user interface. If you feel you need to change the AVG configuration to better suit your your needs, go to ***AVG Advanced Settings***: select the system menu item ***Tools/Advanced settings*** and edit the AVG configuration in the newly opened ***AVG Advanced Settings*** dialog.

7. AVG User Interface

AVG 9 Anti-Virus plus Firewall open with the main window:



The main window is divided into several sections:

- ***System Menu*** *(top system line in the window)* is the standard navigation that allows you to access all AVG components, services, and features - details >>
- ***Security Status Info*** *(upper section of the window)* provides you with information on the current status of your AVG program - details >>
- ***Quick Links*** *(left section of the window)* allow you to quickly access the most important and most frequently used AVG tasks - details >>
- ***Components Overview*** *(central section of the window)* offer an overview of all installed AVG components - details >>

- ***Statistics*** *(left bottom section of the window)* provide you with all statistical data regarding the programs operation - details >>

- ***System Tray Icon*** *(bottom right corner of the monitor, on the system tray)* indicates the AVG current status - details >>

7.1. System Menu

The ***System menu*** is the standard navigation used in all Windows applications. It is located horizontally in the very top part of the **AVG 9 Anti-Virus plus Firewall** main window. Use the system menu to access specific AVG components, feature, and services.

The system menu is divided into five main sections:

7.1.1. File

- ***Exit*** - closes the **AVG 9 Anti-Virus plus Firewall**'s user interface. However, the AVG application will continue running in the background and your computer will still be protected!

7.1.2. Components

The ***Components*** item of the system menu includes links to all installed AVG components, opening their default dialog page in the user interface:

- ***System overview*** - switch to the default user interface dialog with the overview of all installed components and their status

- ***Anti-Virus*** - opens the default page of the ***Anti-Virus*** component

- ***Anti-Rootkit*** - opens the default page of the ***Anti-Rootkit*** component

- ***Anti-Spyware*** - opens the default page of the ***Anti-Spyware*** component

- ***Firewall*** - opens the default page of the ***Firewall*** component

- ***Link Scanner*** - opens the default page of the ***Link Scanner*** component

- ***E-mail Scanner*** - opens the default page of the ***E-mail Scanner*** component

- ***License*** - opens the default page of the ***License*** component

- ***Web Shield*** - opens the default page of the ***Web Shield*** component

- ***Resident Shield*** - opens the default page of the ***Resident Shield*** component
- ***Update Manager*** - opens the default page of the ***Update Manager*** component

7.1.3. History

- ***Scan results*** - switches to the AVG testing interface, specifically to the ***Scan Results Overview*** dialog
- ***Resident Shield Detection*** - open a dialog with an overview of threats detected by ***Resident Shield***
- ***E-mail Scanner Detection*** - open a dialog with an overview of mail messages attachments detected as dangerous by the ***E-mail Scanner*** component
- ***Web Shield findings*** - open a dialog with an overview of threats detected by ***Web Shield***
- ***Virus Vault*** - opens the interface of the quarantine space (***Virus Vault***) to where AVG removes all detected infections that cannot be healed automatically for some reason. Inside this quarantine the infected files are isolated and your computer's security is guaranteed, and at the same time the infected files are stored for possible future repair.
- ***Event History Log*** - opens the history log interface with an overview of all logged **AVG 9 Anti-Virus plus Firewall** actions.
- ***Firewall*** - opens the Firewall settings interface on the ***Logs*** tab with a detailed overview of all Firewall actions

7.1.4. Tools

- ***Scan computer*** - switches to the AVG scanning interface and launches a scan of the whole computer
- ***Scan selected folder*** - switches to the AVG scanning interface and allows you to define within the tree structure of your computer which files and folders should be scanned
- ***Scan file*** - allows you to run an on-demand test over a single file selected from the tree structure of your disk
- ***Update*** - automatically launches the update process of **AVG 9 Anti-Virus plus Firewall**

- ***Update from directory*** - runs the update process from the update files located in a specified folder on your local disk. However, this option is only recommended as an emergency, e.g. in situations where there is no connection to the Internet (*for example, your computer is infected and disconnected from the Internet; your computer is connected to a network with no access to the Internet, etc.*). In the newly opened window select the folder where you have previously placed the update file, and launch the update process.

- ***Advanced settings*** - opens the ***AVG advanced settings*** dialog where you can edit the **AVG 9 Anti-Virus plus Firewall** configuration. Generally, it is recommended to keep the default settings of the application as defined by the software vendor.

- ***Firewall settings*** - open a standalone dialog for advanced configuration of the ***Firewall*** component

7.1.5. Help

- ***Contents*** - opens the AVG help files

- ***Get Help Online*** - opens AVG website (http://www.avg.com/) at the customer support center page

- ***Your AVG Web*** - opens AVG website (http://www.avg.com/)

- ***About Viruses and Threats*** - opens the online ***Virus Encyclopedia*** where you can look up detailed information on the identified virus

- ***Reactivate*** - opens the ***Activate AVG*** dialog with the data you have entered in the ***Personalize AVG*** dialog of the installation process. Within this dialog you can enter your license number to either replace the sales number (*the number you have installed AVG with*), or to replace the old license number (*e. g. when upgrading to a new AVG product*).

- ***Register now*** - connects to the registration page of AVG website (http://www.avg.com/). Please fill in your registration data; only customers who register their AVG product can receive free technical support.

Note*: If using the trial version of* **AVG 9 Anti-Virus plus Firewall***, the latter two items appear as* ***Buy now*** *and* ***Activate****, alowing you to buy the full version of the program right away. For* **AVG 9 Anti-Virus plus Firewall** *installed with a sales number, the items display as* ***Register*** *and* ***Activate****. For more information please consult the License section of this documentation.*

- ***About AVG*** - opens the ***Information*** dialog with five tabs providing data on

program name, program and virus database version, system info, license agreement, and contact information of ***AVG Technologies CZ***.

7.2. Security Status Info

The ***Security Status Info*** section is located in the upper part of the AVG main window. Within this section you will always find information on the current security status of your **AVG 9 Anti-Virus plus Firewall**. Please see an overview of icons possibly depicted in this section, and their meaning:

 The green icon indicates that your AVG is fully functional. Your computer is completely protected, up to date and all installed components are working properly.

 The orange icon warns that one or more components are incorrectly configured and you should pay attention to their properties/settings. There is no critical problem in AVG and you have probably decided to switch some component off for some reason. You are still protected by AVG. However, please pay attention to the problem component's settings! Its name will be provided in the ***Security Status Info*** section.

This icon also appears if for some reason you have decided to ignore a component's error status (*the "Ignore component state" option is available from the context menu opened by a right-click over the respective component's icon in the component overview of the AVG main window*). You may need to use this option in a specific situation but it is strictly recommended to switch off the "***Ignore component state***" option as soon as possible.

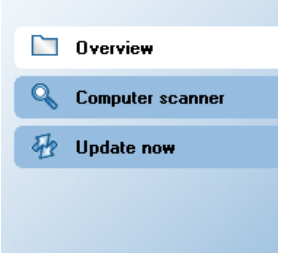
 The red icon indicates that AVG is in critical status! One or more components does not work properly and AVG cannot protect your computer. Please pay immediate attention to fixing the reported problem. If you are not able to fix the error yourself, contact the AVG technical support team.

It is strongly recommended that you pay attention to ***Security Status Info*** and in case the report indicates any problem, go ahead and try to solve it immediately. Otherwise your computer is at risk!

Note: *AVG status information can also be obtained at any moment from the system tray icon.*

7.3. Quick Links

Quick links *(in the left section of the AVG User Interface)* allow you to immediately access the most important and most frequently used AVG features:



- ***Overview*** - use this link to switch from any currently opened AVG interface to the default one with an overview of all installed components - see chapter ***Components Overview*** >>
- ***Computer scanner*** - use this link to open the AVG scanning interface where you can run tests directly, schedule scans, or edit their parameters - see chapter ***AVG Scanning*** >>
- ***Update now*** - this link open the updating interface, and launches the AVG update process immediately - see chapter ***AVG Updates*** >>

These links are accessible from the user interface at all times. Once you use a quick link to run a specific process, the GUI will switch to a new dialog but the quick links are still available. Moreover, the running process is further graphically depicted.

7.4. Components Overview

The ***Components Overview*** section is located in the central part of the AVG User Interface. The section is divided into two parts:

- Overview of all installed components consisting of a panel with the component's icon and the information of whether the respective component is active or inactive
- Description of a selected component

Within the **AVG 9 Anti-Virus plus Firewall** the ***Components Overview*** section contains information on the following components:

- ***Anti-Virus*** ensures that your computer is protected from viruses trying to

enter your computer - details >>

- ***Anti-Spyware*** scans your applications in the background as you run them - details >>
- ***Firewall*** controls how your computer exchanges data with other computers on the Internet or local network - details >>
- ***Link Scanner*** checks the search results displayed in your internet browser - details >>
- ***Anti-Rootkit*** detects programs and technologies trying to camouflage malware - details >>
- ***E-mail Scanner*** checks all incoming and outgoing mail for viruses - details >>
- ***License*** displays the license number, type and expiration date - details >>
- ***Web Shield*** scans all data being downloaded by a web browser - details >>
- ***Resident Shield*** runs in the background and scans files as they are copied, opened or saved - details >>
- ***Update Manager*** controls all AVG updates - details >>

Single-click any component's icon to highlight it within the components overview. At the same time, the component's basic functionality description appears in the bottom part of the user interface. Double-click the icon to open the components own interface with a list of basic statistical data.

Right-click you mouse over a component's icon to expand a context menu: besides opening the component's graphic interface you can also select to ***Ignore component state***. Select this option to express you are aware of the component's error state but for some reason you wish to keep your AVG so and you do not want to be warned by the system tray icon.

7.5. Statistics

The ***Statistics*** section is located in the left bottom part of the AVG User Interface. It offers a list of information regarding the program's operation:

- ***Last scan*** - provides the date when the last scan was performed
- ***Last update*** - provides the date when the last update was launched

- ***Virus DB*** - informs you about the currently installed version of the virus database
- ***AVG version*** - informs you about the AVG version installed *(the number is in the form of 9.0.xx, where 9.0 is the product line version, and xx stands for the number of the build)*
- ***License expires*** - provides the date of your AVG license expiration

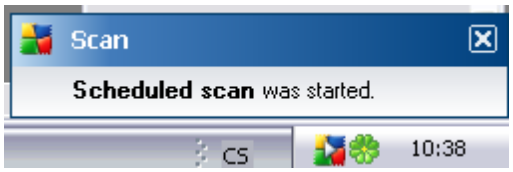
7.6. System Tray Icon

System Tray Icon (*on your Windows taskbar*) indicates the current status of your **AVG 9 Anti-Virus plus Firewall**. It is visible at all times on your system tray, no matter whether your AVG main window is opened or closed.

If in full color , the ***System Tray Icon*** indicates that all AVG components are active and fully functional. Also, AVG system tray icon can be displayed in full color if AVG is in error state but you are fully aware of this situation and you have deliberately decided to ***Ignore the component state***.

An icon with an exclamation mark indicates a problem (*inactive component, error status, etc.*). Double-click the ***System Tray Icon*** to open the main window and edit a component.

The system tray icon further informs on current AVG activities and possible status changes in the program (*e.g. automatic launch of a scheduled scan or update, Firewall profile switch, a component's status change, error status occurrence, ...*) via a pop-up window opened from the AVG system tray icon:



The ***System Tray Icon*** can also be used as a quick link to access the AVG main window at any time - double click on the icon. By right-click on the ***System Tray Icon*** you open a brief context menu with the following options:

- ***Open AVG User Interface*** - click to open the AVG User Interface
- ***Update*** - launches an immediate update

8. AVG Components

8.1. Anti-Virus

8.1.1. Anti-Virus Principles

The antivirus software's scanning engine scans all files and file activity (opening/ closing files, etc.) for known viruses. Any detected virus will be blocked from taking any action and will then be cleaned or quarantined. Most antivirus software also uses heuristic scanning, where files are scanned for typical virus characteristics, so called viral signatures. This means that the antivirus scanner can detect a new, unknown virus, if the new virus contains some typical characteristics of existing viruses.

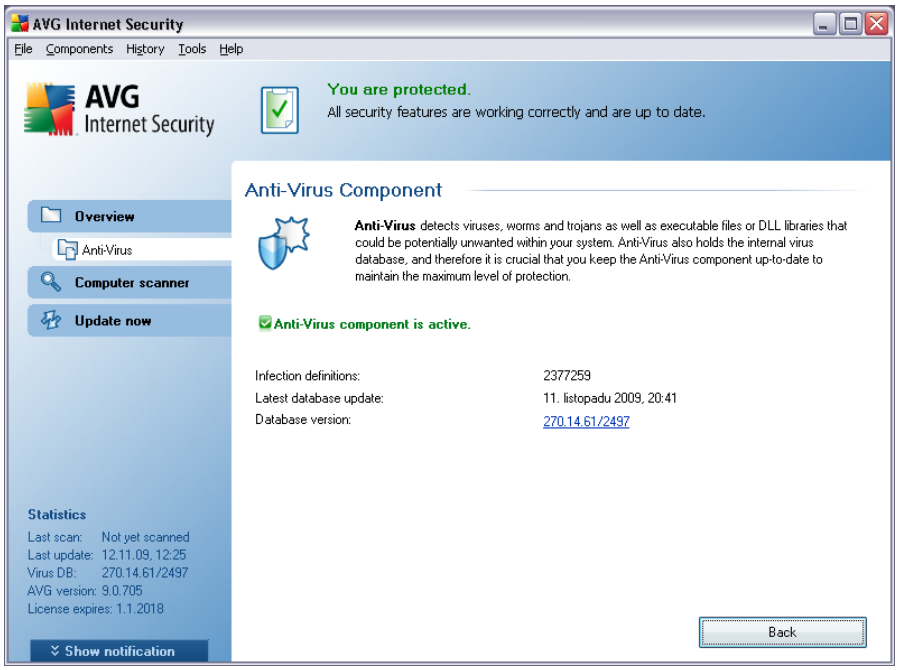
The important feature of antivirus protection is that no known virus can run on the computer!

Where just a single technology might fall short of detecting or identifying a virus, ***Anti-Virus*** combines several technologies to ensure that your computer is protected from viruses:

- Scanning - searching for character strings that are characteristic of a given virus
- Heuristic analysis - dynamic emulation of the scanned object's instructions in a virtual computer environment
- Generic detection - detection of instructions characteristic of the given virus/ group of viruses

AVG is also able to analyze and detect executable applications or DLL libraries that could be potentially unwanted within the system. We call such threats Potentially Unwanted Programs (various kinds of spyware, adware etc.). Furthermore, AVG scans your system registry for suspicious entries, temporary Internet files and tracking cookies, and allows you to treat all potentially harmful items in the same way as any other infection.

8.1.2. Anti-Virus Interface



The ***Anti-Virus*** component's interface provides some basic information on the component's functionality, information on the component's current status (*Anti-Virus component is active.*), and a brief overview of ***Anti-Virus*** statistics:

- ***Infection definitions*** - number provides the count of viruses defined in the up-to-date version of the virus database
- ***Latest database update*** - specifies when and at what time the virus database was last updated
- ***Database version*** - defines the number of the latest virus database version; and this number increases with every virus base update

There is just one operating button available within this component's interface (***Back***) - press the button to return to the default AVG user interface (components overview).

Please note: *The software vendor has set up all AVG components to give optimum performance. Unless you have a real reason to do so, do not change the AVG configuration. Any changes to settings should only be performed by an experienced user. If you need to change AVG configuration, select the system menu item* ***Tools / Advanced settings*** *and edit the AVG configuration in the newly opened AVG*

Advanced Settings dialog.

8.2. Anti-Spyware

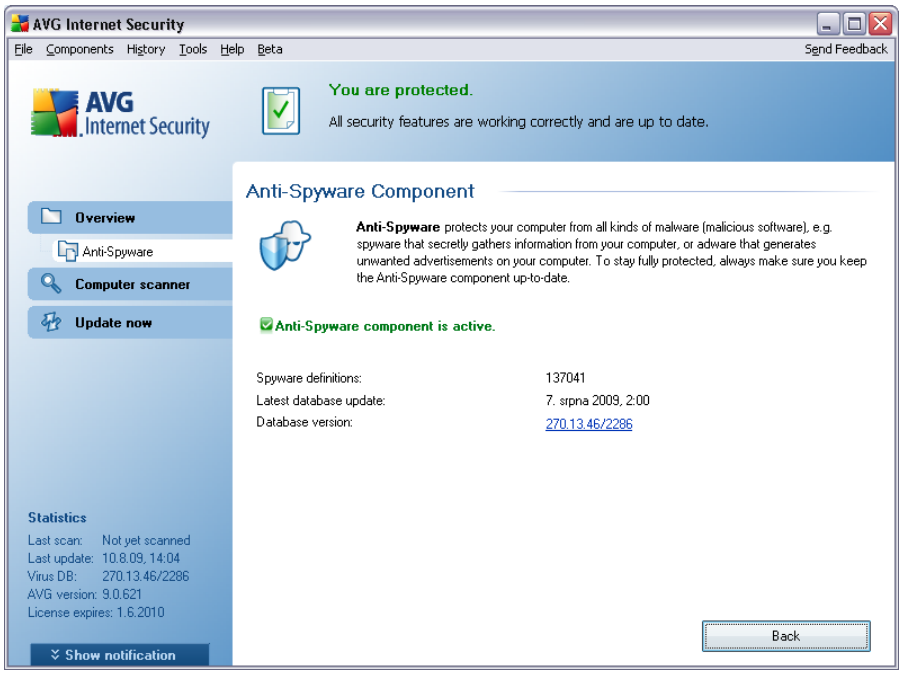
8.2.1. Anti-Spyware Principles

Spyware is usually defined as a type of malware, i.e. software, that gathers information from a user's computer without the user's knowledge or consent. Some spyware applications may also be installed on purpose and often contain advertisements, window pop-ups or different types of unpleasant software.

Currently, the most common source of infection is websites with potentially dangerous content. Other methods of transmission, such as via e-mail or transmission by worms and viruses are also prevalent. The most important protection is to use an always-on background scanner, ***Anti-Spyware***, that works like a resident shield and scans your applications in the background as you run them.

There is also the potential risk that malware has been transmitted to your computer prior to AVG installation, or that you have neglected to keep your **AVG 9 Anti-Virus plus Firewall** up-to-date with the latest database and program updates. For this reason, AVG allows you to fully scan your computer for malware/spyware using the scanning feature. It also detects sleeping and non-active malware, i.e. malware that has been downloaded but not yet activated.

8.2.2. Anti-Spyware Interface



The ***Anti-Spyware*** component's interface provides a brief overview on the component's functionality, information on the component's current status (*Anti-Spyware component is active.*), and some ***Anti-Spyware*** statistics:

- ***Spyware definitions*** - number provides the count of spyware samples defined in the latest spyware database version
- ***Latest database update*** - specifies when and at what time the spyware database was updated
- ***Database version*** - defines the number of the latest spyware database version; and this number increases with every virus base update

There is just one operating button available within this component's interface (***Back***) - press the button to return to the default AVG user interface (components overview).

Please note: The *software vendor has set up all AVG components to give optimum performance. Unless you have a real reason to do so, do not change the AVG configuration. Any changes to settings should only be performed by an experienced user. If you need to change AVG configuration, select the system menu item* ***Tools / Advanced settings*** *and edit the AVG configuration in the newly opened AVG*

Advanced Settings dialog.

8.3. Anti-Rootkit

A rootkit is a program designed to take fundamental control of a computer system, without authorization by the system's owners and legitimate managers. Access to the hardware is rarely required as a rootkit is intended to seize control of the operating system running on the hardware. Typically, rootkits act to obscure their presence on the system through subversion or evasion of standard operating system security mechanisms. Often, they are also Trojans as well, thus fooling users into believing they are safe to run on their systems. Techniques used to accomplish this can include concealing running processes from monitoring programs, or hiding files or system data from the operating system.

8.4. Firewall

Firewall is a system that enforces an access control policy between two or more networks by blocking/permitting traffic. Firewall contains a set of rules that protect the internal network from attacks originating outside (typically from the Internet) and controls all communication on every single network port. The communication is evaluated according to the defined rules, and then either allowed or forbidden. If Firewall recognizes any intrusion attempts, it "blocks" the attempt and does not allow the intruder access to the computer.

Firewall is configured to allow or deny internal/external communication (both ways, in or out) through defined ports, and for defined software applications. For example, the firewall could be configured to only permit web data to flow in and out using Microsoft Explorer. Any attempt to transmit web data by any other browser would be blocked.

Firewall protects your personally-identifiable information from being sent from your computer without your permission. It controls how your computer exchanges data with other computers on the Internet or local network. Within an organization, the firewall also protects the single computer from attacks initiated by internal users on other computers in the network.

Recommendation: *Generally it is not recommended to use more than one firewall on an individual computer. The security of the computer is not enhanced if you install more firewalls. It is more probable that some conflicts between these two applications will occur. Therefore we recommend that you use only one firewall on your computer and deactivate all others, thus eliminating the risk of possible conflict and any problems related to this.*

8.4.1. Firewall Principles

In AVG, the ***Firewall*** component controls all traffic on every network port of your computer. Based on the defined rules, the ***Firewall*** evaluates applications that are either running on your computer (and want to connect to the Internet/local network), or applications that approach your computer from outside trying to connect to your PC. For each of these applications the ***Firewall*** then either allows or forbids the communication on the network ports. By default, if the application is unknown (i.e. has no defined ***Firewall*** rules), the ***Firewall*** will ask you if you wish to allow or block the communication attempt.

Note: *AVG Firewall is not intended for server platforms!*

What AVG Firewall can do:

- Allow or block communication attempts of known applications automatically, or ask you for confirmation
- Use complete profiles with predefined rules, according to your needs
- Switch profiles automatically when connecting to various networks, or using various network adapters

8.4.2. Firewall Profiles

The ***Firewall*** allows you to define specific security rules based on whether your computer is located in a domain, or it is a standalone computer, or even a notebook. Each of these options requires a different level of protection, and the levels are covered by the respective profiles. In short, a ***Firewall*** profile is a specific configuration of ***Firewall*** component, and you can use a number of such predefined configurations.

Available profiles

- ***Allow all*** - a ***Firewall*** system profile that has been pre-set by the manufacturer and is always present. When this profile is activated, all network communication is allowed and no safety policy rules are applied, as if the ***Firewall*** protection was switched off *(i.e. all applications are allowed but packets are still being checked - to completely disable any filtering you need to disable Firewall)*. This system profile cannot be duplicated, deleted, and its settings cannot be modified.

- ***Block all*** - a ***Firewall*** system profile that has been pre-set by the manufacturer and is always present. When this profile is activated, all network communication is blocked, and the computer is neither accessible from outer networks, nor can communicate outside. This system profile cannot be duplicated, deleted, and its settings cannot be modified.

- ***Custom profiles***:

    - ***Directly connected to the Internet*** – suitable for common desktop home computers connected directly to the Internet or notebooks connecting to the Internet outside the safe company network. Select this option if you connecting from home, or you are in a small company network with no central control. Also, select this option when traveling and connecting with your notebook from various unknown and possibly dangerous places (*internet café, hotel room etc.*). More restrictive rules will be created, as it is assumed that these computers have no additional protection and therefore require the maximum protection.

    - ***Computer in domain*** – suitable for computers in a local network, e.g. school or corporate network. It is assumed that the network is protected by some additional measures so that the security level can be lower than for a standalone computer.

    - ***Small home or office network*** – suitable for computers in a small network, e.g. at home or in a small business, typically only several computers connected together, without a "central" administrator.

Profile switching

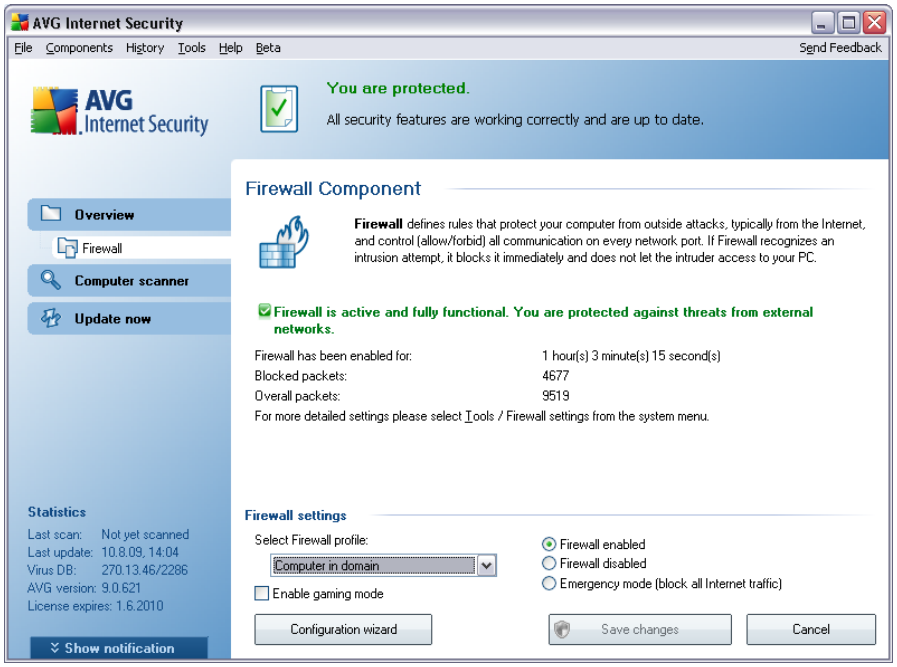
The profile switching feature allows the ***Firewall*** to switch automatically to the defined profile when using a certain network adapter, or when connected to a certain type of network. If no profile has been assigned to a network area yet, then upon next connection to that area, the ***Firewall*** will display a dialog asking you to assign a profile.

You can assign profiles to all local network interfaces or areas and specify further settings in the ***Areas and Adapters Profiles*** dialog, where you can also disable the feature if you do not wish to use it (*then, for any kind of connection, the default profile will be used*).

Typically, users who have a notebook and use various types of connection will find this feature useful. If you have a desktop computer, and only ever use one type of connection (*e.g. cable connection to the Internet*), you do not have to bother with

profile switching as most likely you will never use it.

8.4.3. Firewall Interface



The ***Firewall***'s interface provides some basic information on the component's functionality, and a brief overview of ***Firewall*** statistics:

- ***Firewall has been enabled for*** - time elapsed since Firewall was last launched
- ***Blocked packets*** - number of blocked packets from the entire amount of packets checked
- ***Overall packets*** - number of all packets checked during the Firewall run

Basic component configuration

- ***Select Firewall profile*** - from the roll-down menu select one of the defined profiles - two profiles are available at all times (the *default profiles named* ***Allow all*** *and* ***Block all***), other profiles were added manually by profile editing in the ***Profiles*** dialog in ***Firewall Settings***.
- ***Enable gaming mode*** - Check this option to ensure that when running full-

screen applications (games, PowerPoint presentations etc.), the ***Firewall*** will not display dialogs asking you whether you want to allow or block communication for unknown applications. In case an unknown application tries to communicate over the network at that time, the ***Firewall*** will allow or block the attempt automatically according to settings in the current profile.

- ***Firewall status***:
  - ***Firewall enabled*** - select this option to allow communication to those applications that are assigned as 'allowed' in the set of rules defined within selected ***Firewall*** profile
  - ***Firewall disabled*** - this option switches ***Firewall*** off completely, all network traffic is allowed but not checked!
  - ***Emergency mode (block all internet traffic)*** - select this option to block all traffic on every single network port; ***Firewall*** is still running but all network traffic is stopped

Please note: *The software vendor has set up all AVG components to give optimum performance. Unless you have a real reason to do so, do not change the AVG configuration. Any changes to settings should only be performed by an experienced user. If you need to change Firewall configuration, select the system menu item* ***Tools/Firewall settings*** *and edit the Firewall configuration in the newly opened* ***Firewall Settings*** *dialog.*

Control buttons

- ***Configuration wizard*** - press the button to switch to the respective dialog (*used within installation process*) called ***Computer Usage Selection*** where you can specify the ***Firewall*** component configuration
- ***Save changes*** - press this button to save and apply any changes made in this dialog
- ***Cancel*** - press this button to return to the default AVG user interface (*components overview*)

8.5. E-mail Scanner

One of the most common sources of viruses and trojans is via e-mail. Phishing and spam make e-mail an even greater source of risks. Free e-mail accounts are more likely to receive such malicious e-mails (*as they rarely employ anti-spam technology*), and

home users rely quite heavily on such e-mail. Also home users, surfing unknown sites and filling in online forms with personal data (*such as their e-mail address*) increase exposure to attacks via e-mail. Companies usually use corporate e-mail accounts and employ anti-spam filters etc, to reduce the risk.

8.5.1. E-mail Scanner Principles

The ***E-mail Scanner*** component scans incoming/outgoing e-mails automatically. You can use it with e-mail clients that do not have their own plug-in in AVG (*e.g. Outlook Express, Mozilla, Incredimail, etc.*).

During AVG installation AVG there are automatic servers created for e-mail control: one for checking incoming e-mails and the second one for checking outgoing e-mails. Using these two servers e-mails are automatically checked on ports 110 and 25 (*standard ports for sending/receiving e-mails*).

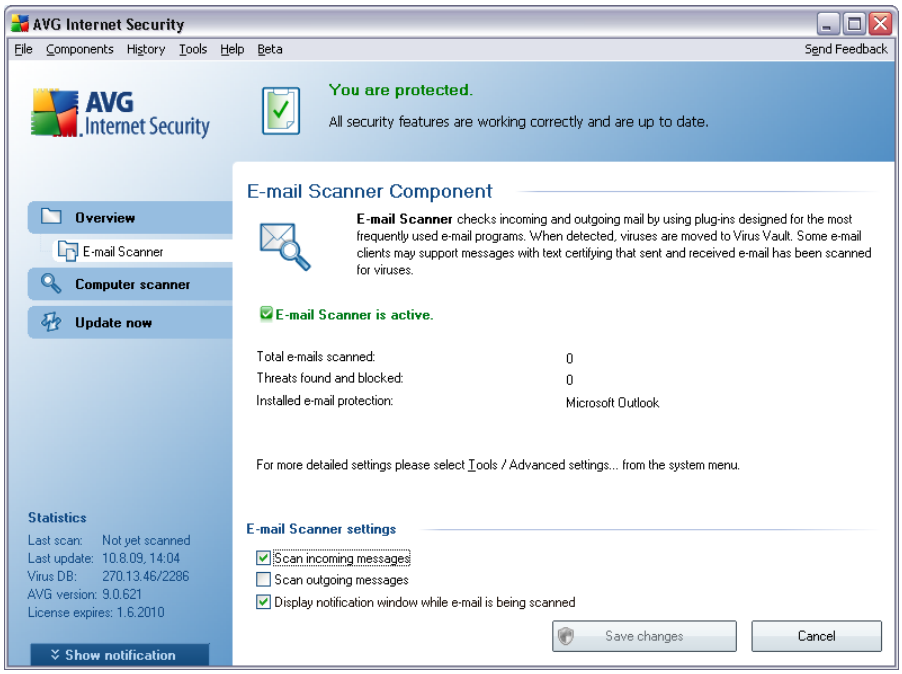
E-mail Scanner works as an interface between e-mail client and e-mail servers on the Internet.

- ***Incoming mail:*** While receiving a message from the server, the ***E-mail Scanner*** component tests it for viruses, removes infected attachments, and adds certification. When detected, viruses are quarantined in ***Virus Vault*** immediately. Then the message is passed to the e-mail client.

- ***Outgoing mail:*** Message is sent from e-mail client to E-mail Scanner; it tests the message and its attachments for viruses and then sends the message to the SMTP server (*scanning of outgoing e-mails is disabled by default, and can be set up manually*).

Note: *AVG E-mail Scanner is not intended for server platforms!*

8.5.2. E-mail Scanner Interface



In the ***E-mail Scanner*** component's dialog you can find a brief text describing the component's functionality, information on its current status (*E-mail Scanner is active.*), and the following statistics:

- ***Total e-mails scanned*** - how many e-mail messages were scanned since the ***E-mail Scanner*** was last launched (*if needed, this value can be reset; e.g. for statistic purposes - Reset value*)
- ***Threats found and blocked*** - provides the number of infections detected in e-mail messages since the last ***E-mail Scanner*** launch
- ***Installed e-mail protection*** - information about a specific e-mail protection plug-in referring to your default installed e-mail client

Basic component configuration

In the bottom part of the dialog you can find the section named ***E-mail Scanner settings*** where you can edit some elementary features of the component's functionality:

- ***Scan incoming messages*** - check the item to specify that all e-mails deliver ed to your account should be scanned for viruses. By default, this item is on, and it is recommended not to change this setting!

- ***Scan outgoing messages*** - check the item to confirm all e-mail sent from your account should be scanned for viruses. By default, this item is off.

- ***Display notification icon while E-mail is being scanned*** - check the item to confirm you want to be informed via notification dialog displayed over the AVG icon on the system tray during the scanning of your mail via ***E-mail Scanner*** component. By default, this item is on, and it is recommended not to change this setting!

The advanced configuration of the ***E-mail Scanner*** component is accessible via the ***Tools/Advanced settings*** item of the system menu; however advanced configuration is recommended for experienced users only!

Please note: *The software vendor has set up all AVG components to give optimum performance. Unless you have a real reason to do so, do not change the AVG configuration. Any changes to settings should only be performed by an experienced user. If you need to change AVG configuration, select the system menu item* ***Tools / Advanced settings*** *and edit the AVG configuration in the newly opened AVG Advanced Settings dialog.*

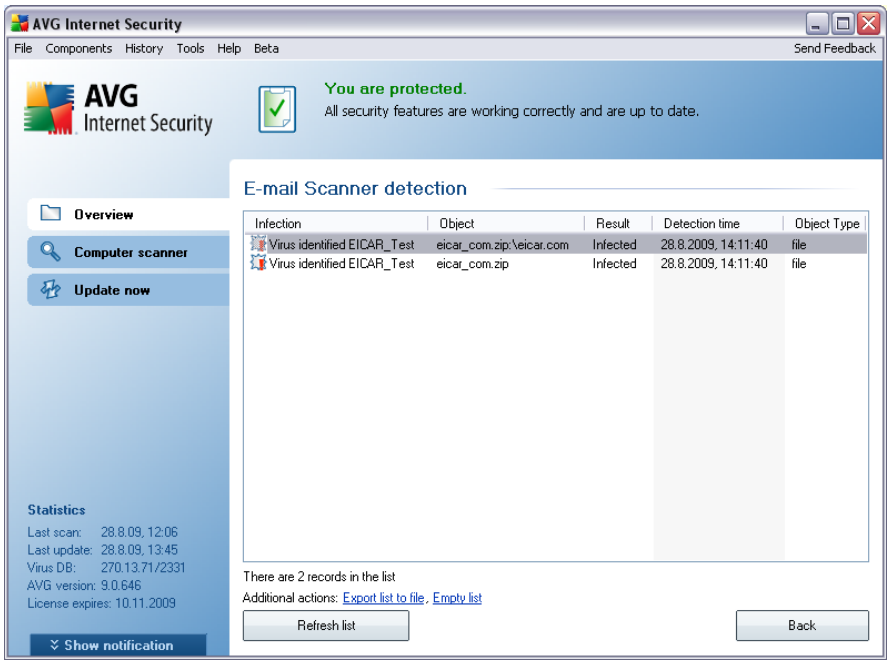
Control buttons

The control buttons available within the ***E-mail Scanner*** interface are as follows:

- ***Save changes*** - press this button to save and apply any changes made in this dialog

- ***Cancel*** - press this button to return to the default AVG user interface (components overview)

8.5.3. E-mail Scanner Detection



In the ***E-mail Scanner detection*** dialog (*accessible via system menu option History / E-mail Scanner detection*) you will be able to see a list of all findings detected by the ***E-mail Scanner*** component. For each detected object the following information is provided:

- ***Infection***- description (possibly even name) of the detected object
- ***Object*** - object location
- ***Result*** - action performed with the detected object
- ***Detection time*** - date and time the suspicious object was detected
- ***Object Type*** - type of the detected object

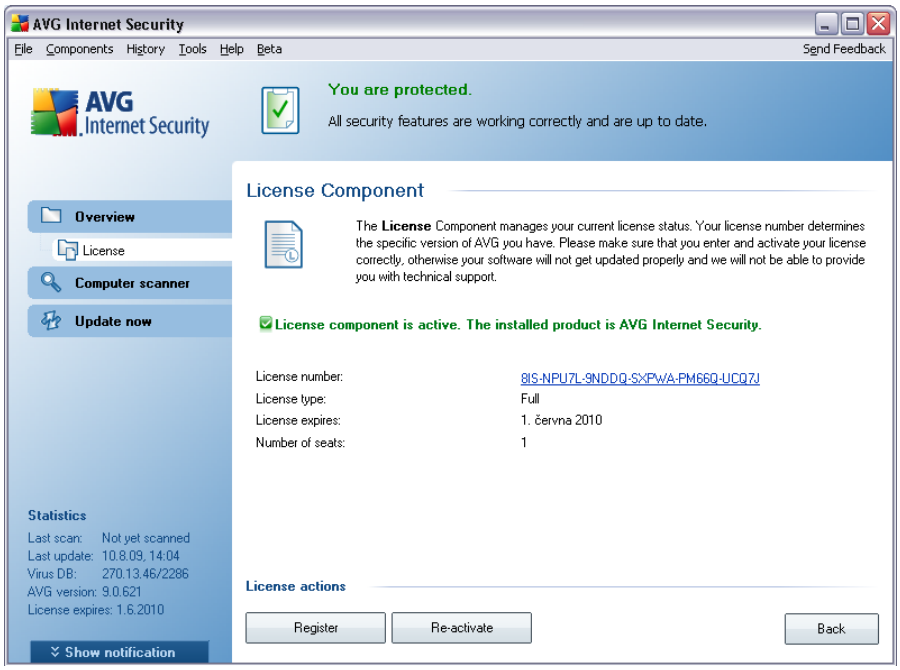
In the bottom part of the dialog, under the list, you will find information on total number of detected objects listed above. Further you can export the entire list of detected objects in a file (***Export list to file***) and delete all entries on detected objects (***Empty list***).

Control buttons

The control buttons available within the ***E-mail Scanner detection*** interface are as follows:

- ***Refresh list*** - updates the list of detected threats
- ***Back*** - switches you back to the default ***AVG user interface*** (components overview)

8.6. License



In the ***Licence*** component interface you will find a brief text describing the component's functionality, information on its current status (*License component is active.*), and the following information:

- ***License number*** - provides the exact form of your license number. When entering your license number, you have to be absolutely precise and type it exactly as shown. Therefore we strongly recommend to always use "copy & paste" method for any manipulation with the license number.

- ***License type*** - specifies the product type installed.

- ***License expires*** - this date determines the period of validity of your license. If you want to go on using **AVG 9 Anti-Virus plus Firewall** after this date you have to renew your license. The license renewal can be performed online on AVG website (http://www.avg.com/).

- ***Number of seats*** - how many workstations on which you are entitled to install your **AVG 9 Anti-Virus plus Firewall**.

Control buttons

- ***Register*** - connects to the registration page of AVG website (http://www.avg.com/). Please fill in your registration data; only customers who register their AVG product can receive free technical support.

- ***Re-activate*** - opens the ***Activate AVG*** dialog with the data you have entered in the ***Personalize AVG*** dialog of the installation process. Within this dialog you can enter your license number to either replace the sales number (*the number you have installed AVG with*), or to replace the old license number (*e.g. when upgrading to a new AVG product*).

Note: *If using the trial version of* **AVG 9 Anti-Virus plus Firewall***, the buttons appear as* ***Buy now*** *and* ***Activate****, alowing you to buy the full version of the program right away. For* **AVG 9 Anti-Virus plus Firewall** *installed with a sales number, the buttons display as* ***Register*** *and* ***Activate****.*

- ***Back*** - press this button to return to the default AVG user interface (components overview).

8.7. Link Scanner

8.7.1. Link Scanner Principles

The ***LinkScanner*** component provides protection against websites, that are designed to install malware into your computer via the web browser or its plugins. The ***LinkScanner*** technology consists of two features, ***AVG Search-Shield*** and ***AVG Active Surf-Shield***:

- ***AVG Search Shield*** contains list of websites (*URL addresses*) which are known to be dangerous. When searching Google, Yahoo!, Bing, Baidu, Altavista, or

Yandex, all results of the search are checked according to this list and a verdict icon is shown (*for Yahoo! search results only "exploited website" verdict icons are shown*). Also if you type some address directly into your browser, click a link on any website or e.g. in your e-mail, it is checked automatically and blocked if necessary.

- ***AVG Active Surf-Shield*** scans the contents of the websites you are visiting, regardless of the websites address. Even if some website is not detected by ***AVG Search Shield*** (*e.g. when a new malicious website is created, or when a previously clean website now contains some malware*), it will be detected and blocked by ***AVG Active Surf-Shield*** once you try to visit it.

Note: *AVG Link Scanner is not intended for server platforms!*

8.7.2. Link Scanner Interface

The ***LinkScanner*** component consists of two parts that you can switch on/off in the ***LinkScanner component*** interface:

The ***LinkScanner*** component interface provides a brief description of the component's functionality and information on its current status (*LinkScanner component is active.*). Further, you can find the information on the latest ***LinkScanner*** database version number (|*LinkScanner Version*).

In the bottom part of the dialog you can edit several options:

- ***Enable AVG Search-Shield*** - (*on by default*): advisory notifying icons on searches performed in Google, Yahoo!, Bing, Baidu, Yandex, or Altavista: having checked ahead the content of sites returned by the search engine.
- ***Enable AVG Active Surf-Shield*** - (*on by default*): active (*real-time*) protection against exploitive sites as they are accessed. Known malicious site connections and their exploitive content is blocked as they are accessed by the user via a web browser (*or any other application that uses HTTP*).
- ***Enable reporting of detected threats to AVG*** - mark this item to allow back reporting of exploits and bad sites found by users either via ***Safe Surf*** or ***Safe Search*** to feed the database collecting information on malicious activity on the web.

8.7.3. AVG Search-Shield

When searching Internet with the ***AVG Search-Shield*** on, all search results returned from the most popular search engines like Yahoo!, Google, Bing, Altavista, Yandex, etc. are evaluated for dangerous or suspicious links. By checking these links and marking the bad links, the ***AVG Link Scanner*** warns you before you click on dangerous or suspicious links, so you can ensure you only go to safe websites.

While a link is being evaluated on the search results page, you will see a graphic sign next to the link informing that the link verification is in progress. When the evaluation is complete, the respective informative icon will be displayed:

 The linked page is safe (*with Yahoo! search engine within AVG Security Toolbar this icon will not be displayed!*).

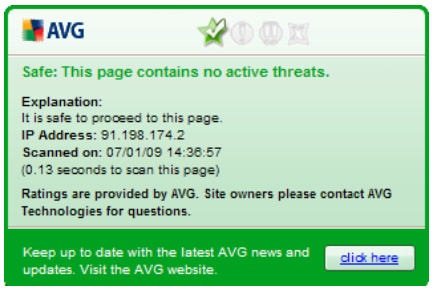
 The linked page does not contain threats but is somewhat suspicious (*questionable in origin or motive, therefore not recommended for e-shopping etc.*).

 The linked page can be either safe itself, but containing further links to positively dangerous pages; or suspicious in code, though not directly employing any threats at the moment.

 The linked page contains active threats! For your own safety, you will not be allowed to visit this page.

 The linked page is not accessible, and so could not be scanned.

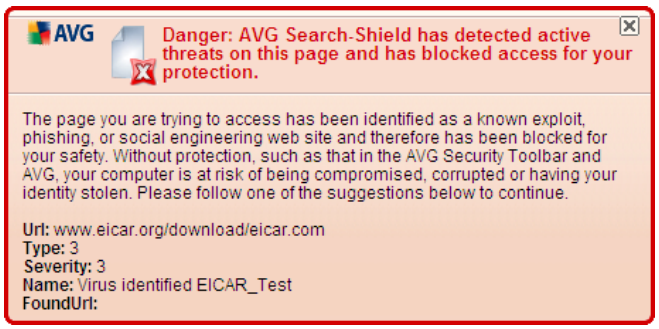
Hovering over an individual rating icon will display details about the particular link in question. Information include additional details of the threat (if any), the IP address of the link and when the page was scanned by AVG:



8.7.4. AVG Active Surf-Shield

This powerful protection will block malicious content of any webpage you try to open, and prevent it from being downloaded to your computer. With this feature enabled, clicking a link or typing in a URL to a dangerous site will automatically block you from opening the web page thus protecting you from inadvertently being infected. It is important to remember that exploited web pages can infect your computer simply by visiting the affected site, for this reason when you request a dangerous webpage containing exploits or other serious threats, the ***AVG Link Scanner*** will not allow your browser to display it.

If you do encounter a malicious web site, within your web browser the ***AVG Link Scanner*** will warn you with a screen similar to:



Entering such web site is highly risky and it cannot be recommended!

8.8. Web Shield

8.8.1. Web Shield Principles

Web Shield is a type of a real time resident protection; it scans the content of visited web pages (and possible files included in them) even before these are displayed in your web browser or downloaded to your computer.

Web Shield detects that the page you are about to visit includes some dangerous javascript, and prevents the page from being displayed. Also, it recognizes malware contained in a page and stops its downloading immediately so that it never gets to your computer.

Note: *AVG Web Shield is not intended for server platforms!*

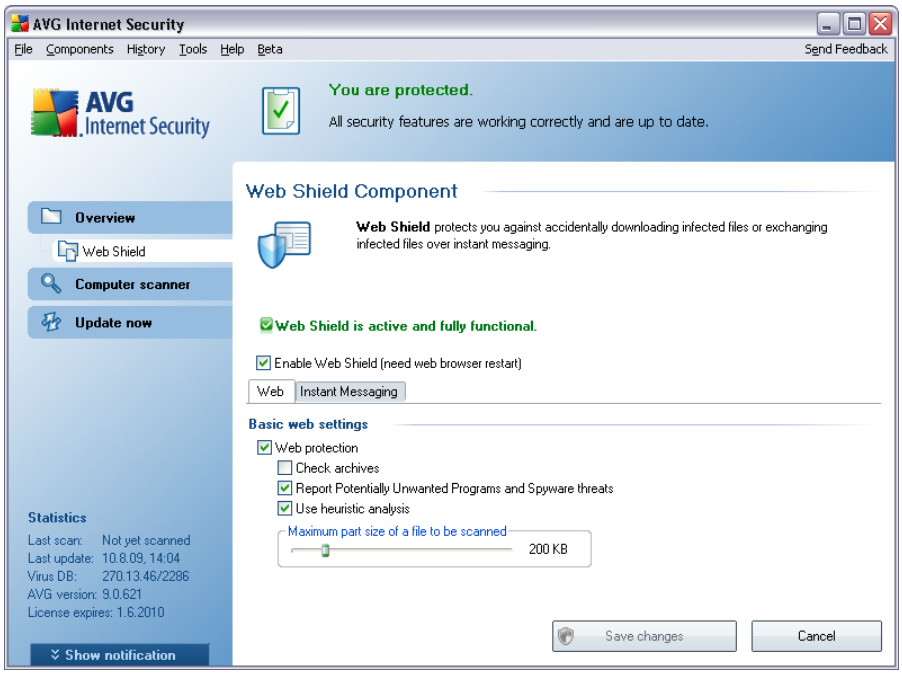
8.8.2. Web Shield Interface

The ***Web Shield*** component's interface describes the behavior of this type of protection. Further you can find information on the component's current status (*Web Shield is active and fully functional.*). In the bottom part of the dialog you will then find the elementary editing options of this component's functionality.

Basic component configuration

First of all, you have the option to immediately switch on/off the ***Web Shield*** by checking the ***Enable Web Shield*** item. This option is enabled by default, and the ***Web Shield*** component is active. However, if you do not have a good reason to change this settings, we recommend to keep the component active. If the item is checked, and the ***Web Shield*** is running, more configuration options are available and editable on two tabs:

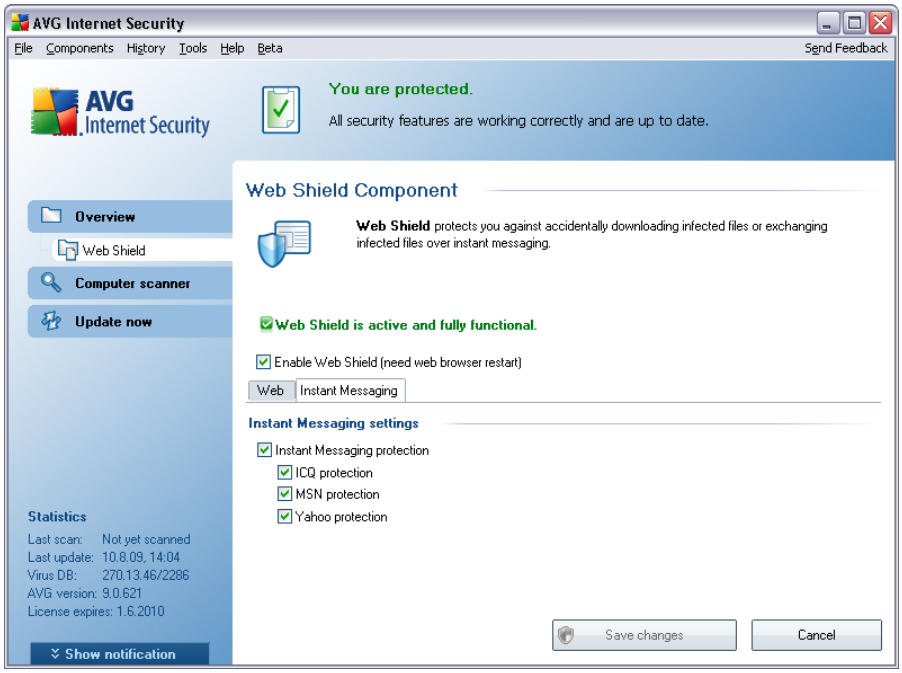
- ***Web*** - you can edit the component's configuration regarding the scan of the website content. The editing interface allows you to configure the following elementary options:



- ***Web protection*** - this option confirms that the ***Web Shield*** should perform scanning of the www pages content. Provided this option is on (*by default*), you can further switch on/off these items:
  - ***Check archives*** - scan the content of archives possibly included in the www page to be displayed
  - ***Report Potentially Unwanted Programs*** - scan potentially unwanted programs (*executable programs that can operate as spyware or adware*) included in the www page to be displayed
  - ***Use heuristic analysis*** - scan the content of the page to be displayed using the heuristic analysis method *(dynamic emulation of the scanned object's instructions in a virtual computer environment - see chapter Anti-Virus Principles*)
  - ***Maximum file size to be scanned*** - if included files are present in the displayed page you can also scan their content even before these are downloaded to your computer. However, scanning of large files takes quite some time and the web page download might be slowed significantly. You can use the slide bar to specify the maximum size of a file that is still to be scanned with ***Web Shield***. Even if the downloaded file is bigger than specified, and therefore will not be

scanned with ***Web Shield***, you are still protected: in case the file is infected, the ***Resident Shield*** will detect it immediately.

- ***Instant Messaging*** - allows you to edit the components settings referring to instant messaging (*e.g. ICQ, MSN Messenger, Yahoo ...*) scanning.



o Instant Messaging protection - check this item if you wish that the Web Shield verifies the on-line communication is virus free. Provided this option is on, you can further specify which instant messaging application you want to control - currently **AVG 9 Anti-Virus plus Firewall** supports the ICQ, MSN, and Yahoo applications.

Please note: The *software vendor has set up all AVG components to give optimum performance. Unless you have a real reason to do so, do not change the AVG configuration. Any changes to settings should only be performed by an experienced user. If you need to change AVG configuration, select the system menu item* ***Tools / Advanced settings*** *and edit the AVG configuration in the newly opened AVG Advanced Settings dialog.*

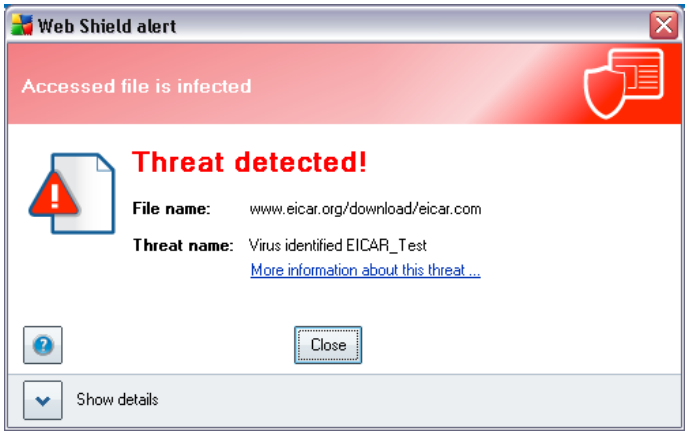
Control buttons

The control buttons available within the ***Web Shield*** interface are as follows:

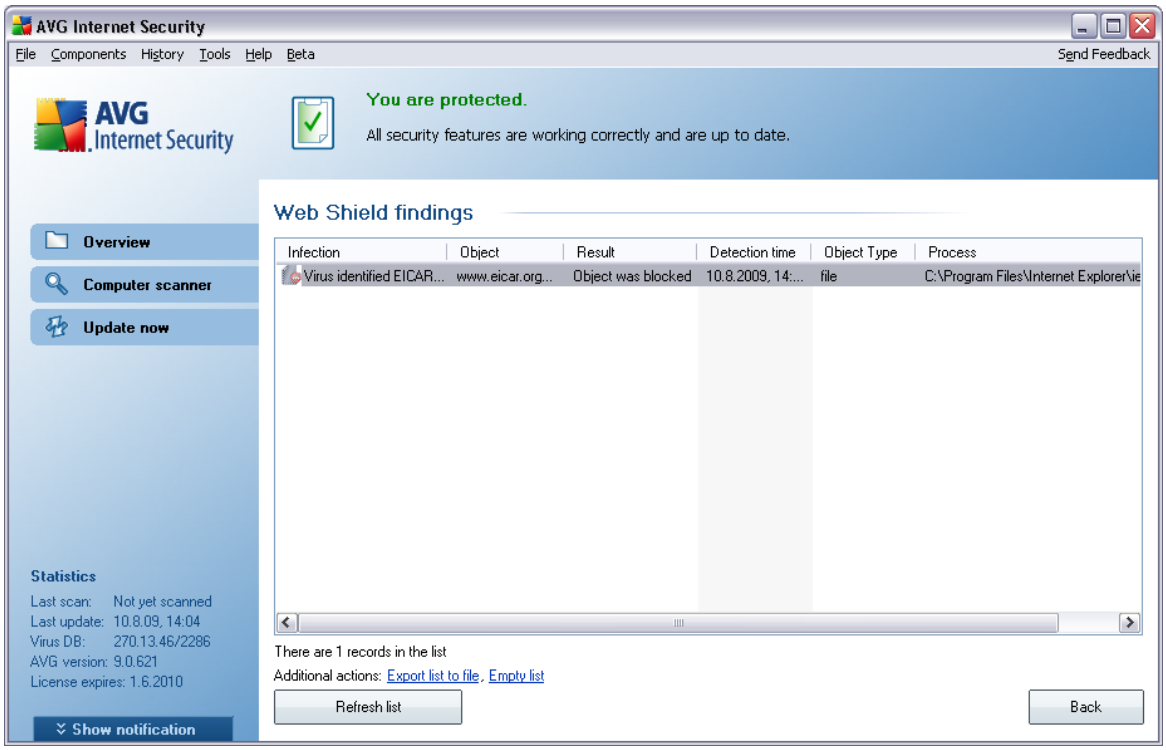
- ***Save changes*** - press this button to save and apply any changes made in this dialog
- ***Cancel*** - press this button to return to the default AVG user interface (*components overview*)

8.8.3. Web Shield Detection

Web Shield scans the content of visited web pages and possible files included in them even before these are displayed in your web browser or downloaded to your computer. If a threat is detected, you will be warned immediately with the following dialog:



The suspect web page will not be opened, and the threat detection will be logged in the list of ***Web Shield findings*** - this overview of detected threats is accessible via system menu ***History / Web Shield findings***.



For each detected object the following information is provided:

- ***Infection***- description (*possibly even name*) of the detected object
- ***Object*** - object source (*web page*)
- ***Result*** - action performed with the detected object
- ***Detection time*** - date and time the threat was detected and blocked
- ***Object Type*** - type of the detected object
- ***Process*** - what action was performed to call out the potentially dangerous object so that it could be detected

In the bottom part of the dialog, under the list, you will find information on total number of detected objects listed above. Further you can export the entire list of detected objects in a file (***Export list to file***) and delete all entries on detected objects (***Empty list***). The ***Refresh list*** button will update the list of finding detected by ***Web Shield***. The ***Back*** button switches you back to the default ***AVG user interface*** (components overview).

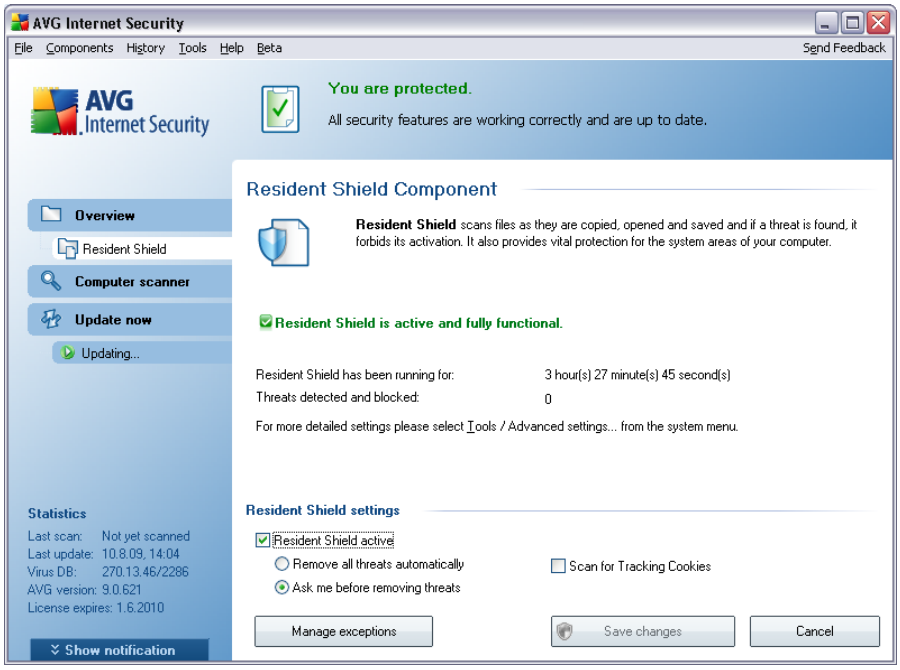
8.9. Resident Shield

8.9.1. Resident Shield Principles

The ***Resident Shield*** component gives your computer continuous protection. It scans every single file that is being opened, saved, or copied, and guards the system areas of the computer. When ***Resident Shield*** discovers a virus in a file that is accessed, it stops the operation currently being performed and does not allow the virus to activate itself. Normally, you do not even notice the process, as it runs "in the background", and you only get notified when threats are found; at the same time, ***Resident Shield*** blocks activation of the threat and removes it. ***Resident Shield*** is being loaded in the memory of your computer during system startup.

Warning: Resident Shield is loaded in the memory of your computer during startup, and it is vital that you keep it switched on at all times!

8.9.2. Resident Shield Interface



Besides an overview of the most important statistical data and the information on the component's current status (*Resident Shield is active and fully functional*), the ***Resident Shield*** interface offers some elementary component settings options, too. The statistics is as follows:

- ***Resident Shield has been active for*** - provides the time since the latest component's launch

- ***Threats detected and blocked*** - number of detected infections that were prevented from being run/opened (*if needed, this value can be reset; e.g. for statistic purposes - Reset value*)

Basic component configuration

In the bottom part of the dialog window you will find the section called ***Resident Shield settings*** where you can edit some basic settings of the component's functionality (*detailed configuration, as with all other components, is available via the Tools/Advanced settings item of the system menu*).

The ***Resident Shield is active*** option allows you to easily switch on/off resident protection. By default, the function is on. With resident protection on you can further decide how the possibly detected infections should be treated (removed):

- either automatically (***Remove all threats automatically***)

- or only after the user's approval (***Ask me before removing threats***)

This choice has no impact on the security level, and it only reflects your preferences.

In both cases, you can still select whether you want to ***Scan for tracking cookies***. In specific cases you can switch this option on to achieve maximum security levels, however it is switched off by default. (*cookies = parcels of text sent by a server to a web browser and then sent back unchanged by the browser each time it accesses that server. HTTP cookies are used for authenticating, tracking, and maintaining specific information about users, such as site preferences or the contents of their electronic shopping carts*).

Please note: The *software vendor has set up all AVG components to give optimum performance. Unless you have a real reason to do so, do not change the AVG configuration. Any changes to settings should only be performed by an experienced user. If you need to change AVG configuration, select the system menu item* ***Tools / Advanced settings*** *and edit the AVG configuration in the newly opened AVG Advanced Settings dialog.*

Control buttons

The control buttons available within the ***Resident Shield*** interface are as follows:

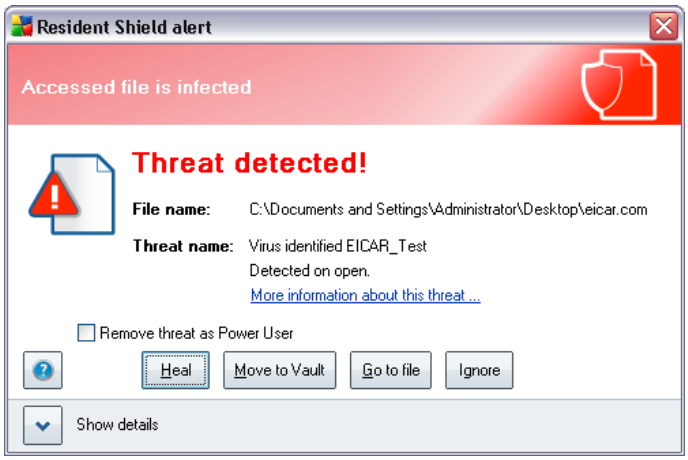
- ***Manage exceptions*** - opens the ***Resident Shield - Directory Excludes*** dialog where you can define folders that should be left out from the ***Resident Shield*** scanning

- ***Save changes*** - press this button to save and apply any changes made in this dialog

- ***Cancel*** - press this button to return to the default ***AVG user interface*** (components overview)

8.9.3. Resident Shield Detection

Resident Shield scans files as they are copied, opened or saved. When a virus or any kind of threat is detected, you will be warned immediately via the following dialog:



The dialog provides information on the threat detected, and it invites you to decide what action should be taken now:

- ***Heal*** - if a cure is available, AVG will heal the infected file automatically; this option is the recommended action to be taken

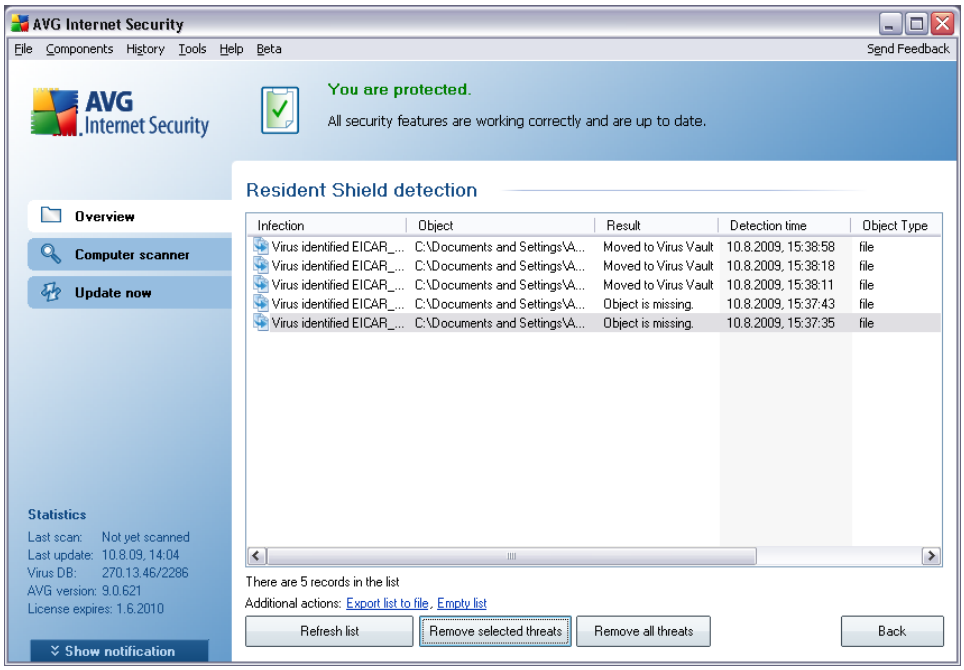
- ***Move to Vault*** - the virus will be moved to AVG ***Virus Vault***

- ***Go to file*** - this option redirects you to the exact location of the suspicious object (*opens new Windows Explorer window*)

- ***Ignore*** - we strictly recommend NOT TO use this option unless you have a very good reason to do so!

The entire overview of all threats detected by ***Resident Shield*** can be found in the

Resident Shield detection dialog accessible from via system menu option ***History / Resident Shield findings***:



The ***Resident Shield detection*** offers an overview of objects that were detected by the ***Resident Shield***, evaluated as dangerous and either cured or moved to the ***Virus Vault***. For each detected object the following information is provided:

- ***Infection***- description (possibly even name) of the detected object
- ***Object*** - object location
- ***Result*** - action performed with the detected object
- ***Detection time*** - date and time the object was detected
- ***Object Type*** - type of the detected object
- ***Process*** - what action was performed to call out the potentially dangerous object so that it could be detected

In the bottom part of the dialog, under the list, you will find information on total number of detected objects listed above. Further you can export the entire list of detected objects in a file (***Export list to file***) and delete all entries on detected

objects (***Empty list***). The ***Refresh list*** button will update the list of finding detected by ***Resident Shield***. The ***Back*** button switches you back to the default ***AVG user interface*** (components overview).

8.10. Update Manager

8.10.1. Update Manager Principles

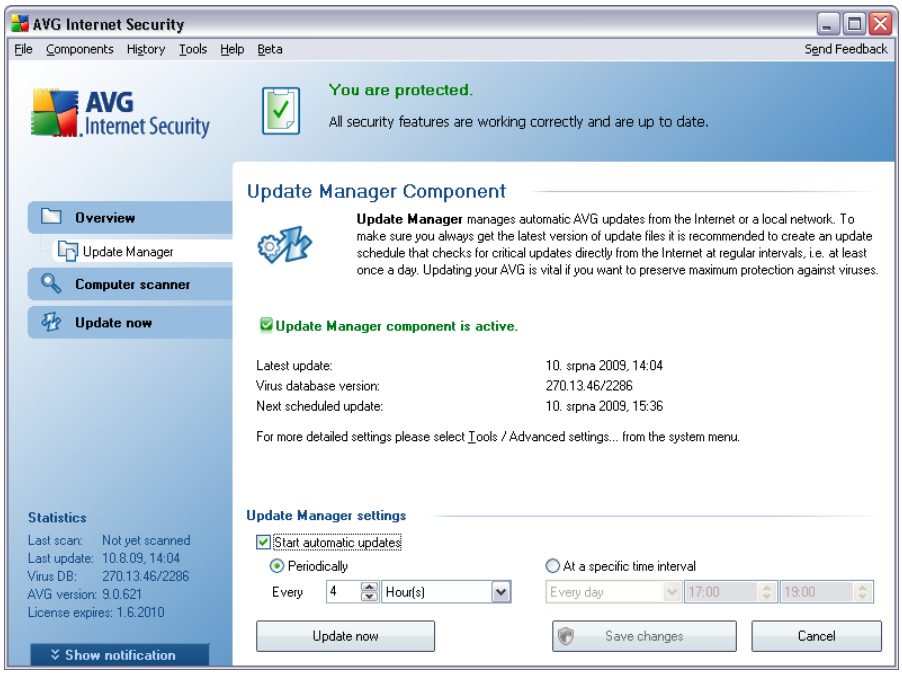
No security software can guarantee true protection from various types of threats unless it is regularly updated! Virus writers are always looking for new flaws that they can exploit in both software and operating systems. New viruses, new malware, new hacking attacks appear daily. For this reason, software vendors are continually issuing updates and security patches, to fix any security holes that are discovered.

It is crucial to update your AVG regularly!

The ***Update Manager*** helps you to control regular updating. Within this component you can schedule automatic downloads of update files either from the Internet, or the local network. Essential virus definition updates should be daily if possible. Less urgent program updates can be weekly.

Note: *Please pay attention to the AVG Updates chapter for more information on update types and levels!*

8.10.2. Update Manager Interface



The ***Update Manager***'s interface displays information about the component's functionality and its current status (*Update manager is active.*), and provides the relevant statistical data:

- ***Latest update*** - specifies when and at what time the database was updated
- ***Virus database version*** - defines the number of the latest virus database version; and this number increases with every virus base update
- ***Next scheduled update*** - specifies when and at what time the database is scheduled to be updated again

Basic component configuration

In the bottom part of the dialog you can find the ***Update Manager settings*** section where you can perform some changes to the rules of the update process launch. You can define whether you wish the update files to be downloaded automatically (***Start automatic updates***) or just on demand. By default, the ***Start automatic updates*** option is switched on and we recommend to keep it that way! Regular download of the latest update files is crucial for proper functionality of any security software!

Further you can define when the update should be launched:

- ***Periodically*** - define the time interval
- ***At a specific time*** - define the exact day and time

By default, the update is set for every 4 hours. It is highly recommended to keep this setting unless you have a true reason to change it!

Please note: The *software vendor has set up all AVG components to give optimum performance. Unless you have a real reason to do so, do not change the AVG configuration. Any changes to settings should only be performed by an experienced user. If you need to change AVG configuration, select the system menu item* ***Tools / Advanced settings*** *and edit the AVG configuration in the newly opened AVG Advanced Settings dialog.*

Control buttons

The control buttons available within the ***Update Manager*** interface are as follows:

- ***Update now*** - launches an immediate update on demand
- ***Save changes*** - press this button to save and apply any changes made in this dialog
- ***Cancel*** - press this button to return to the default ***AVG user interface*** (components overview)

8.11. AVG Security Toolbar

AVG Security Toolbar is a new tool which works together with the ***Link Scanner*** component and checks search results of the supported Internet search engines (*Yahoo!, Google, Bing, Altavista, Baidu*).

If you select to install the toolbar during the installation of **AVG 9 Anti-Virus plus Firewall**, it will be added into your web browser automatically.

AVG Security Toolbar can be used to control ***Link Scanner*** functions and to adjust its behavior.

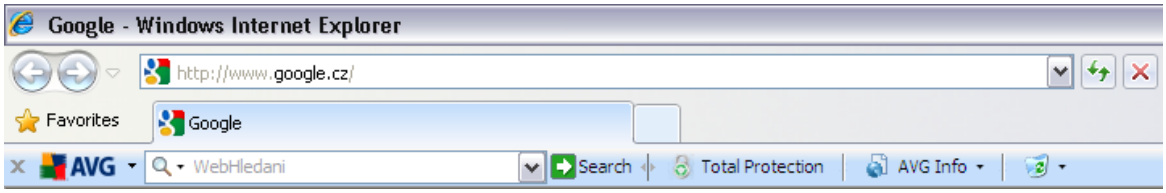
Note: *In case you are using some alternative Internet browser (e.g Avant Browser) you can meet unexpected behavior.*

8.11.1. AVG Security Toolbar Interface

The ***AVG Security Toolbar*** is designed to work with ***MS Internet Explorer*** (*version 6.0 or greater*) and ***Mozilla Firefox*** (*version 2.0 or greater*).

Note: *AVG Security Toolbar is not intended for server platforms!*

Once you have decided you want to install ***AVG Security Toolbar*** (*during the AVG installation process you were asked to decide whether or not you wish to install the component*), the component will be located in your web browser just under the address bar:



The ***AVG Security Toolbar*** consists of the following:

- ***AVG logo*** - provides access to general toolbar items. Click the logo button to get redirected to AVG website (http://www.avg.com/). Clicking the pointer next to the AVG icon will open the following:
  - ***Toolbar Info*** - link to the ***AVG Security Toolbar*** home page with detailed information on the toolbar's protection
  - ***Launch AVG 9.0*** - opens the AVG user interface
  - ***Options*** - opens a configuration dialog where you can adjust your ***AVG Security Toolbar*** settings to suit your needs - see the following chapter ***AVG Security Toolbar Options***
  - ***Delete History*** - allows you to *Delete complete history* of AVG Security Toolbar, or to *Delete search history, Delete browser history, Delete downloaded history* and *Delete cookies*.
  - ***Update*** - checks for new updates for your ***AVG Security Toolbar***
  - ***Help*** - provides options to open the help file, contact ***AVG technical support***, submit product feedback, or view the details of the current version of the toolbar
- ***Search box*** - Enter a word or phrase into the search box. Press ***Search*** to

start searchin using the specified search engine (*you can specify the desired search engine to be used within the AVG Security Toolbar Advanced Options, and you can choose either Yahoo!, Wikipedia, Baidu, WebHledani, or Yandex*), no matter what page is currently displayed. The search box also lists your search history. Searches done through the search box are analyzed using the ***AVG Search-Shield*** protection.

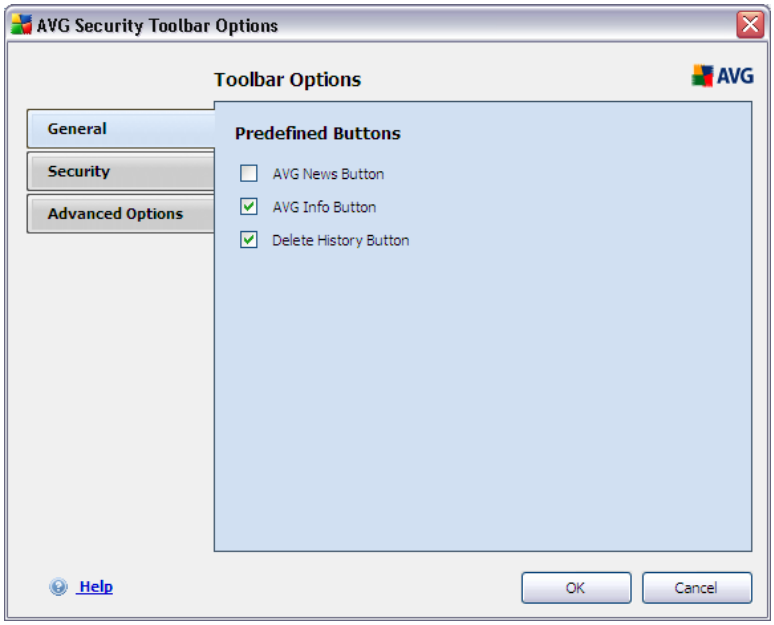
- ***Total Protection*** - this button appears optionally as either ***Total Protection*** / ***Limited Protection*** / ***No Protection*** depending on the ***AVG Link Scanner*** configuration

- ***AVG Info*** - provides links to important security information located on AVG website (http://www.avg.com/).

8.11.2. AVG Security Toolbar Options

All ***AVG Security Toolbar*** parameters configuration is accessible directly within the ***AVG Security Toolbar*** panel. The editing interface opens via the *AVG / Options* toolbar menu item in a new dialog called ***Toolbar Options*** divided into three sections:

- ***General***



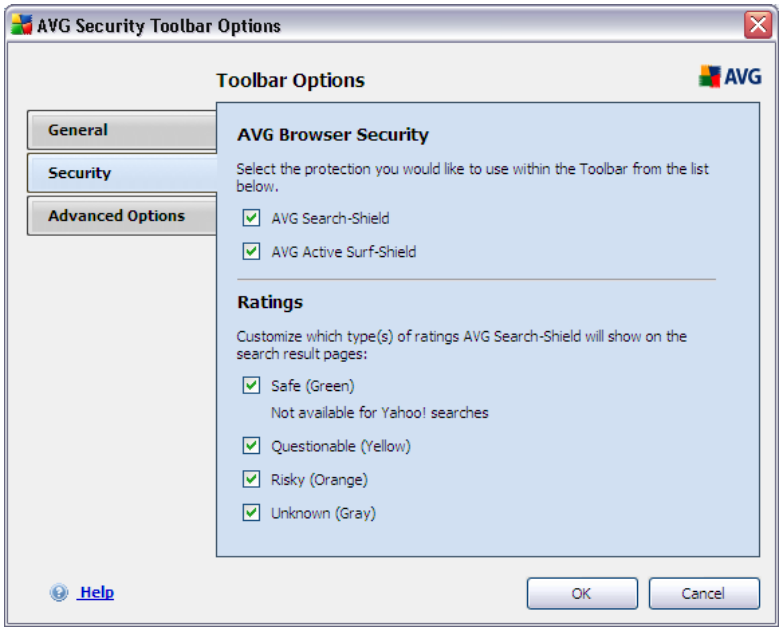
On the tab you can specify button that should be displayed / hidden within the ***AVG Security Toolbar*** panel:

- ***AVG News Button*** - this option displays the ***AVG News*** button. Pressing

the button within the ***AVG Security Toolbar*** panel you can open a drop-down menu with links to up-to-date AVG related press releases.

- ***AVG Info Button*** - the ***AVG Info*** button opens the menu with the following options:
  - *Toolbar Info* - opens the ***AVG Security Toolbar*** product page with detailed information on the component
  - *About Threats* - opens the AVG virus lab web page with information on current threats, virus removal recommendations, FAQ list, etc.
  - *AVG News* - opens the web page providing the latest AVG related press release
  - *Current Threat Level* - opens the virus lab web page with a graphical display of the current threat level on the web
  - *Virus Encyclopedia* - opens the Virus Encyclopedia page where you can search the specific viruses by name and get detailed information on each one
- ***Delete History Button*** - this button allows you to *Delete complete history,* or *Delete search history, Delete browser history, Delete download history,* or *Delete cookies* directly from the ***AVG Security Toolbar*** panel.

- ***Security***



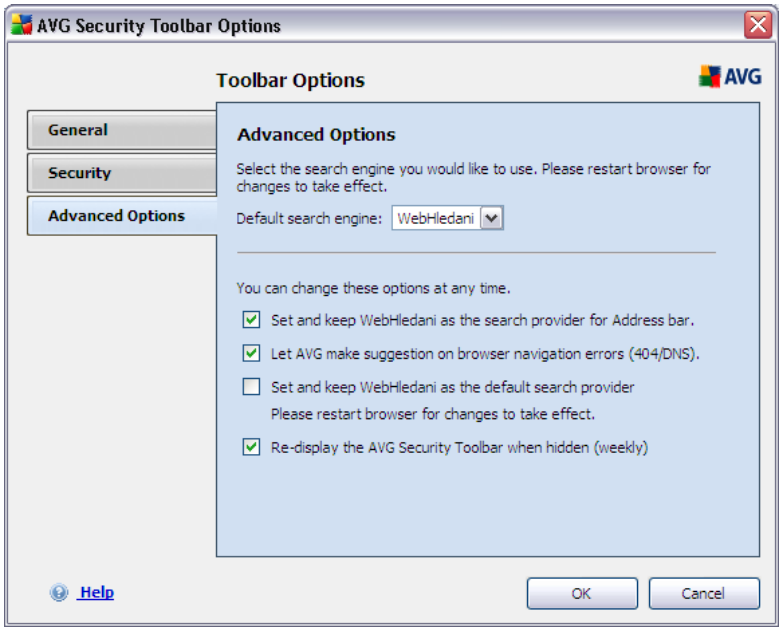
The ***Security*** tab is divided into two sections, ***AVG Browser Security*** and ***Ratings***, where you can mark specific check-boxes to assign ***AVG Security Toolbar*** functionality you want to use:

- ***AVG Browser Security*** - check this item to activate or switch-off the ***AVG Search-Shield*** and/or ***AVG Active Surf-Shield*** service
- ***Ratings*** - select graphical symbols used for search results ratings by the ***AVG Search-Shield*** component that you want to use:
  - page is safe
  - page is somewhat suspicious
  - page containing links to positively dangerous pages
  - page contains active threats
  - page is not accessible, and so could not be scanned

  Mark the respective option to confirm you want to be informed about this specific threat level. However, display of the red mark assigned to

pages containing active and dangerous threats cannot be switched-off. ***Again, it is recommended to keep the default configuration set by the program vendor unless you have a real reason to change it.***

- ***Advanced Options***



On the ***Advanced Options*** tab first select what search engine you want to use as default. You have the choice of Yahoo!, Baidu, WebHledani, and Yandex. Having changed the default search engine, please restart your internet browser for the change to take effect.

Further, you can activate or switch-off further specific ***AVG Security Toolbar*** settings:

- ***Set and keep Yahoo! as the search provider for Address bar*** - (*off by default*) - if marked, this option allows you to type a search keyword directly into the address bar into your Internet browser and the Yahoo! service will be used automatically to search for relevant websites.

- ***Let AVG make suggestion on browser navigation errors (404/DNS)*** - (*on by default*) - if when searching the web you run into a non-existing page, or a page that cannot be displayed (*404 error*), you will be

automatically redirected to a web page that allows you to select from an overview of alternative topic-related pages.

- ***Set and keep Yahoo! as the search provider for your browser*** - (*off by default*) - Yahoo! is the default search engine for web search within ***AVG Security Toolbar***, and activating this option it can also become your web browser default search engine.

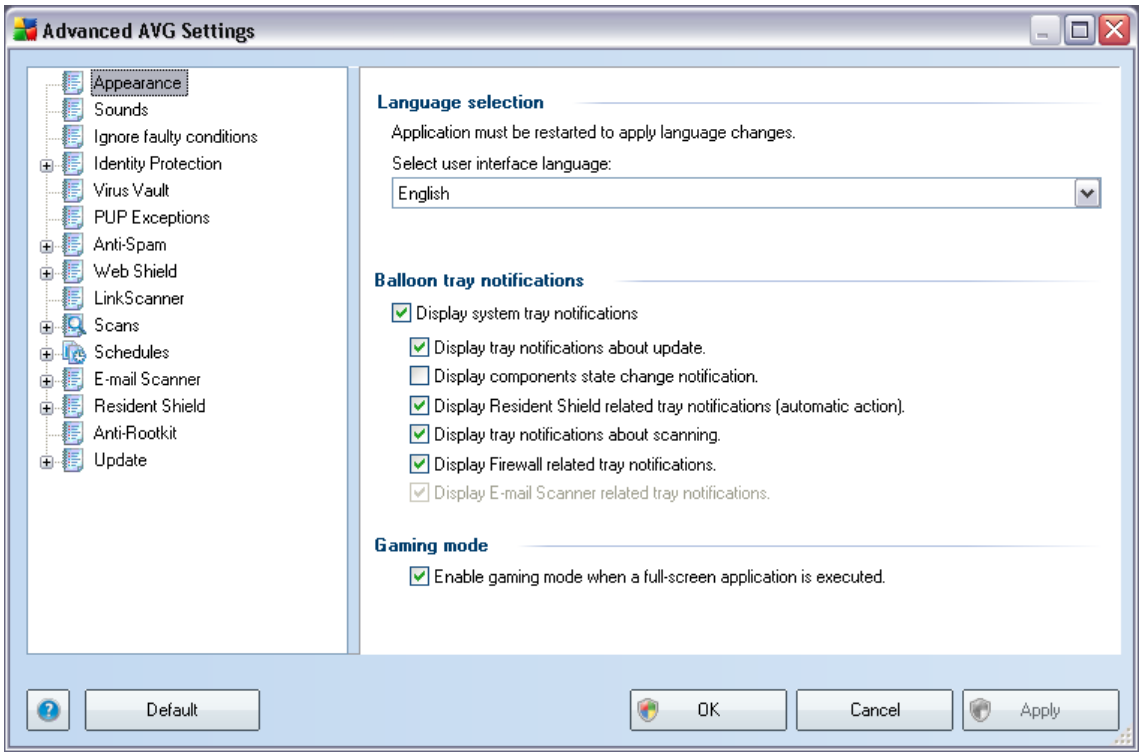
- ***Re-display the AVG Security Toolbar when hidden (weekly)*** - (*on by default*) - this option is active by default and when your ***AVG Security Toolbar*** gets hidden accidentally, it will re-display it again within one week term.

9. AVG Advanced Settings

The advanced configuration dialog of **AVG 9 Anti-Virus plus Firewall** opens in a new window named ***Advanced AVG Settings***. The window is divided into two sections: the left part offers a tree-arranged navigation to the program configuration options. Select the component you want to change the configuration of (*or its specific part*) to open the editing dialog in the right-hand section of the window.

9.1. Appearance

The first item of the navigation tree, ***Appearance***, refers to the general settings of the AVG user interface and a few elementary options of the application's behavior:

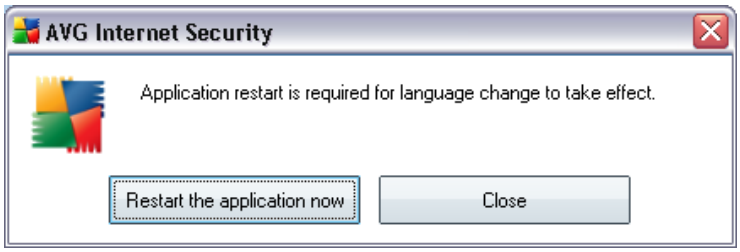


Language selection

In the ***Language selection*** section you can chose your desired language from the drop-down menu; the language will then be used for the entire AVG user interface. The drop-down menu only offers those languages you have previously selected to be installed during the installation process (see chapter Custom Installation - Component

Selection). However, to finish switching the application to another language you have to restart the user interface; follow these steps:

- Select the desired language of the application and confirm your selection by pressing the ***Apply*** button (right-hand bottom corner)
- Press the ***OK*** button confirm
- New dialog window pops-up informing you the language change of AVG user interface requires the application restart:



Balloon tray notifications

Within this section you can suppress display of system tray balloon notifications on the status of the application. By default, the balloon notifications are allowed to be displayed, and it is recommended to keep this configuration! The balloon notifications typically inform on some AVG component's status change, and you should pay attention to them!

However, if for some reason you decide you do not wish these notifications to be displayed, or you would like only certain notifications (related to a specific AVG component) to be displayed, you can define and specify your preferences by checking/unchecking the following options:

- ***Display system tray notifications*** - by default, this item is checked (*switched on*), and notifications are displayed. Uncheck this item to completely turn off the display of all balloon notifications. When turned on, you can further select what specific notifications should be displayed:
  - ***Display tray notifications about update*** - decide whether information regarding AVG update process launch, progress, and finalization should be displayed;
  - ***Display components state change notifications*** - decide whether information regarding component's activity/inactivity or its possible

problem should be displayed. When reporting a component's fault status, this option equals to the informative function of the system tray icon (color changing) reporting a problem in any AVG component;

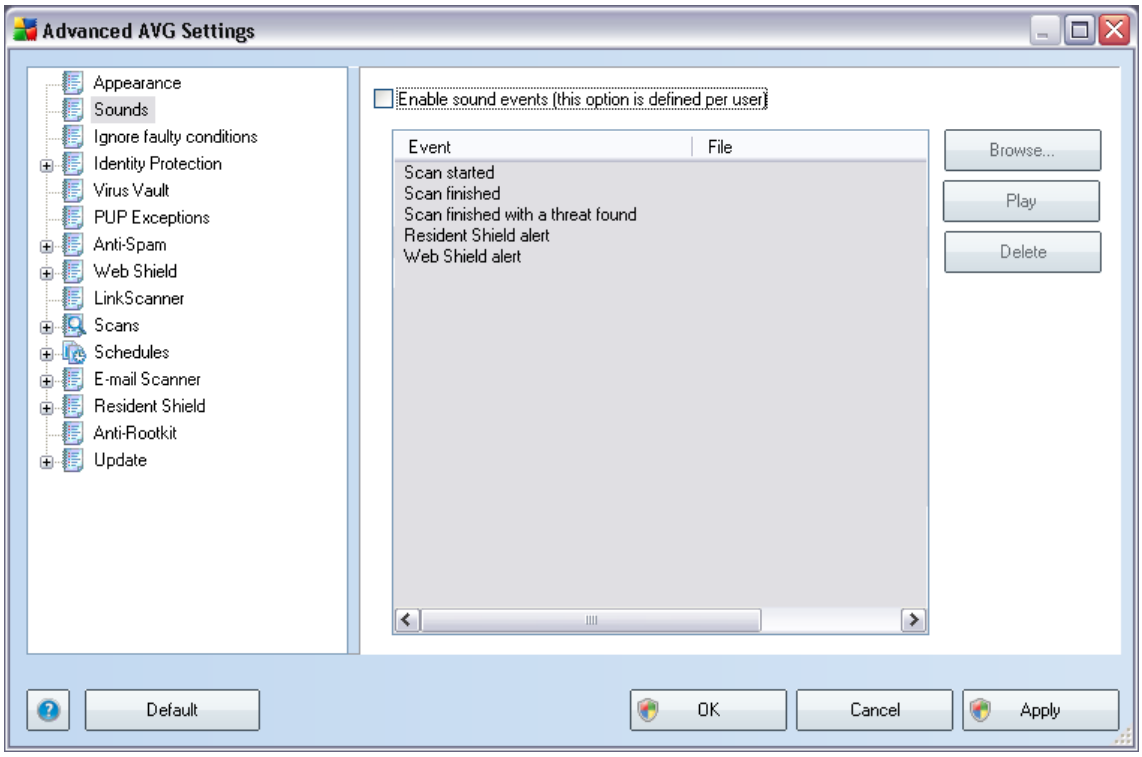
- ***Display Resident Shield related tray notifications*** - decide whether information regarding file saving, copying, and opening processes should be displayed or suppressed (*this configuration only demonstrates if the Resident Shield Auto-heal option is on*);
- ***Display tray notifications about scanning*** - decide whether information upon automatic launch of the scheduled scan, its progress and results should be displayed;
- ***Display Firewall related tray notifications*** - decide whether information concerning Firewall status and processes, e.g. component's activation/deactivation warnings, possible traffic blocking etc. should be displayed;
- ***Display E-mail Scanner related tray notifications*** - decide whether information upon scanning of all incoming and outgoing e-mail messages should be displayed.

Gaming mode

This AVG function is designed for full-screen applications where possible AVG information ballons (*displayed e.g. when a scheduled scan is started*) would be disturbing (*they could minimize the application or corrupt its graphics*). To avoid this situation, keep the check box for the ***Enable gaming mode when a full-screen application is executed*** option marked (*default setting*).

9.2. Sounds

Within the ***Sounds*** dialog you can specify whether you want to be informed about specific AVG actions by a sound notification. If so, check the ***Enable sound events*** option (*off by default*) to activate the list of AVG actions:

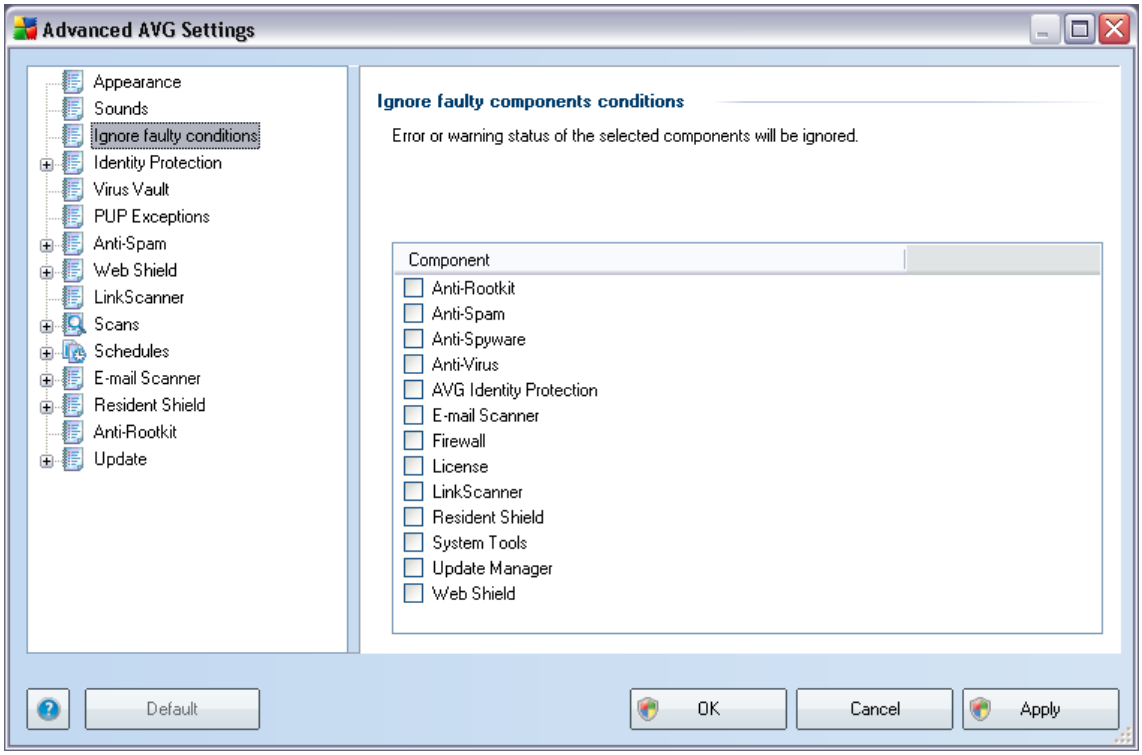


Then, select the respective event from the list and browse (***Browse***) your disk for an appropriate sound you want to assign to this event. To listen to the selected sound, highlight the event in the list and push the ***Play*** button. Use the ***Delete*** button to remove the sound assigned to a specific event.

Note: *Only *.wav sounds are supported!*

9.3. Ignore Faulty Conditions

In the ***Ignore faulty components conditions*** dialog you can tick those components that you do not want to get informed about:



By default, no component is selected in this list. It means that if any component get to an error status, you will be informed about it immediately via:

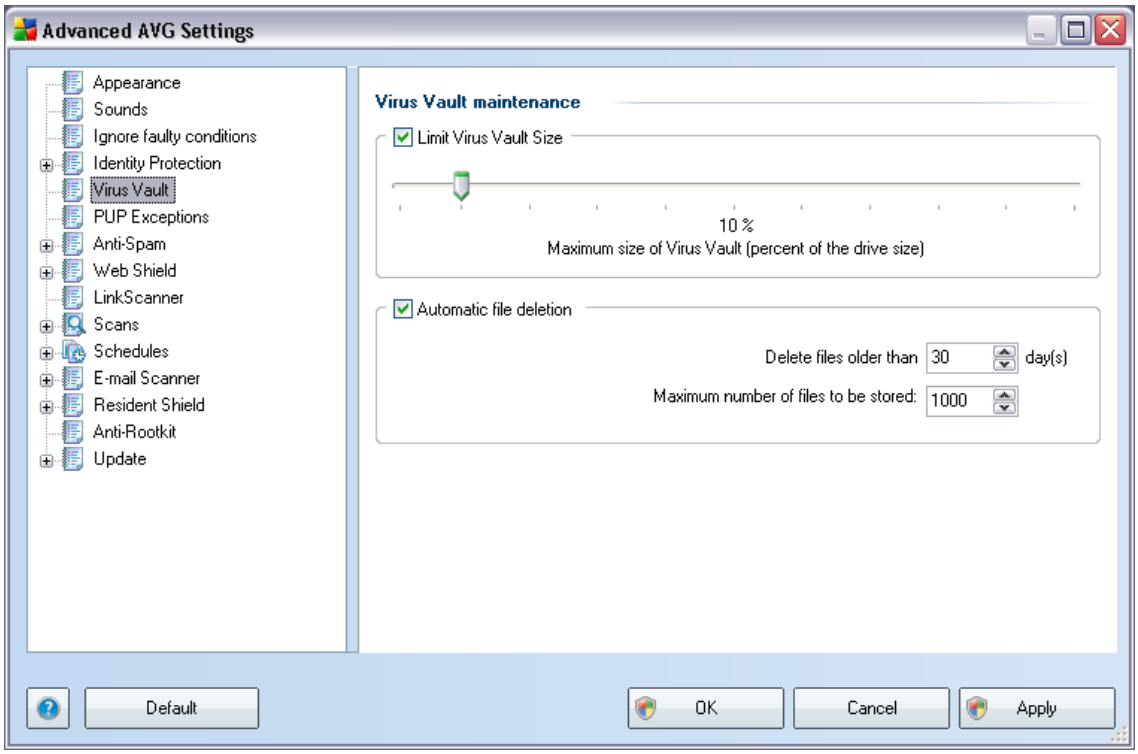
- ***system tray icon*** - while all parts of AVG are working properly, the icon is displayed in four colors; however, if an error occurs, the icon appears with a yellow exclamation mark,
- text description of the existing problem in the ***Security Status Info*** section of the AVG main window

There might be a situation that for some reason you need to switch a component off temporarily (*this is not recommended, you should try to keep all components permanently on and in default configuration, but it may be happen*). In that case the system tray icon automatically reports the component's error status. However, in this very case we cannot talk about an actual error since you have deliberately induced it

yourself, and you are aware of the potential risk. At the same time, once being displayed in grey color, the icon cannot actually report any possible further error that might appear.

For this situation, within the above dialog you can select components that may be in an error state (*or switched off*) and you do not wish to get informed about it. The same option of ***Ignoring component state*** is also available for specific components directly from the components overview in the AVG main window.

9.4. Virus Vault



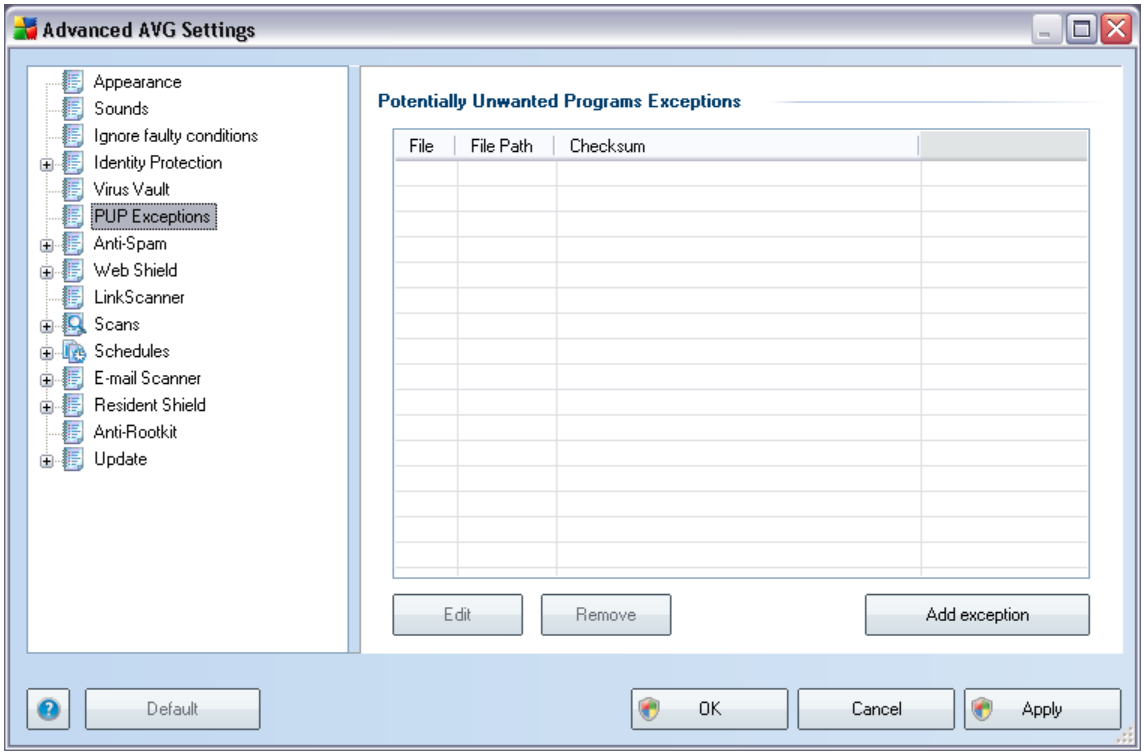
The ***Virus Vault maintenance*** dialog allows you to define several parameters regarding the administration of objects stored in the ***Virus Vault***:

- ***Limit Virus Vault size*** - use the slider to set up the maximum size of the ***Virus Vault***. The size is specified proportionally compared to the size of your local disk.
- ***Automatic file deletion*** - in this section define the maximum length of time that objects should be stored in the ***Virus Vault*** (***Delete files older than ...***

days), and the maximum number of files to be stored in the ***Virus Vault*** (***Maximum number of files to be stored***)

9.5. PUP Exceptions

AVG 9 Anti-Virus plus Firewall is able to analyze and detect executable applications or DLL libraries that could be potentially unwanted within the system. In some cases the user may wish to keep certain unwanted programs on the computer (*programs that were installed on purpose*). Some programs, especially free ones, include adware. Such adware might be detected and reported by AVG as a ***potentially unwanted program***. If you wish to keep such a program on your computer, you can define it as a potentially unwanted program exception:



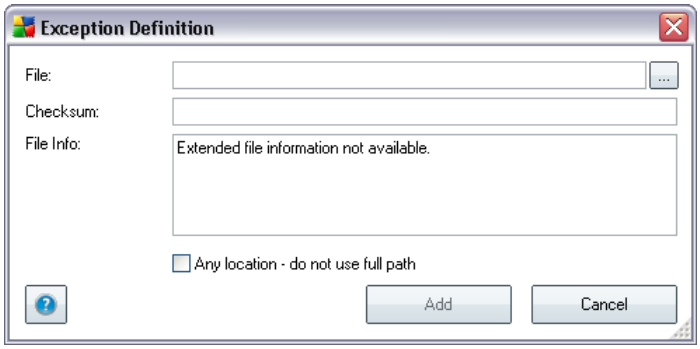
The ***Potentially Unwanted Programs Exceptions*** dialog displays a list of already defined and currently valid exceptions from potentially unwanted programs. You can edit the list, delete existing items, or add new exceptions. The following information can be found in the list for every single exception:

- ***File*** - provides the name of the respective application

- ***File Path*** - shows the way to the application's location
- ***Checksum*** - displays the unique 'signature' of the chosen file. This checksum is an automatically generated string of characters, which allows AVG to unequivocally distinguish the chosen file from other files. The checksum is generated and displayed after successful addition of the file.

Control buttons

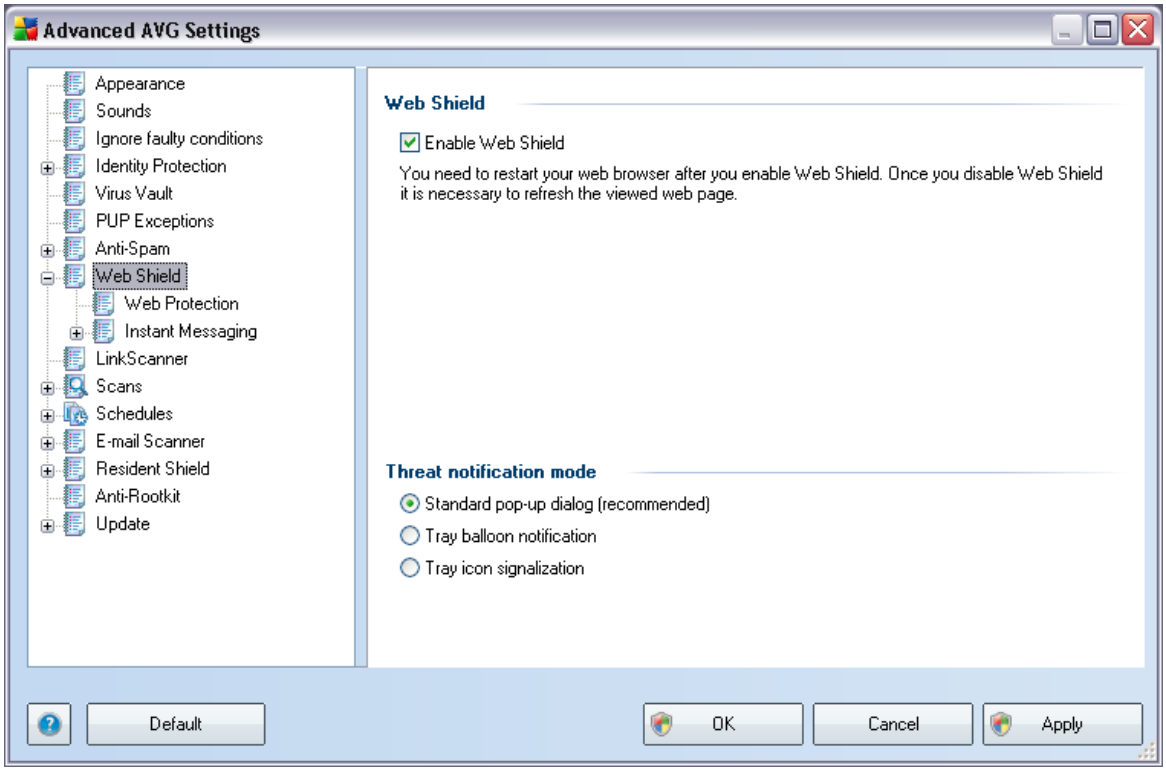
- ***Edit*** - opens an editing dialog (*identical with the dialog for a new exception definition, see below*) of an already defined exception where you can change the exception's parameters
- ***Remove*** - deletes the selected item from the list of exceptions
- ***Add exception*** - open an editing dialog where you can define parameters of the new exception to be created:



  - ***File*** - type the full path to the file that you want to mark as an exception
  - ***Checksum*** - displays the unique 'signature' of the chosen file. This checksum is an automatically generated string of characters, which allows AVG to unequivocally distinguish the chosen file from other files. The checksum is generated and displayed after successful addition of the file.
  - ***File Info*** - displays any additional information available about the file (*license/version information etc.*)
  - ***Any location - do not use full path*** - if you want to define this file as an exception only for the specific location, then leave this checkbox

unchecked

9.6. Web Shield



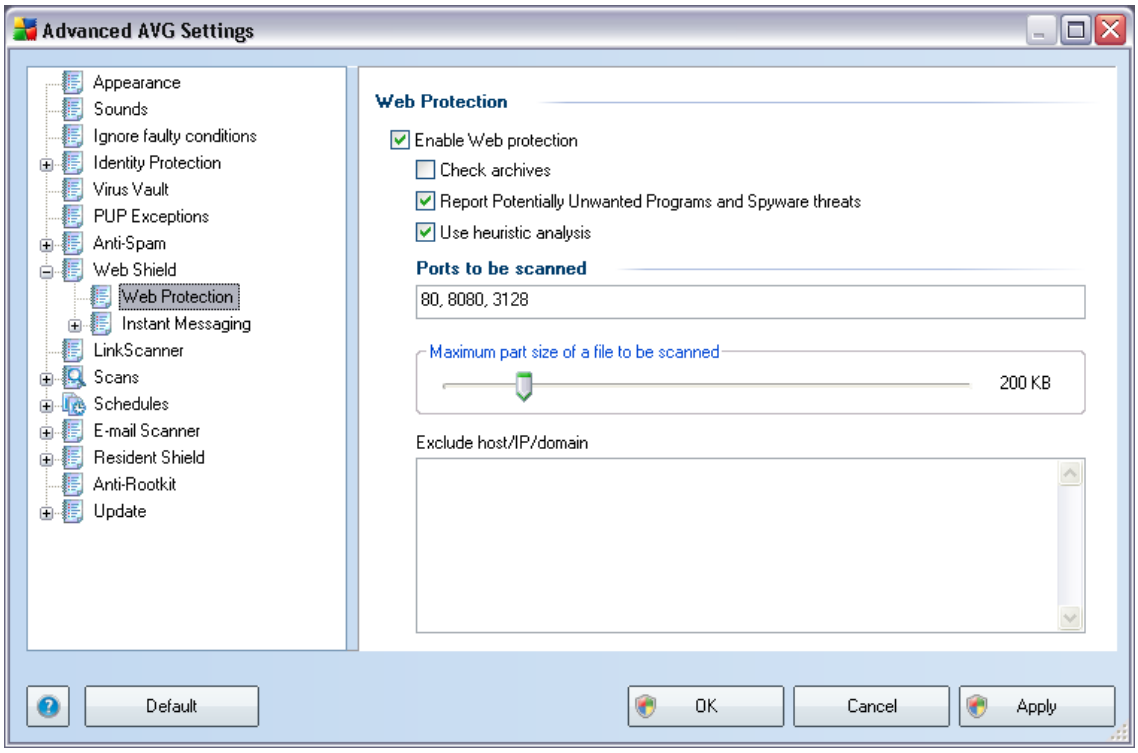
The ***Web Protection*** dialog allows you to activate/deactivate the entire ***Web Shield*** component via the ***Enable Web Shield*** option (*activated by default*). For further advanced settings of this component please continue to the subsequent dialogs as listed in the tree navigation:

- ***Web Protection***
- ***Instant Messaging***

Treat notification mode

In the bottom section of the dialog, select in which way you wish to be informed about possible detected threat: via standard pop-up dialog, via tray balloon notification, or via tray icon info.

9.6.1. Web Protection



In the ***Web Protection*** dialog you can edit the component's configuration regarding the scan of the website content. The editing interface allows you to configure the following elementary options:

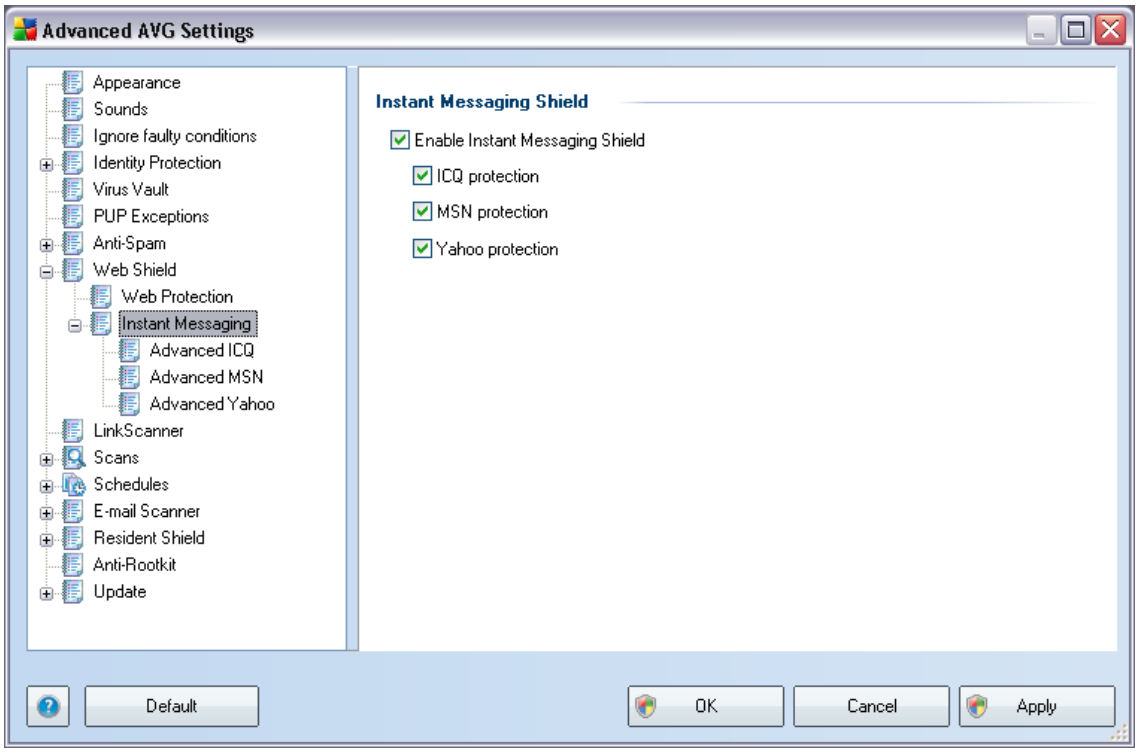
- ***Enable Web protection*** - this option confirms that the ***Web Shield*** should perform scanning of the www pages content. Provided this option is on (*by default*), you can further switch on/off these items:
    - ***Check archives*** - scan the content of archives possibly included in the www page to be displayed .
    - ***Report Potentially Unwanted Programs and Spyware threats*** - scan potentially unwanted programs (*executable programs that can operate as spyware or adware*) included in the www page to be displayed, and spyware infections.
    - ***Use heuristic analysis*** - scan the content of the page to be displayed using the heuristic analysis method (*dynamic emulation of the scanned object's instructions in a virtual computer environment*).

- ***Ports to be scanned*** - this field lists the standard http communication port numbers. If your computer configuration differs, you can change the port numbers as needed.

- ***Maximum part size of a file to be scanned*** - if included files are present in the displayed page you can also scan their content even before these are downloaded to your computer. However, scanning of large files takes quite some time and the web page download might be slowed significantly. You can use the slide bar to specify the maximum size of a file that is still to be scanned with ***Web Shield***. Even if the downloaded file is bigger than specified, and therefore will not be scanned with Web Shield, you are still protected: in case the file is infected, the ***Resident Shield*** will detect it immediately.

- ***Exclude host/IP/domain*** - into the text field you can type the exact name of a server (*host, IP address, IP address with mask, or URL*) or a domain that should not be scanned by ***Web Shield***. Therefore exclude only host that you can be absolutely sure would never provide dangerous website content.

9.6.2. Instant Messaging

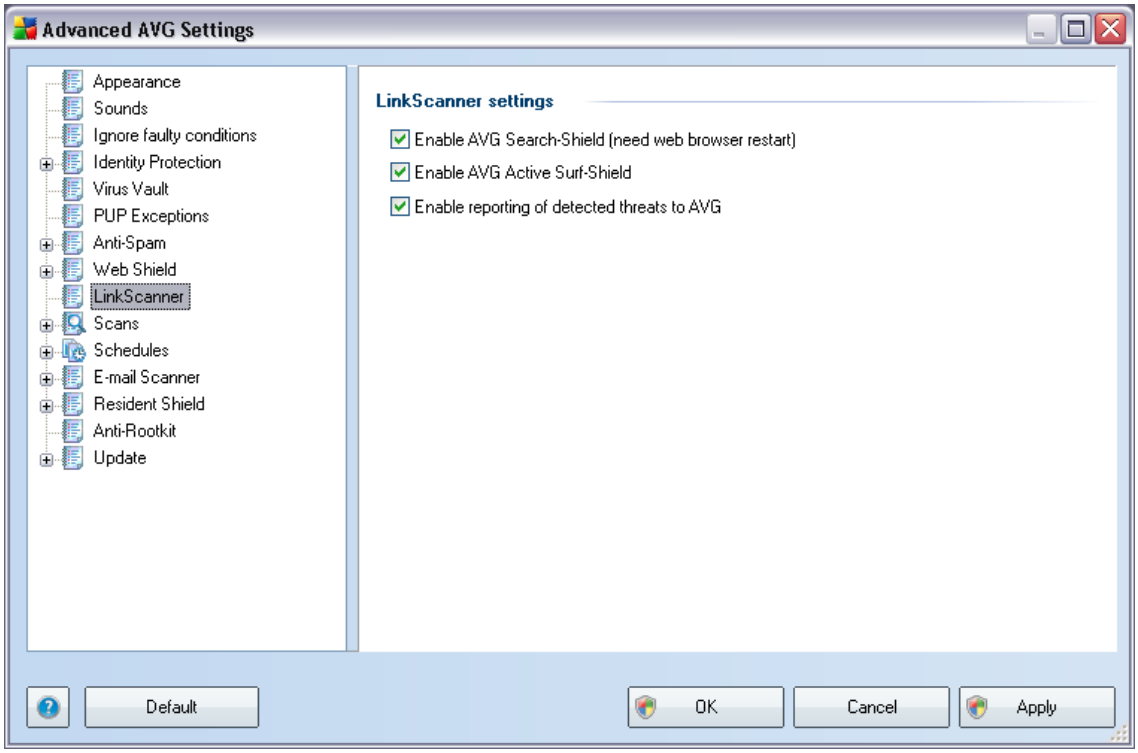


In the ***Instant Messaging Shield*** dialog you can edit the ***Web Shield*** components settings referring to instant messaging scanning. Currently the following three instant messaging programs are supported: ***ICQ***, ***MSN***, and ***Yahoo*** - tick the respective item for each of them if you want the ***Web Shield*** to verify the on-line communication is virus free.

For further specification of allowed/blocked users you can see and edit the respective dialog (***Advanced ICQ***, ***Advanced MSN, Advanced Yahoo***) and specify the ***Whitelist*** (*list of users that will be allowed to communicate with you*) and ***Blacklist*** (*users that should be blocked*).

9.7. Link Scanner

The ***LinkScanner settings*** dialog allows you to switch on/off the elementary features of the ***LinkScanner***:



- ***Enable AVG Search-Shield*** - (*on by default*): advisory notifying icons on searches performed in Google, Yahoo, Bing, Yandex, Altavista or Baidu having checked ahead the content of sites returned by the search engine.
- ***Enable AVG Active Surf-Shield*** - (*on by default*): active (*real-time*) protection against exploitive sites as they are accessed. Known malicious site connections and their exploitive content is blocked as they are accessed by the user via a web browser (*or any other application that uses HTTP*).
- ***Enable reporting of detected threats to AVG*** - (*on by default*): mark this item to allow back reporting of exploits and bad sites found by users either via ***AVG Active Surf-Shield*** or ***AVG Search-Shield*** to feed the database collecting information on malicious activity on the web.

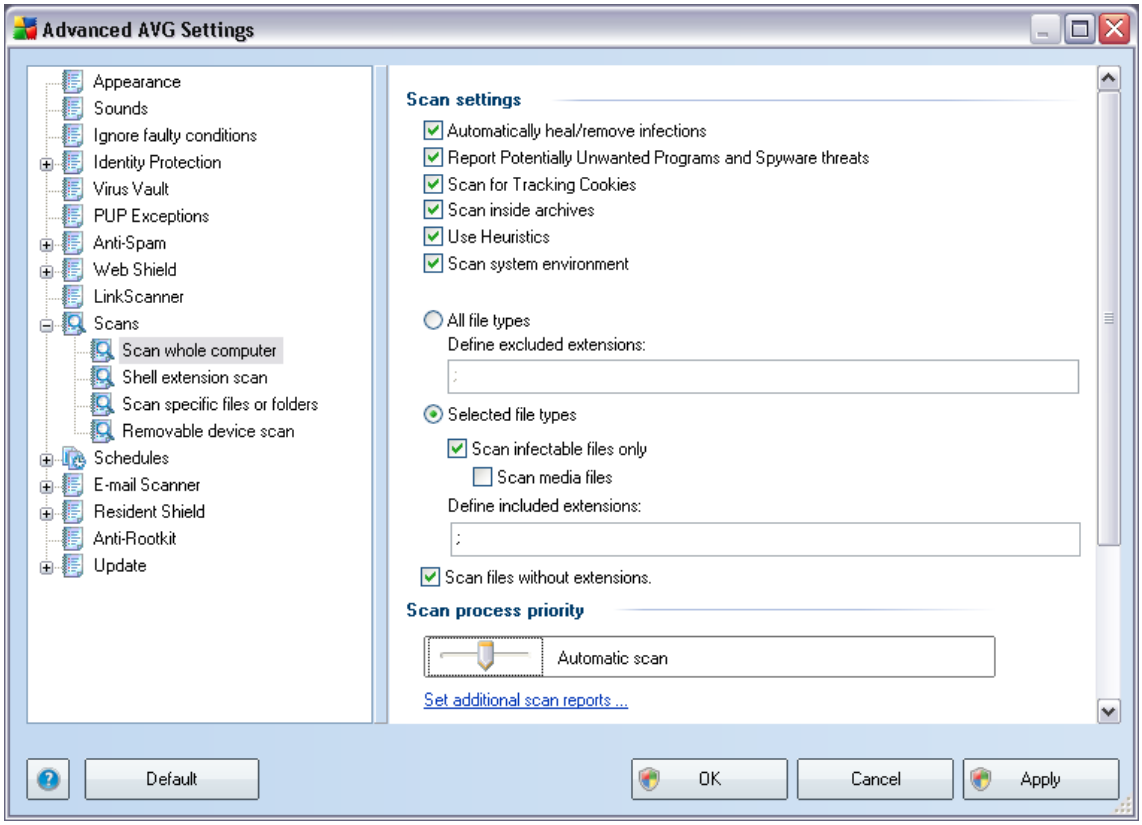
9.8. Scans

The advanced scan settings is divided into three categories referring to specific scan types as defined by the software vendor:

- ***Scan Whole Computer*** - standard predefined scan of the entire computer
- ***Shell Extension Scan*** - specific scanning of a selected object directly from the Windows Explorer environment
- ***Scan Specific Files or Folders*** - standard predefined scan of selected areas of your computer
- ***Removable Device Scan*** - specific scanning of removable devices attached to your computer

9.8.1. Scan Whole Computer

The ***Scan whole computer*** option allows you to edit parameters of one of the scans predefined by the software vendor, ***Scan of the whole computer***:



Scan settings

The ***Scan settings*** section offers a list of scanning parameters that can be optionally switched on/off:

- ***Automatically heal/remove infection*** - if a virus is identified during scanning it can be healed automatically if a cure is available. If the infected file cannot be healed automatically, the infected object will be moved to the ***Virus Vault***.
- ***Report Potentially Unwanted Programs and Spyware Threats*** - this parameter controls the ***Anti-Virus*** and ***Anti-Spyware*** components functionality that allows detection of potentially unwanted programs (

executable files that can run as spyware or adware) and these can then be blocked, or removed;

- ***Scan for Tracking Cookies*** - this parameter of the Anti-Spyware component defines that cookies should be detected; (*HTTP cookies are used for authenticating, tracking, and maintaining specific information about users, such as site preferences or the contents of their electronic shopping carts*)

- ***Scan inside archives*** - this parameters defines that scanning should check all files even those stored inside archives, e.g. ZIP, RAR, ...

- ***Use Heuristics*** - heuristic analysis (*dynamic emulation of the scanned object's instructions in a virtual computer environment*) will be one of the methods used for virus detection during scanning;

- ***Scan system environment*** - scanning will also check the system areas of your computer.

Further you should decide whether you want to have scanned

- ***All file types*** with the possibility of defining exceptions from scanning by providing a list of comma separated (*having been saved, the commas change into semicolons*) file extensions that should not be scanned;

- ***Selected file types*** - you can specify that you want to scan only files that are possibly infectable (*files that cannot get infected will not be scanned, for instance some plain text files, or some other non-executable files*), including media files (*video, audio files - if you leave this box unchecked, it will reduce the scanning time even more, because these files are often quite large and are not too likely to be infected by a virus*). Again, you can specify by extensions which files are those that should always be scanned.

- Optionally, you can decide you want to ***Scan files without extension*** - this option is on by default, and it is recommended that you keep it so unless you have a real reason to change it. Files with no extension are rather suspicious and should be scanned at all times.

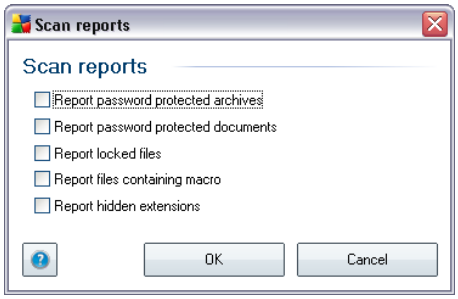
Scan process priority

Within the ***Scan process priority*** section you can further specify the desired scanning speed dependent on system resource usage. By default, this option value is set to the medium level of automatic resource usage. If you want the scanning to run faster, it will take less time but system resources usage will increase significantly during the

scan, and will slow down your other activities on the PC (*this option can be used when your computer is switched on but nobody is currently working on it*). On the other hand, you can decrease system resources usage by extending the scanning duration.

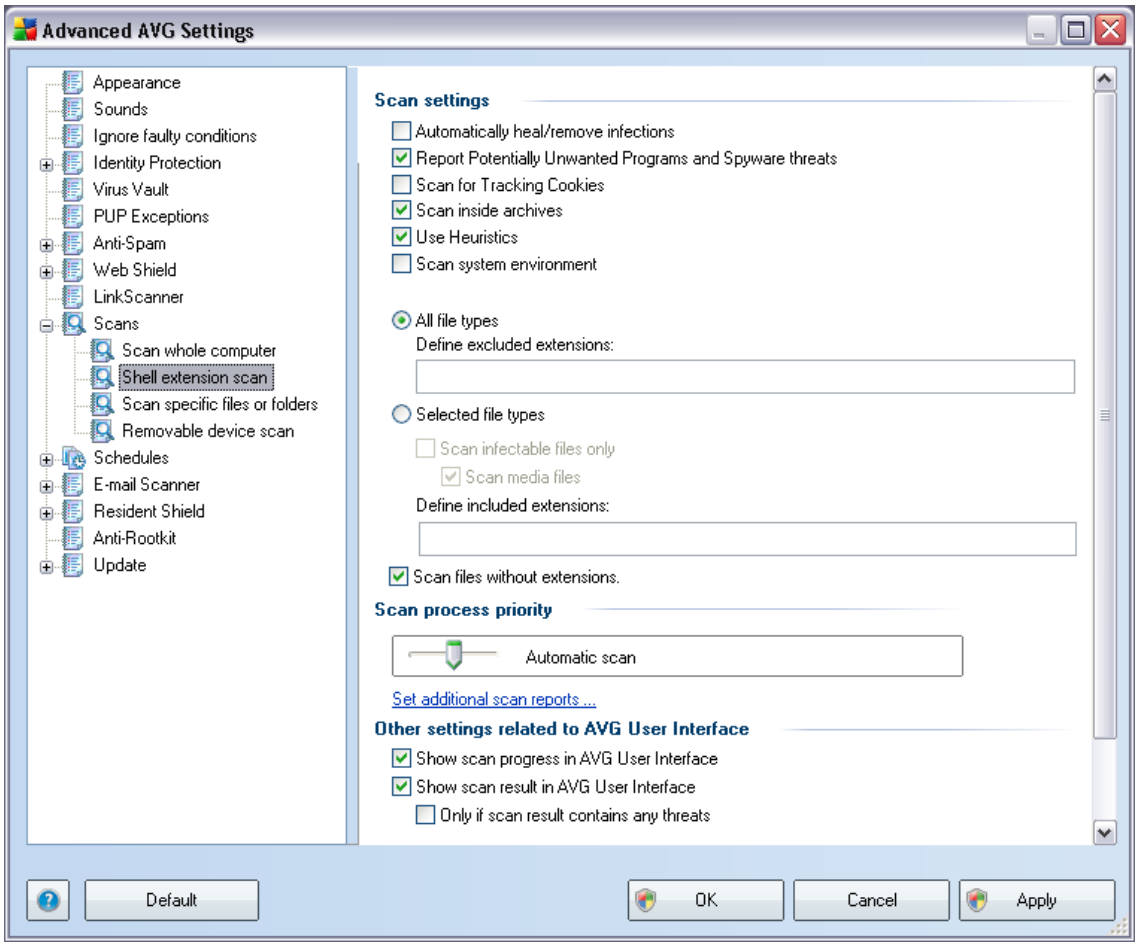
Set additional scan reports ...

Click the ***Set additional scan reports ...*** link to open a standalone dialog window called ***Scan reports*** where you can tick several items to define what scan findings should be reported:



9.8.2. Shell Extension Scan

Similar to the previous ***Scan whole computer*** item, this item named ***Shell extension scan*** also offers several options for editing the scan predefined by the software vendor. This time the configuration is related to scanning of specific objects launched directly from the Windows Explorer environment (*shell extension*), see chapter ***Scanning in Windows Explorer***:

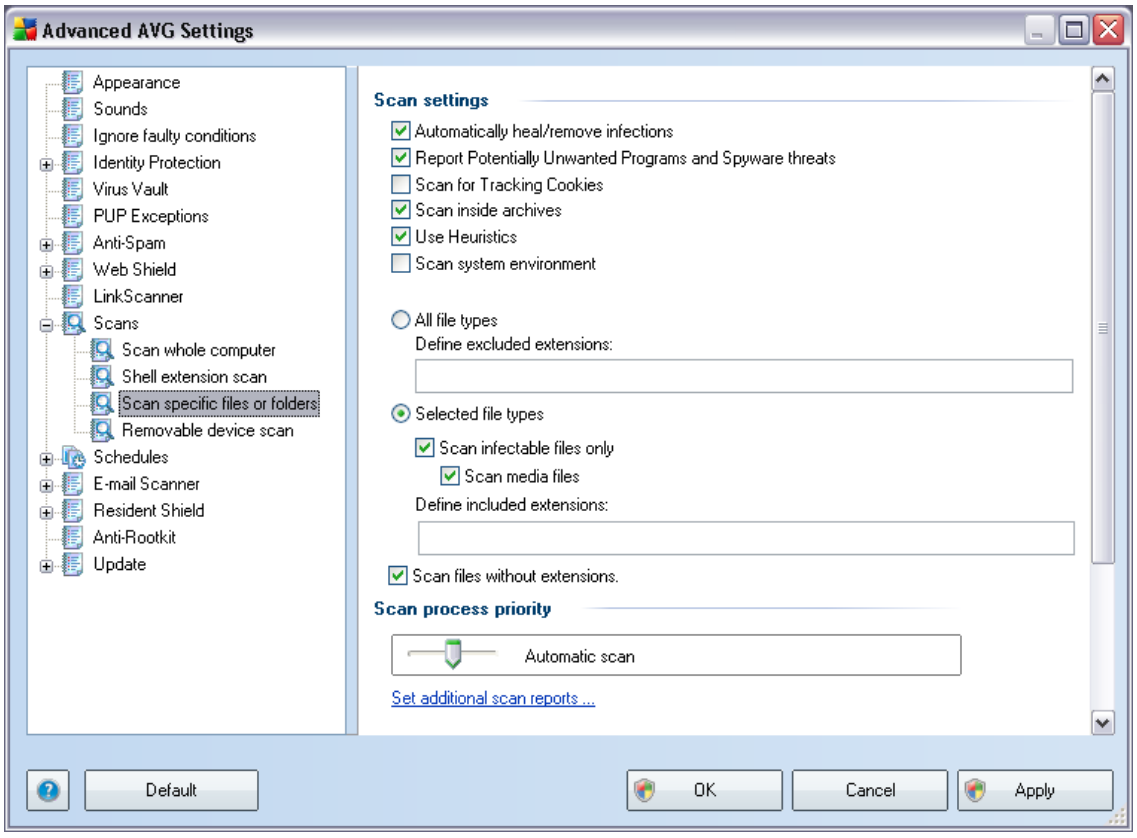


The list of parameters is identical to those available for the ***Scan of the whole computer***. However, the default settings differ: with the ***Scan of the Whole Computer*** most parameters are selected while for the ***Shell extension scan*** (***Scanning in Windows Explorer***) only the relevant parameters are switched on.

Note: *For a description of specific parameters please consult the chapter* ***AVG Advanced Settings / Scans / Scan Whole Computer****.*

9.8.3. Scan Specific Files or Folders

The editing interface for ***Scan specific files or folders*** is identical to the ***Scan Whole Computer*** editing dialog. All configuration options are the same; however, the default settings are more strict for the ***Scan of the whole computer***:

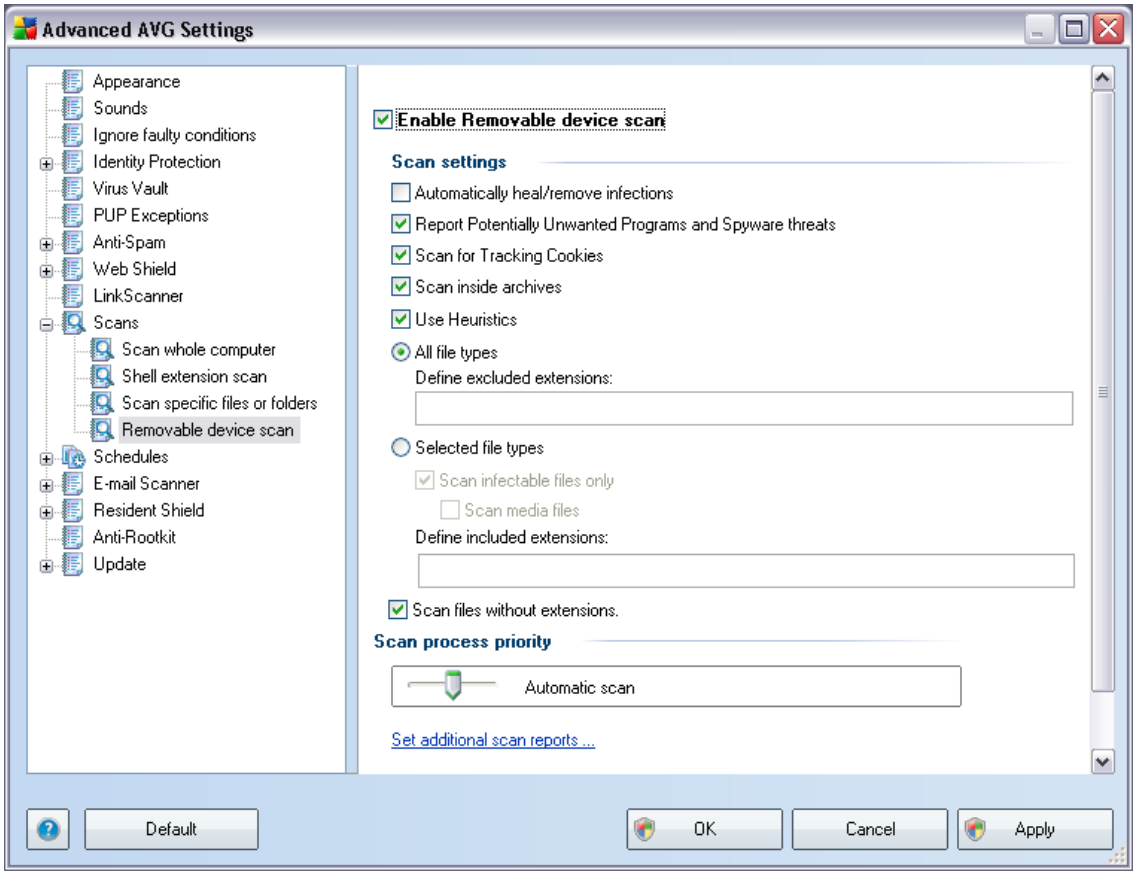


All parameters set up in this configuration dialog apply only to the areas selected for scanning with the ***Scan of specific files or folders***!

Note: *For a description of specific parameters please consult the chapter* ***AVG Advanced Settings / Scans / Scan Whole Computer****.*

9.8.4. Removable Device Scan

The editing interface for ***Removable device scan*** is also very similar to the ***Scan Whole Computer*** editing dialog:



The ***Removable device scan*** is launched automatically once you attach any removable device to your computer. By default, this scanning is switched off. However, it is crucial to scan removable devices for potential threats since these are a major source of infection. To have this scanning ready and launched automatically when needed, mark the ***Enable Removable device scan*** option.

Note: *For a description of specific parameters please consult the chapter* ***AVG Advanced Settings / Scans / Scan Whole Computer****.*

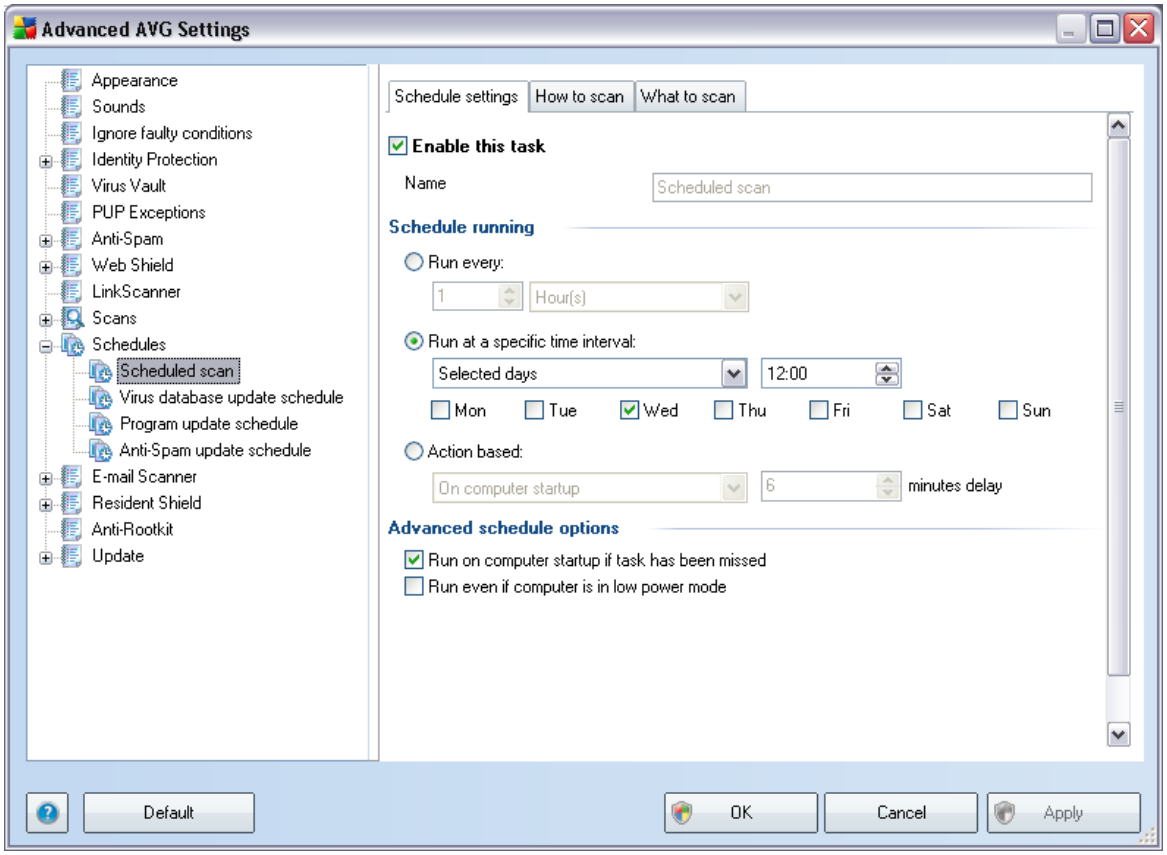
9.9. Schedules

In the ***Schedules*** section you can edit the default settings of:

- Whole computer scan schedule
- Virus database update schedule
- Program update schedule

9.9.1. Scheduled Scan

Parameters of the scheduled scan can be edited (*or a new schedule set up*) on three tabs:



On the ***Schedule settings*** tab you can first check/uncheck the ***Enable this task*** item to simply deactivate the scheduled test temporarily, and switch it on again as the need arises.

Next, in the text field called ***Name*** (*deactivated for all default schedules*) there is the name assigned to this very schedule by the program vendor. For newly added schedules (*you can add a new schedule by mouse right-click over the* ***Scheduled scan*** *item in the left navigation tree*) you can specify your own name, and in that case the text field will be open for editing. Try to always use brief, descriptive and apt names for scans to make it easier to later recognize the scan from others.

Example: *It is not appropriate to call the scan by the name of "New scan" or "My scan" since these names do not refer to what the scan actually checks. On the other hand, an example of a good descriptive name would be "System areas scan" etc. Also it is not necessary to specify in the scan's name whether it is the scan of the whole of the computer or just a scan of selected files or folders - your own scans will always be a specific version of the scan of selected files or folders.*

In this dialog you can further define the following parameters of the scan:

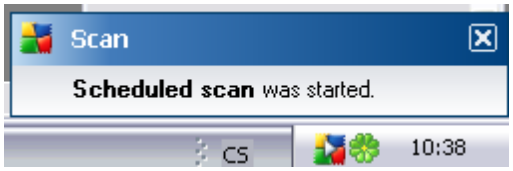
Schedule running

Here, you can specify time intervals for the newly scheduled scan launch. The timing can either be defined by the repeated scan launch after a certain period of time (***Run every ...***) or by defining an exact date and time (***Run at specific time interval ...***), or possibly by defining an event that the scan launch should be associated with (***Action based on computer startup***).

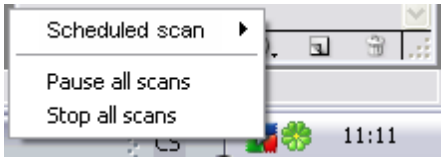
Advanced schedule options

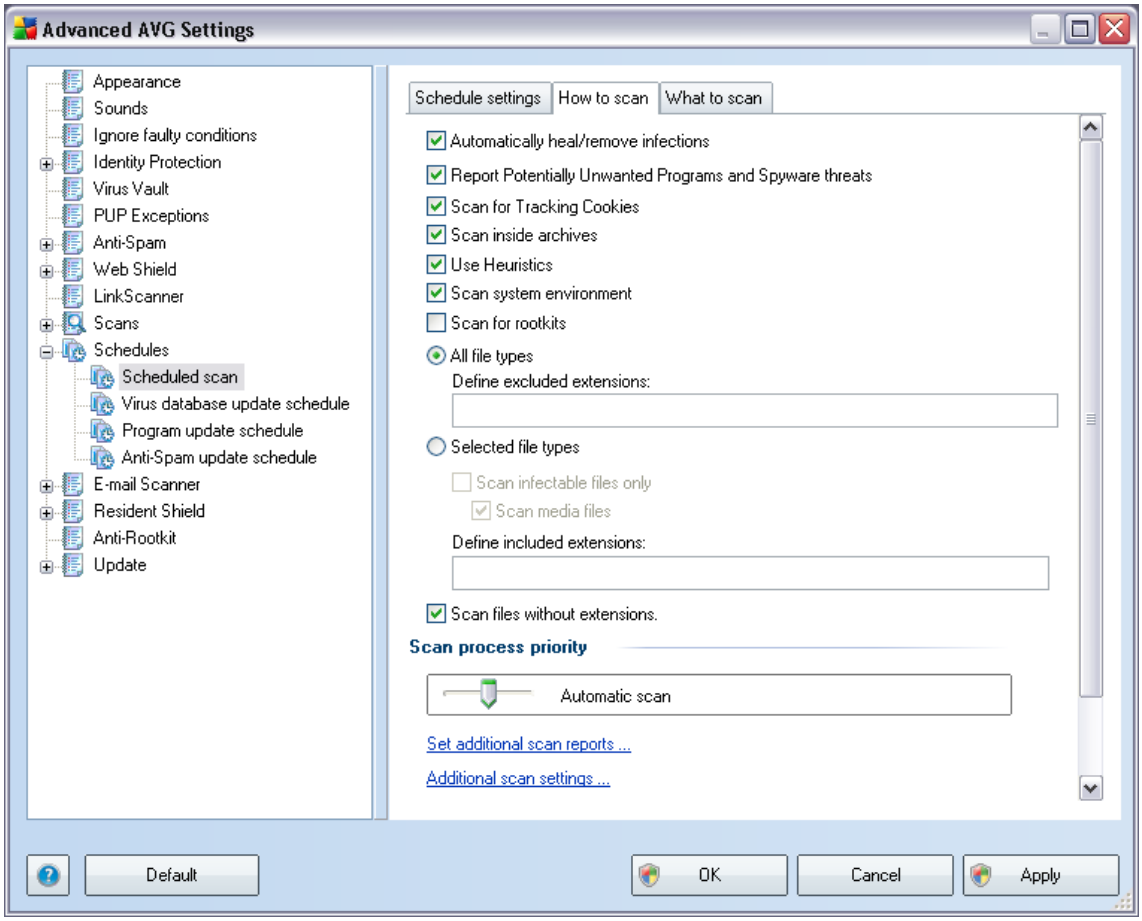
This section allows you to define under which conditions the scan should/should not be launched if the computer is in low power mode or switched off completely.

Once the scheduled scan is launched in the time you have specified, you will be informed on this fact via a pop-up window opened over the AVG system tray icon:



A new AVG system tray icon then appears (*in full color with a white arrow - see picture above*) informing a scheduled scan is running. Right-click on the running scan AVG icon to open a context menu where you can decide to pause or even stop the running scan:





On the ***How to scan*** tab you will find a list of scanning parameters that can be optionally switched on/off. By default, most parameters are switched on and the functionality will be applied during scanning. Unless you have a valid reason to change

these settings we recommend to keep the predefined configuration:

- ***Automatically heal/remove infection*** - if a virus is identified during scanning it can be healed automatically if a cure is available. If the infected file cannot be healed automatically, the infected object will be moved to the ***Virus Vault***.

    - ***Report Potentially Unwanted Programs and Spyware Threats*** - (*switched on, by default*): this parameter controls the ***Anti-Virus*** and ***Anti-Spyware*** components functionality that allows ***detection of potentially unwanted programs*** (*executable files that can run as spyware or adware*) and these can then be blocked, or removed;

    - ***Scan for Tracking Cookies*** - (*switched on, by default*): this parameter of the ***Anti-Spyware*** component defines that cookies should be detected during scanning; (*HTTP cookies are used for authenticating, tracking, and maintaining specific information about users, such as site preferences or the contents of their electronic shopping carts*)

    - ***Scan inside archives*** - (*switched on, by default*): this parameter defines the scanning should check all files even if they are stored inside an archive, e.g. ZIP, RAR, ...

    - ***Use Heuristics*** - (*switched on, by default*): heuristic analysis (*dynamic emulation of the scanned object's instructions in a virtual computer environment*) will be one of the methods used for virus detection during scanning;

    - ***Scan system environment*** - (*switched on, by default*): scanning will also check the system areas of your computer;

    - ***Scan for rootkits*** - tick this item if you want to include the rootkit detection into scanning of the entire computer. The rootkit detection is also available on its own within the ***Anti-Rootkit*** component;

Further you should decide whether you want to have scanned

- ***All file types*** with the possibility of defining exceptions from scanning by providing a list of comma separated (*having been saved, the commas change into semicolons*) file extensions that should not be scanned;

- ***Selected file types*** - you can specify that you want to scan only files that are possibly infectable (*files that cannot get infected will not be scanned, for instance some plain text files, or some other non-executable files*), including media files (*video, audio files - if you leave this box unchecked, it will reduce the scanning time even more, because these files are often quite large and*

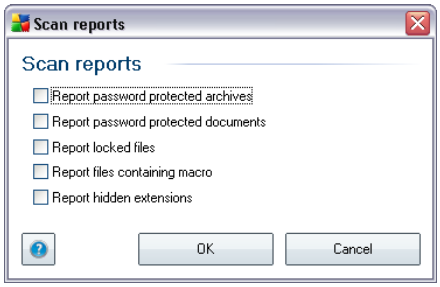
are not too likely to be infected by a virus). Again, you can specify by extensions which files are those that should always be scanned.

- Optionally, you can decide you want to ***Scan files without extension*** - this option is on by default, and it is recommended that you keep it so unless you have a real reason to change it. Files with no extension are rather suspicious and should be scanned at all times.

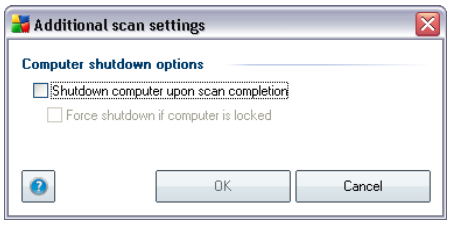
Scan process priority

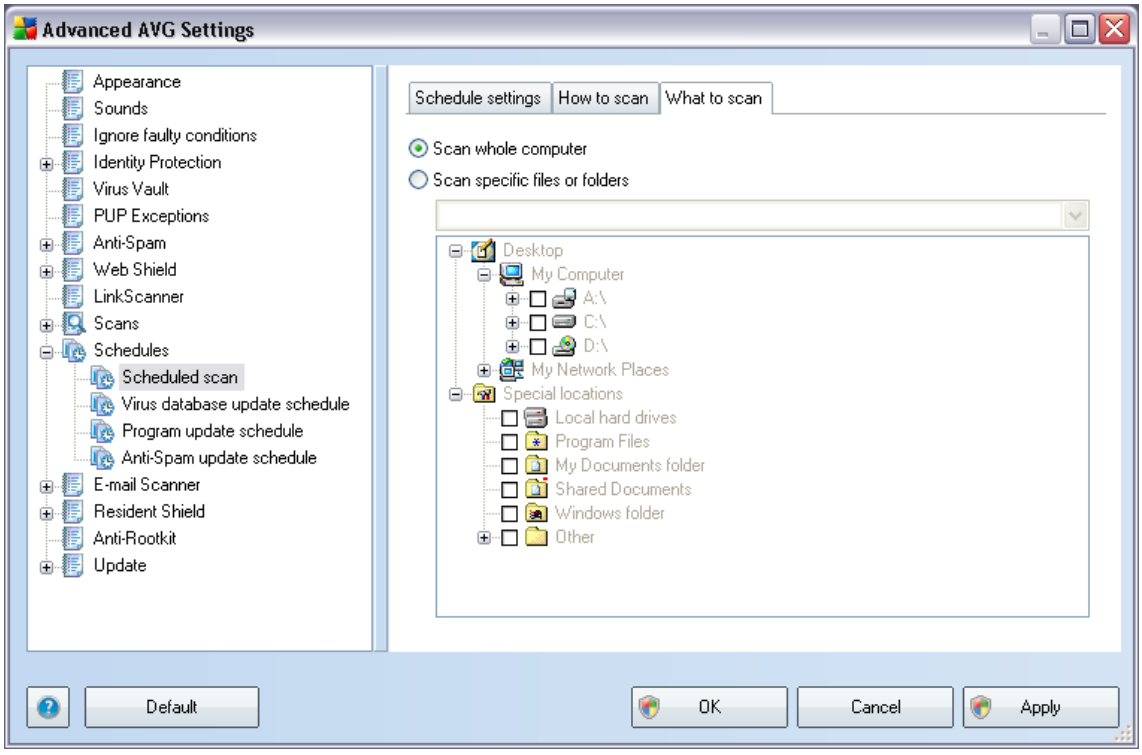
Within the ***Scan process priority*** section you can further specify the desired scanning speed dependent on system resource usage. By default, this option is set to the medium level of automatic resource usage. If you want the scanning to run faster, it will take less time but the system resources usage will increase significantly during the scan, and will slow down your other activities on the PC (*this option can be used when your computer is switched on but nobody is currently working on it*). On the other hand, you can decrease the system resources usage by extending the scanning duration.

Click the ***Set additional scan reports ...*** link to open a standalone dialog window called ***Scan reports*** where you can tick several items to define what scan findings should be reported:



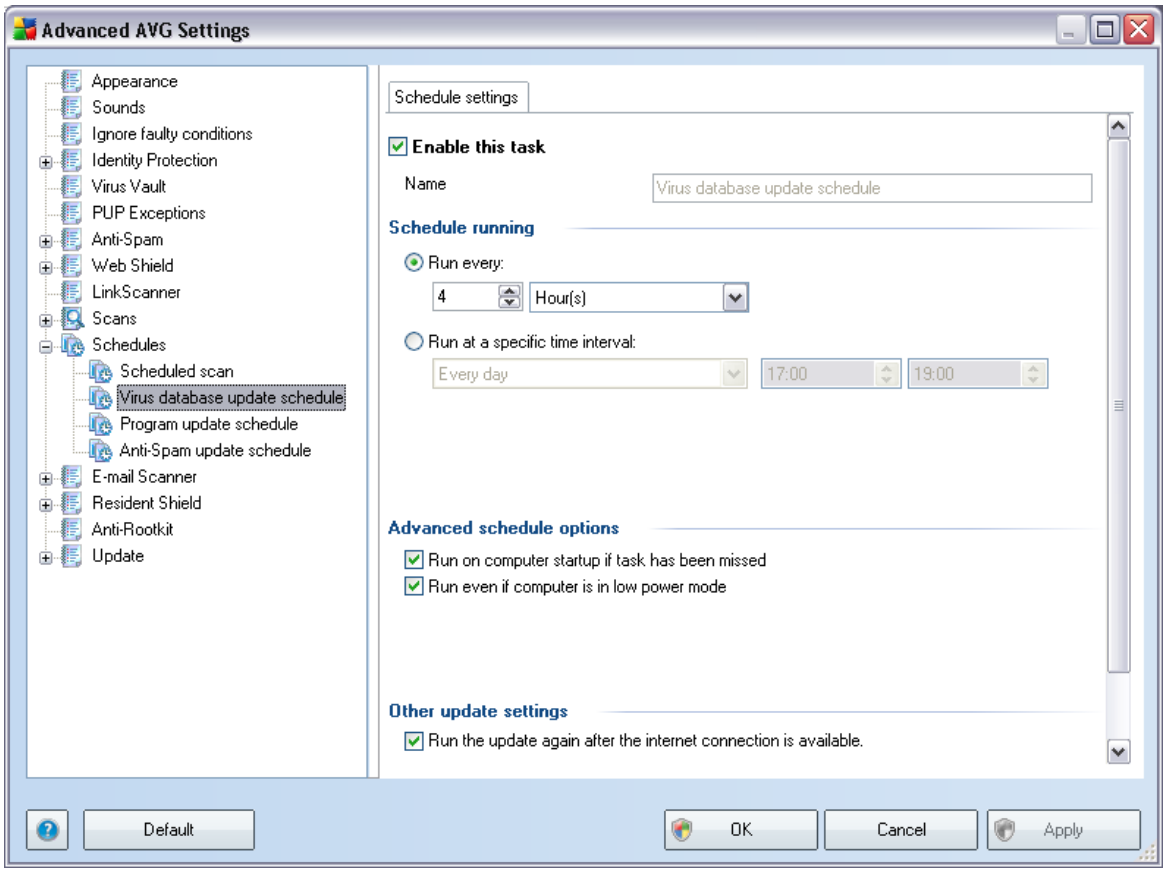
Click the ***Additional scan settings ...*** to open a new ***Computer shutdown options*** dialog where you can decide whether the computer should be shut down automatically once the running scanning process is over. Having confirmed this option (***Shutdown computer upon scan completion***), a new option activates that allows the computer to shut down even if it is currently locked (***Force shutdown if computer is locked***).





On the ***What to scan*** tab you can define whether you want to schedule scanning of the whole computer or scanning of specific files or folders. If you select scanning of specific files or folders, in the bottom part of this dialog the displayed tree structure activates and you can specify the folders to be scanned.

9.9.2. Virus Database Update Schedule



On the ***Schedule settings*** tab you can first check/uncheck the ***Enable this task*** item to simply deactivate the scheduled virus database update temporarily, and switch it on again as the need arises.

The basic virus database update scheduling is covered within the ***Update Manager*** component. Within this dialog you can set up some detailed parameters of the virus database update schedule:

In the text field called ***Name*** (*deactivated for all default schedules*) there is the name assigned to this very schedule by the program vendor. For newly added schedules (*you can add a new schedule by mouse right-click over the* ***Virus database update schedule*** *item in the left navigation tree*) you can specify your own name, and in that case the text field will be open for editing. Try to always use brief, descriptive and apt names for your schedules to make it easier to later recognize them.

Schedule running

In this section, specify the time intervals for the newly scheduled virus database update launch. The timing can either be defined by the repeated update launch after a certain period of time (***Run every ...***) or by defining an exact date and time (***Run at specific time ...***).

Advanced schedule options

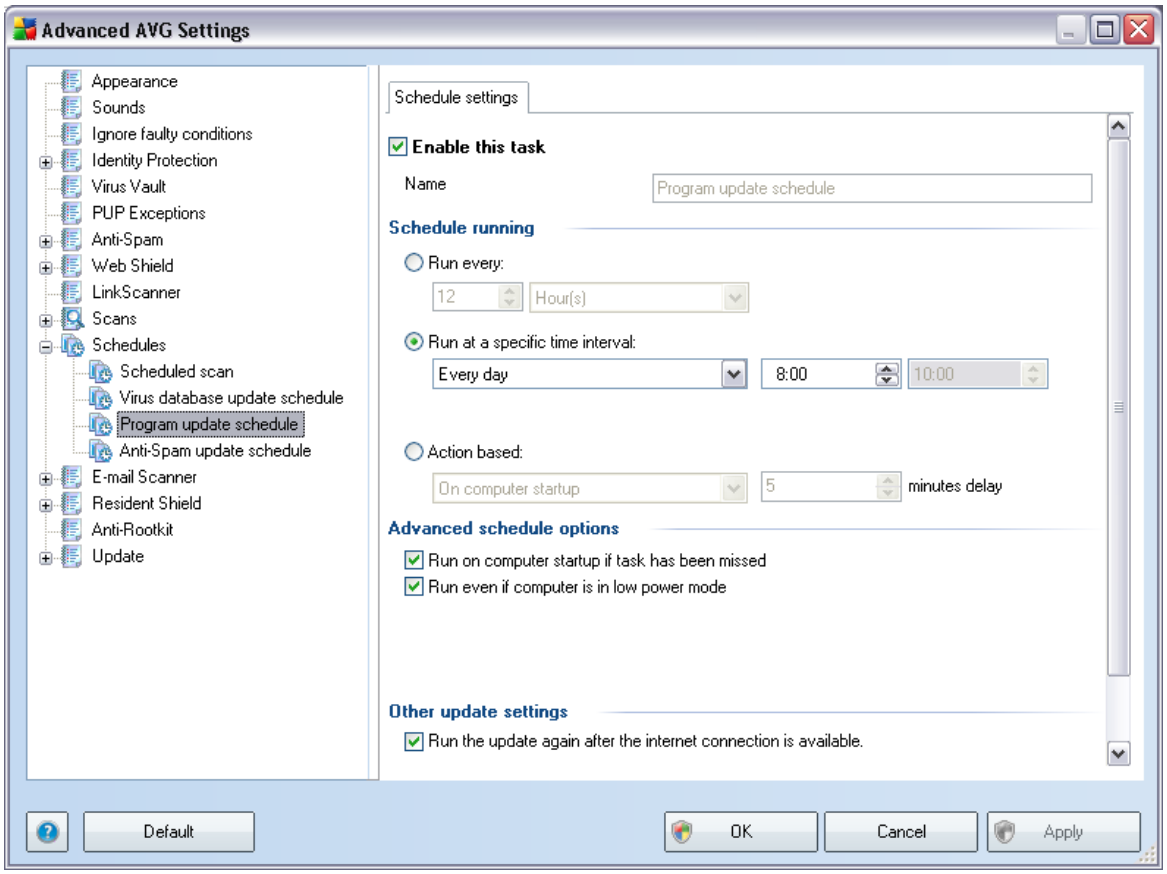
This section allows you to define under which conditions the virus database update should/should not be launched if the computer is in low power mode or switched off completely.

Other update settings

Finally, check the ***Run the update again as soon as the Internet connection is available*** option to make sure than if the internet connection gets corrupted and the update process fails, it will be launched again immediately after the internet connection is restored.

Once the scheduled update is launched in the time you have specified, you will be informed on this fact via a pop-up window opened over the AVG system tray icon (*provided that you have kept the default configuration of the the **Advanced Settings / Appearance** dialog)*.

9.9.3. Program Update Schedule



On the ***Schedule settings*** tab you can first check/uncheck the ***Enable this task*** item to simply deactivate the scheduled program update temporarily, and switch it on again as the need arises.

In the text field called ***Name*** (*deactivated for all default schedules*) there is the name assigned to this very schedule by the program vendor. For newly added schedules (*you can add a new schedule by mouse right-click over the* ***Program update schedule*** *item in the left navigation tree*) you can specify your own name, and in that case the text field will be open for editing. Try to always use brief, descriptive and apt names for your schedules to make it easier to later recognize them.

Schedule running

Here, specify the time intervals for the newly scheduled program update launch. The

timing can either be defined by the repeated update launch after a certain period of time (***Run every ...***) or by defining an exact date and time (***Run at specific time ...***), or possibly by defining an event that the update launch should be associated with (***Action based on computer startup***).

Advanced schedule options

This section allows you to define under which conditions the program update should/ should not be launched if the computer is in low power mode or switched off completely.

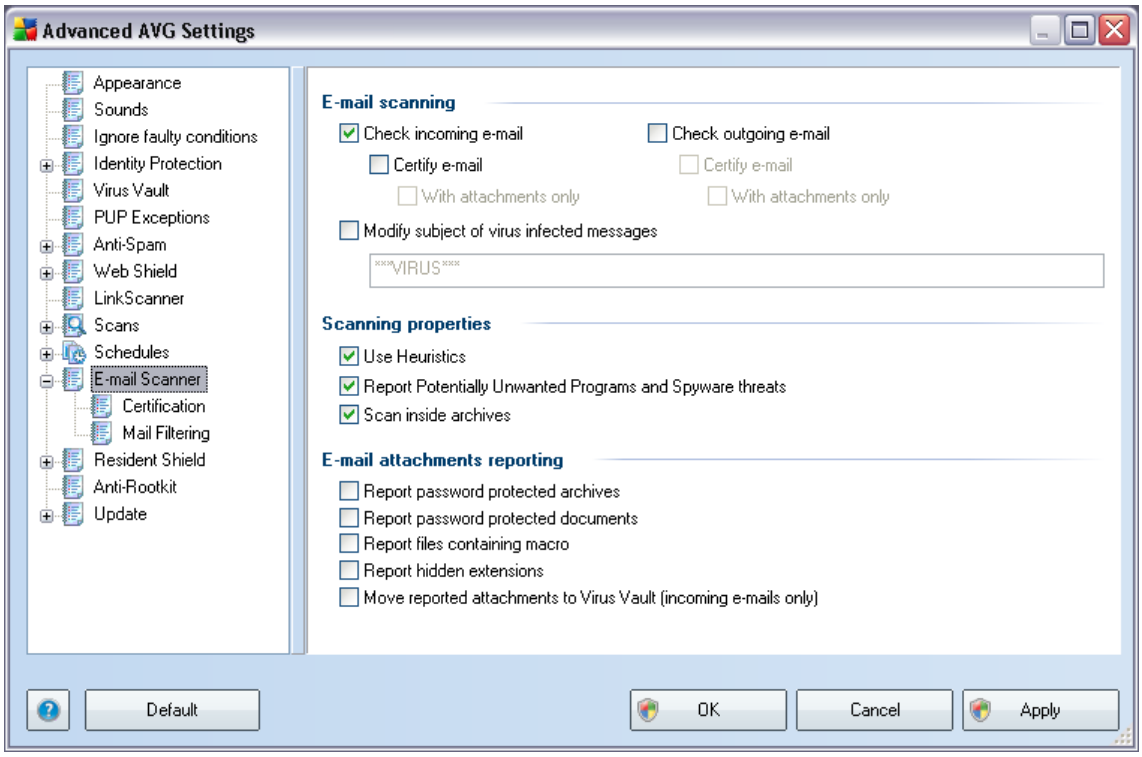
Other update settings

Check the ***Run the update again as soon as the Internet connection is available*** option to make sure than if the internet connection gets corrupted and the update process fails, it will be launched again immediately after the internet connection is restored.

Once the scheduled update is launched in the time you have specified, you will be informed on this fact via a pop-up window opened over the AVG system tray icon (*provided that you have kept the default configuration of the the **Advanced Settings/ Appearance** dialog)*.

Note: *If a time coincidence of a scheduled program update and scheduled scan occurs, the update process is of higher priority and the scan will get interrupted.*

9.10. E-mail Scanner



The ***E-mail Scanner*** dialog is divided into three sections:

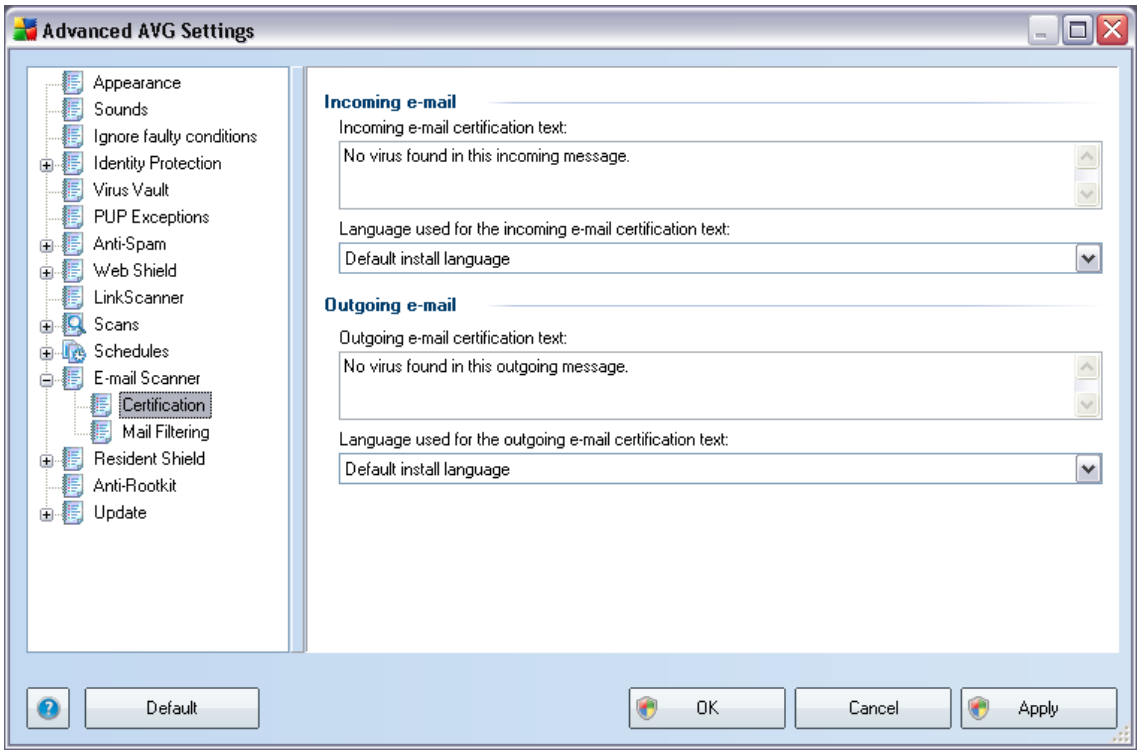
- ***E-mail scanning*** - in this section select whether you want to scan the incoming/outgoing e-mail messages and whether all e-mails should be certified or only e-mails with attachments (e-*mail virus-free certification is not supported in HTML/RTF format*). Additionally you can choose if you want AVG to modify the subject for messages that contain potential viruses. Tick the ***Modify subject of virus infected messages*** checkbox and change the text respectively (*default value is* ****VIRUS****).

- ***Scanning properties*** - specify whether the heuristic analysis method should be used during scanning (***Use heuristic***), whether you want to check for the presence of potentially unwanted programs (***Report Potentially Unwanted Programs and Spyware Threats***), and whether archives should be scanned too (***Scan inside archives***).

- ***E-mail attachments reporting*** - specify whether you wish to be notified via e-mail about password protected archives, password protected documents,

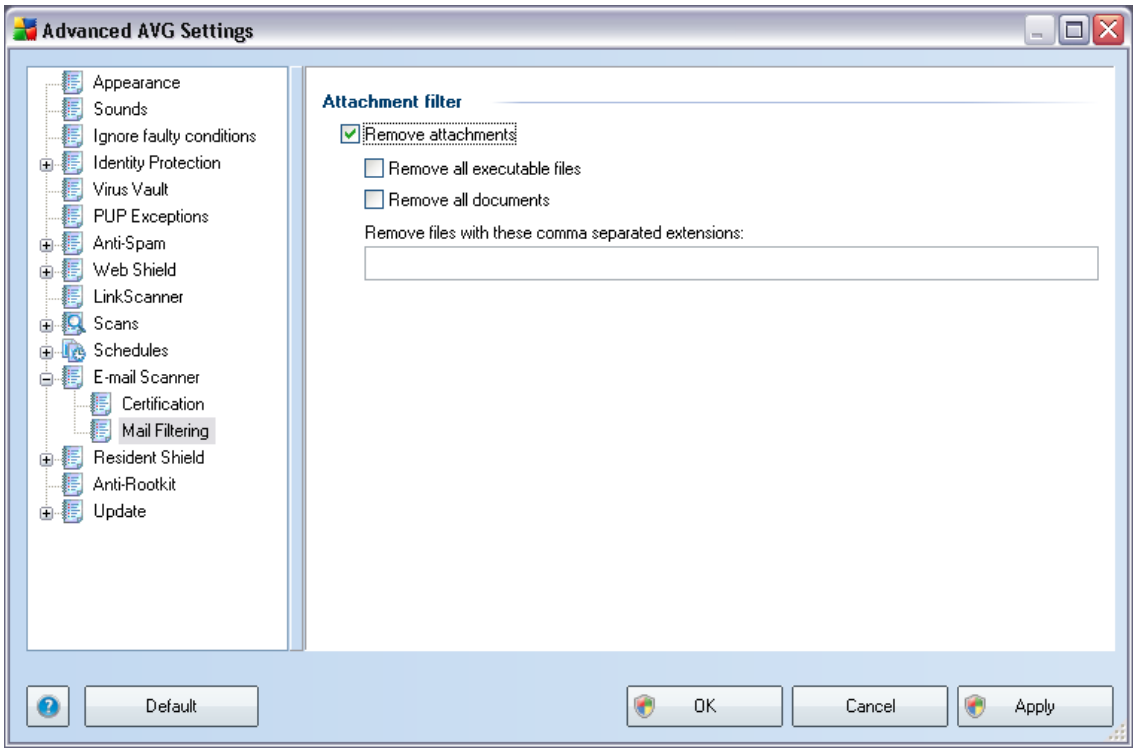
macro containing files and/or files with hidden extension detected as an attachment of the scanned e-mail message. If such a message is identified during scanning, define whether the detected infectious object should be moved to the ***Virus Vault***.

9.10.1. Certification



In the ***Certification*** dialog you can specify exactly what text the certification note should contain, and in what language. This should be specified separately for ***Incoming mail*** and ***Outgoing mail***.

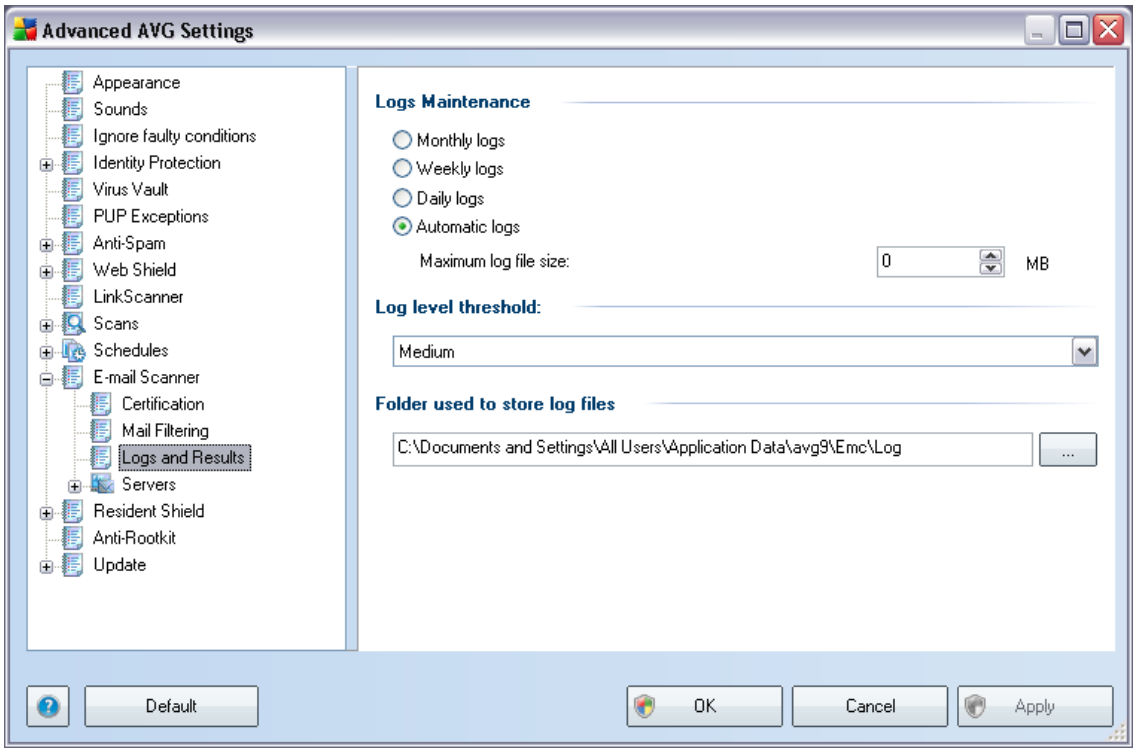
9.10.2. Mail Filtering



The ***Attachment filter*** dialog allows you to set up parameters for e-mail messages attachment scanning. By default, the ***Remove attachments*** option is switched off. If you decide to activate it, all e-mail message attachments detected as infectious or potentially dangerous will be removed automatically. If you want to define specific types of attachments that should be removed, select the respective option:

- ***Remove all executable files*** - all *.exe files will be deleted
- ***Remove all documents*** - all *.doc, *.docx, *.xls, *.xlsx files will be deleted
- ***Remove files with these comma separated extensions*** - will remove all files with the defined extensions

9.10.3. Logs and Results

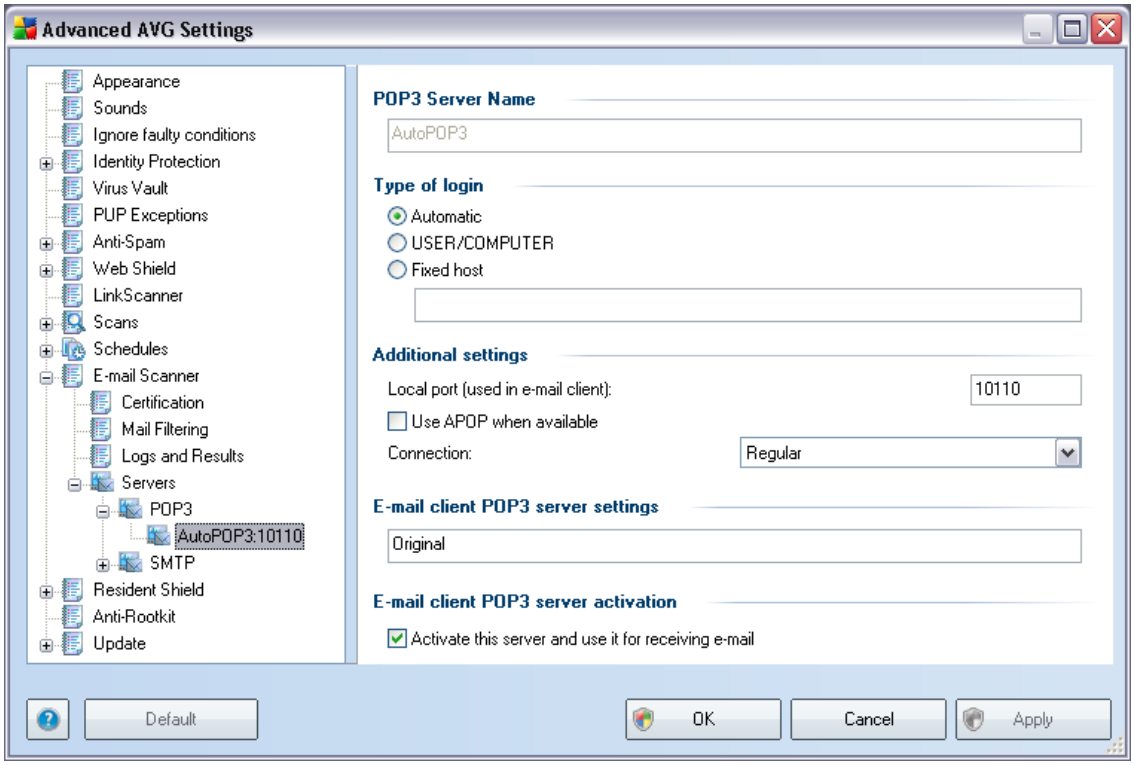


The dialog opened via the ***Logs and Results*** navigation item allows you to specify parameters for e-mail scanning results maintenance. The dialog is divided into several sections:

- ***Logs Maintenance*** - define whether you want to log e-mail scanning information daily, weekly, monthly, ... ; and also specify the maximum size of the log file (*in MB*)
- ***Log level threshold*** - the medium level is set up by default - you can select a lower level (*logging elementary connection information*) or higher level (*logging of all traffic*)
- ***Folder used to store log files*** - define where the log file should be located

9.10.4. Servers

In the ***Servers*** section you can edit parameters of the ***E-mail Scanner*** component servers, or set up a new server fusing the ***Add new server*** button.



In this dialog (opened via ***Servers / POP3***) you can set up a new ***E-mail Scanner*** server using the POP3 protocol for incoming mail:

- ***POP3 Server Name*** - type in the name of the server or keep the AutoPOP3 default name
- ***Type of login*** - defines the method for determining the mail server used for incoming mail:
    - ***Automatic*** - Login will be carried out automatically, according to your e-mail client settings.
    - ***USER/COMPUTER*** - the simplest and the most frequently used method for determining the destination mail server is the proxy method. To use this method, specify the name or address (or also the port) as part of the login user name for the given mail server, separating them with the / character. For example, for the account user1 on the server pop.acme.com and the port 8200 you would use user1/pop.acme.com:8200 for the login name.

- ***Fixed host*** - In this case, the program will always use the server specified here. Please specify the address or name of your mail server. The login name remains unchanged. For a name, you may use a domain name (for example, pop.acme.com) as well as an IP address (for example, 123.45.67.89). If the mail server uses a non-standard port, you can specify this port after the server name by using a colon as the delimiter (for example, pop.acme.com:8200). The standard port for POP3 communication is 110.

- ***Additional settings*** - specifies more detailed parameters:

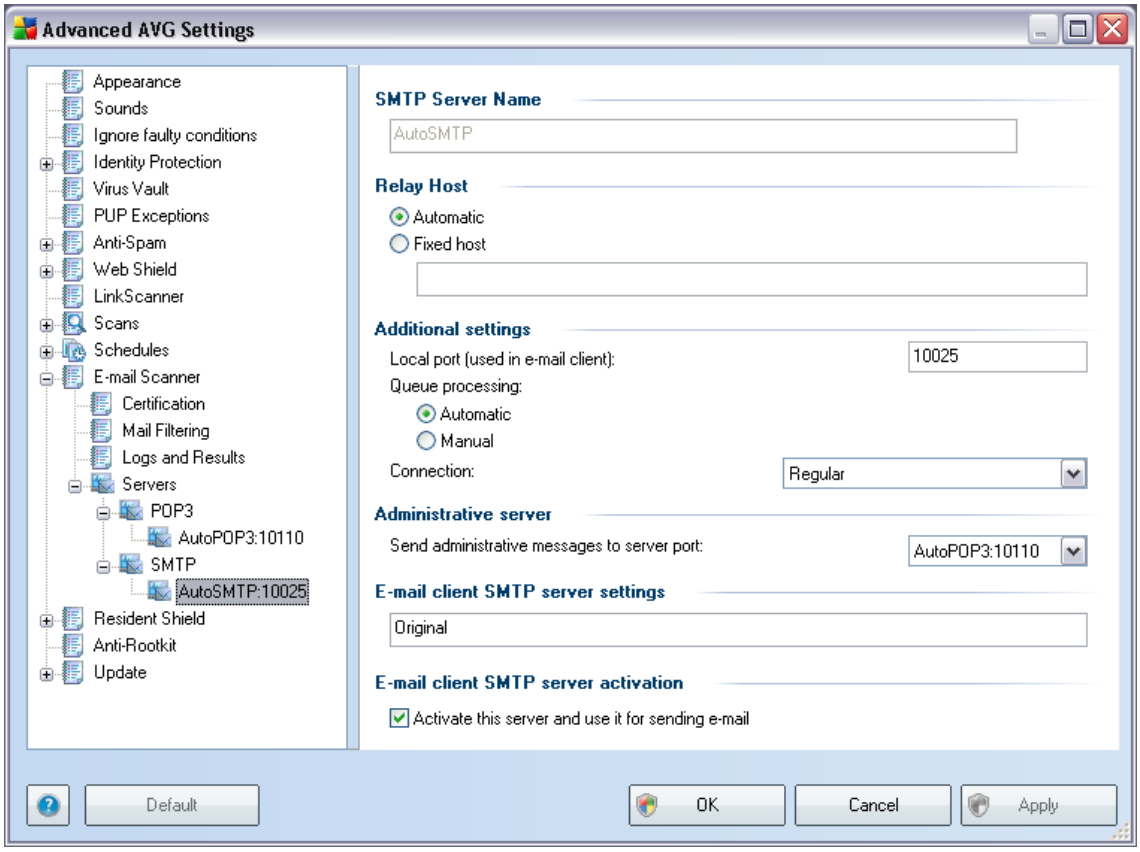
  - ***Local port*** - specifies the port on which the communication from your mail application should be expected. You must then specify in your mail application this port as the port for POP3 communication.

  - ***Use APOP when available*** - this option provides more secure mail server login. This makes sure that the ***E-mail Scanner*** uses an alternative method of forwarding the user account password for login, sending the password to the server not in an open, but in an encrypted format using a variable chain received from the server. Naturally, this feature is available only when the destination mail server supports it.

  - ***Connection*** - in the drop-down menu, you can specify which kind of connection to use (regular/SSL/SSL default). If you choose SSL connection, the data sent is encrypted without the risk of being traced or monitored by a third party. This feature is also only available when the destination mail server supports it.

- ***E-mail client POP3 server settings*** - provides brief information on the configuration settings required to correctly configure your e-mail client (so that the ***E-mail Scanner*** will check all incoming mail). This is a summary based on the corresponding parameters specified in this dialog and other related dialogs.

- ***E-mail client POP3 server activation*** - check/uncheck this item to activate or deactivate the specified POP3 server



In this dialog (opened via ***Servers / SMTP***) you can set up a new ***E-mail Scanner*** server using the SMTP protocol for outgoing mail:

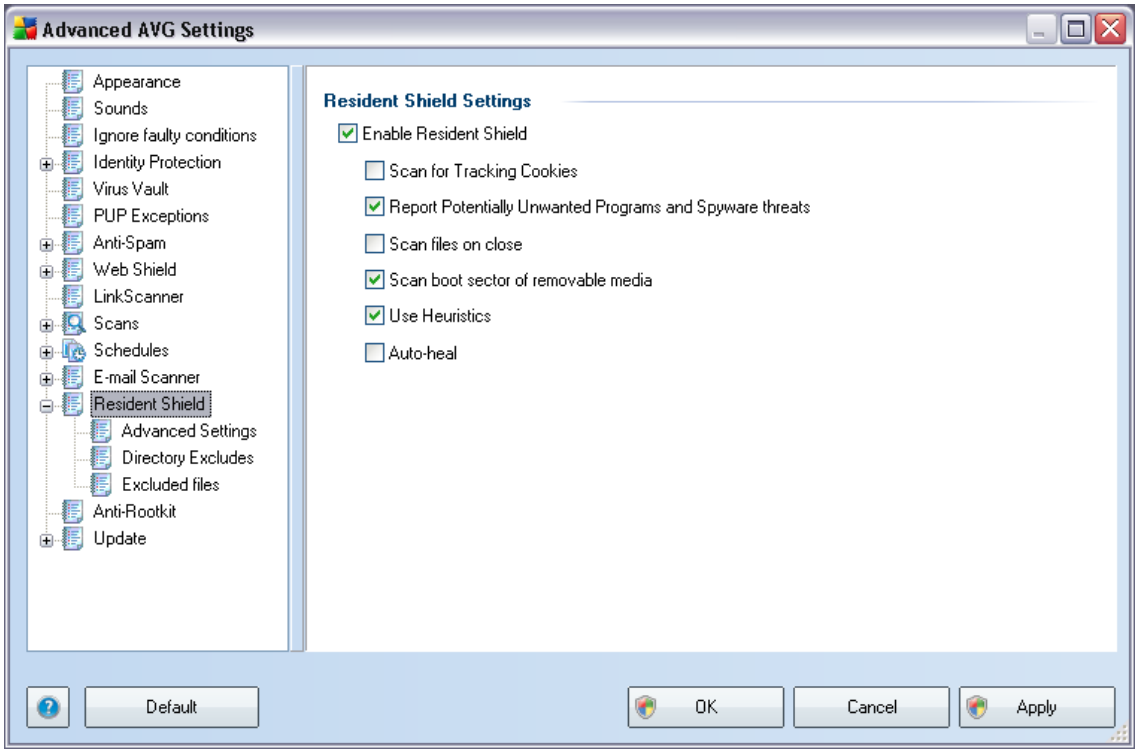
- ***SMTP Server Name*** - type in the name of the server or keep the AutoSMTP default name
- ***Relay Host*** - defines the method for determining the mail server used for outgoing mail:
  - ***Automatic*** - login will be carried out automatically, according to your e-mail client settings
  - ***Fixed host*** - in this case, the program will always use the server specified here. Please specify the address or name of your mail server. You may use a domain name (for example, smtp.acme.com) as well as an IP address (for example, 123.45.67.89) for a name. If the mail server

uses a non-standard port, you can type this port behind the server name using a colon as the delimiter (for example, smtp.acme.com:8200). The standard port for SMTP communication is 25.

- ***Additional settings*** - specifies more detailed parameters:
  - ***Local port*** - specifies the port on which the communication from your mail application should be expected. You must then specify in your mail application this port as the port for SMTP communication.
  - ***Queue processing*** - determines the behavior of the ***E-mail Scanner*** when processing the requirements for sending mail messages:
    - Automatic - the outgoing mail is immediately delivered (sent) to the target mail server
    - Manual - the message is inserted into the queue of outgoing messages and sent later
  - ***Connection*** - in this drop-down menu, you can specify which kind of connection to use (regular/SSL/SSL default). If you choose SSL connection, the data sent is encrypted without the risk of being traced or monitored by a third party. This feature is available only when the destination mail server supports it.
- ***Administrative server*** - shows the number of the port of the server that will be used for the reverse delivery of administration reports. These messages are generated, for example, when the target mail server rejects the outgoing message or when this mail server is not available.
- ***E-mail client SMTP server settings*** - provides information on how to configure the client mail application so that outgoing mail messages are checked using the currently modified server for checking the outgoing mail. This is a summary based on the corresponding parameters specified in this dialog and other related dialogs.

9.11. Resident Shield

The ***Resident Shield*** component performs live protection of files and folders against viruses, spyware and other malware.



In the ***Resident Shield Settings*** dialog you can activate or deactivate the ***Resident Shield*** protection completely by checking/unchecking the ***Enable Resident Shield*** item (*this option is switched on by default*). In addition you can select which ***Resident Shield*** features should be activated:

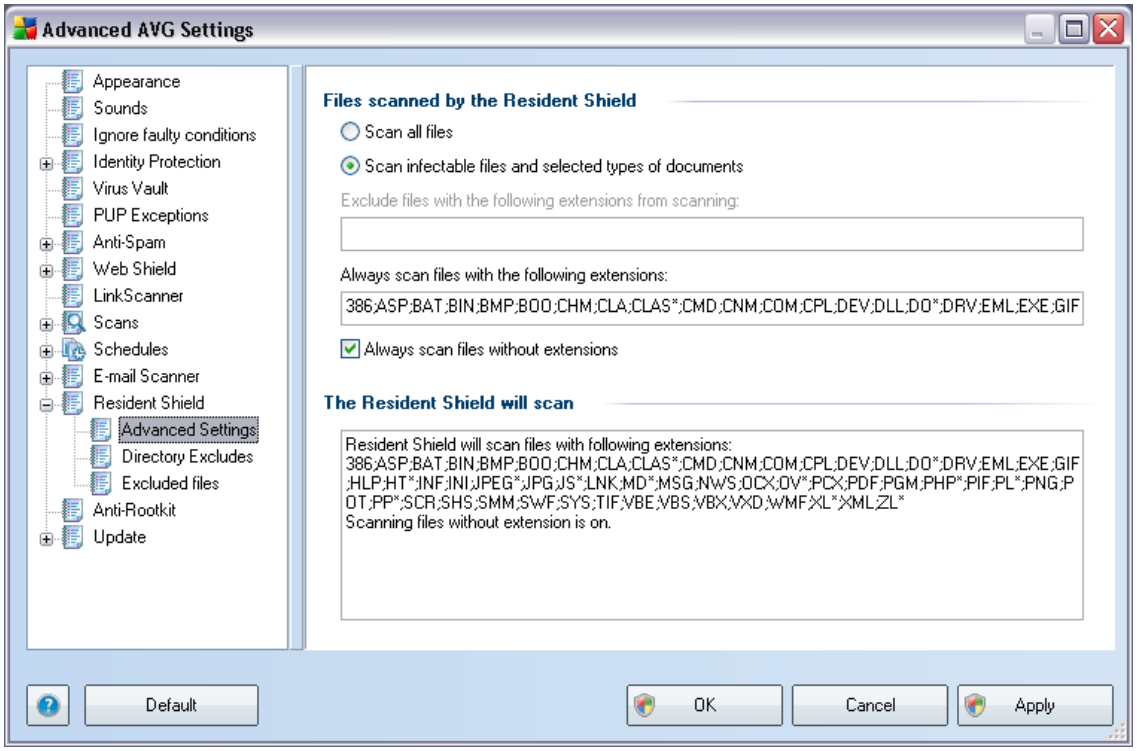
- ***Scan for Tracking cookies*** - this parameter defines that cookies should be detected during scanning. (*HTTP cookies are used for authenticating, tracking, and maintaining specific information about users, such as site preferences or the contents of their electronic shopping carts*)
- ***Report Potentially Unwanted Programs and Spyware Threats*** - (*switched on by default*) scanning for potentially unwanted programs (*executable applications that can behave as various types of spyware or adware*)
- ***Scan files on close*** - on-close scanning ensures that AVG scans active

objects (e.g. applications, documents …) when they are being opened, and also when they are being closed; this feature helps you protect your computer against some types of sophisticated virus

- ***Scan boot sector of removable media*** - (*switched on by default*)
- ***Use Heuristics*** - (*switched on by default*) heuristic analysis will be used for detection (*dynamic emulation of the scanned object's instructions in a virtual computer environment*)
- ***Auto-heal*** - any detected infection will be healed automatically if there is a cure available

9.11.1. Advanced Settings

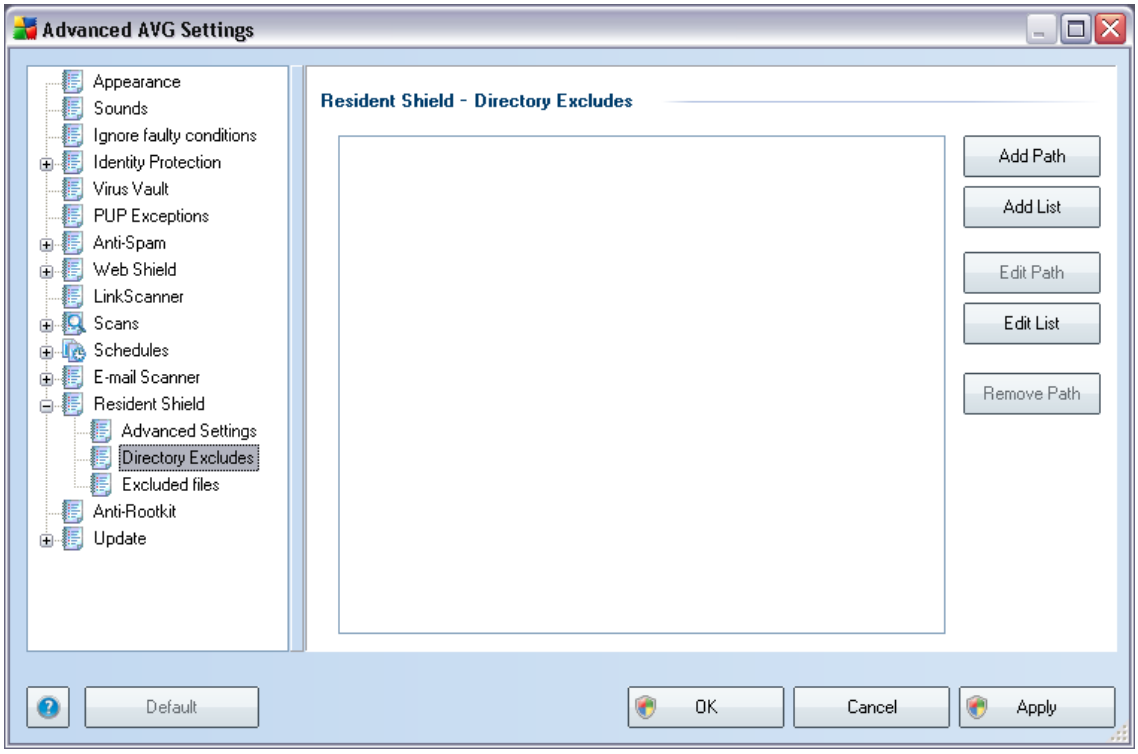
In the ***Files scanned by the Resident Shield*** dialog it is possible to configure which files will be scanned (*by specific extensions*):



Decide whether you want all files to be scanned or just infectable files - if so, you can further specify a list of extensions defining files that should be excluded from scanning, and also a list of file extensions defining files that must be scanned under all

circumstances.

9.11.2. Directory Exludes



The ***Resident Shield - Directory Excludes*** dialog offers the possibility of defining folders that should be excluded from the ***Resident Shield*** scanning.

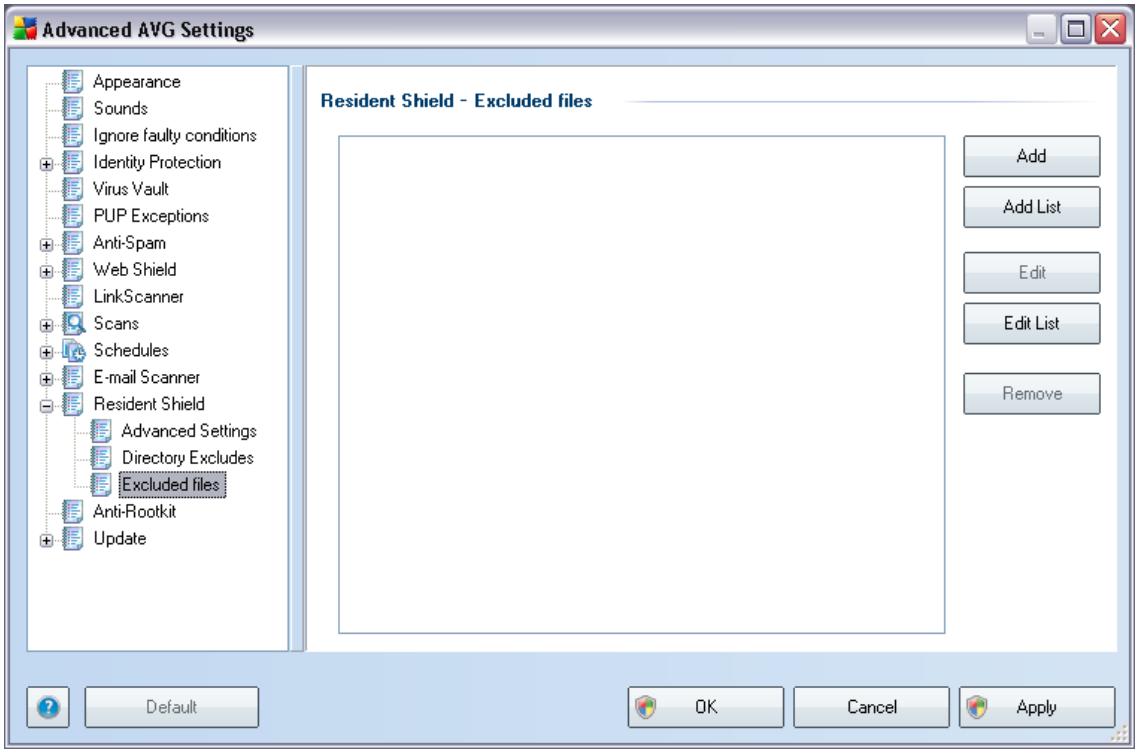
If this is not essential, we strongly recommend not excluding any directories!

The dialog provides the following control buttons:

- ***Add path*** – specify directories to be excluded from the scanning by selecting them one by one from the local disk navigation tree
- ***Add list*** – allows you to enter a whole list of directories to be excluded from the ***Resident Shield*** scanning
- ***Edit path*** – allows you to edit the specified path to a selected folder
- ***Edit list*** – allows you to edit the list of folders

- ***Remove path*** – allows you to delete the path to a selected folder from the list

9.11.3. Excluded Files



The ***Resident Shield - Excluded files*** dialog behaves just like the previously described ***Resident Shield - Directory Excludes*** but instead of folders you can now define specific files that should be excluded from the ***Resident Shield*** scanning.

If this is not essential, we strongly recommend not excluding any files!

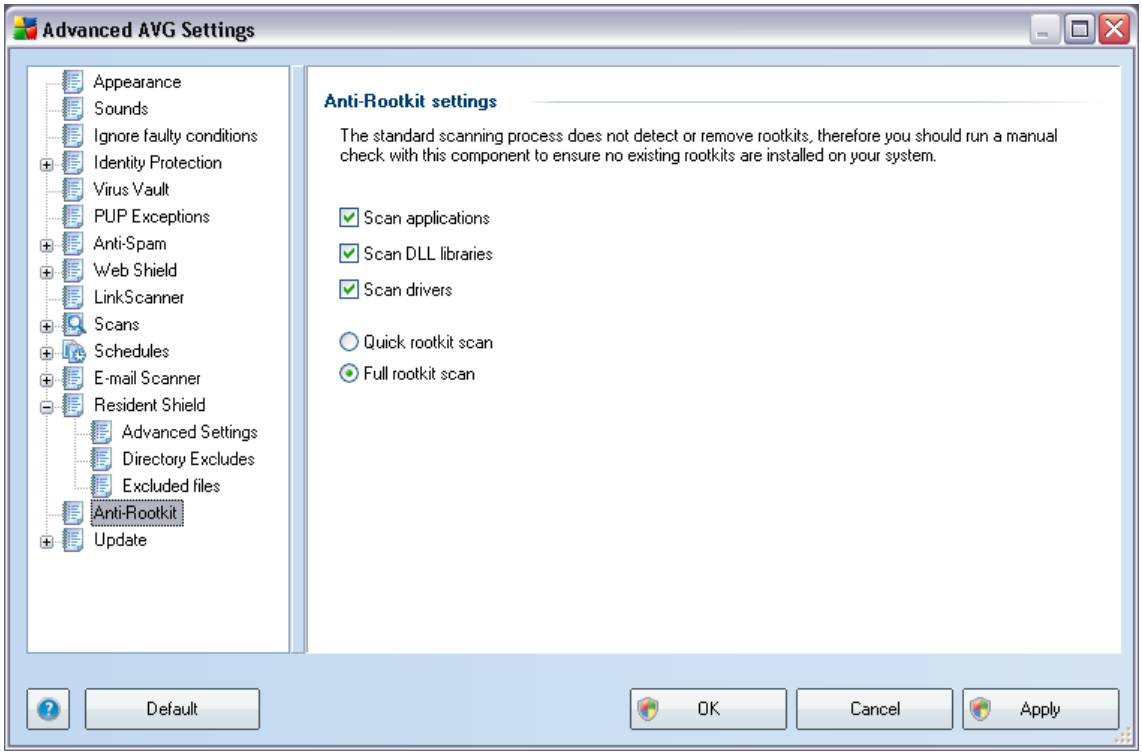
The dialog provides the following control buttons:

- ***Add*** – specify files to be excluded from the scanning by selecting them one by one from the local disk navigation tree
- ***Add list*** – allows you to enter a whole list of files to be excluded from the ***Resident Shield*** scanning
- ***Edit*** – allows you to edit the specified path to a selected file

- ***Edit list*** – allows you to edit the list of files
- ***Remove*** – allows you to delete the path to a selected file from the list

9.12. Anti-Rootkit

In this dialog you can edit the ***Anti-Rootkit*** component's configuration:



Editing of all functions of the ***Anti-Rootkit*** component as provided within this dialog is also accessible directly from the ***Anti-Rootkit component's interface***.

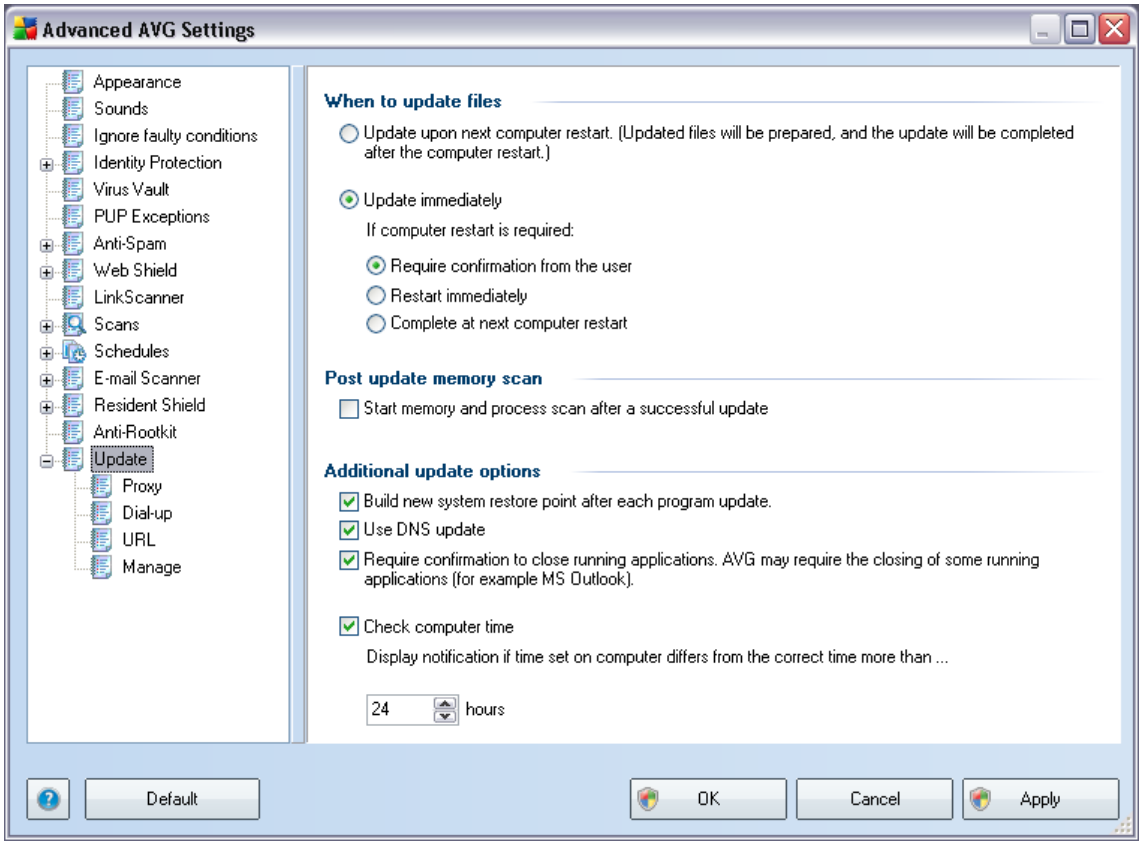
Mark up the respective check-boxes to specify objects that should be scanned:

- ***Scan applications***
- ***Scan DLL libraries***
- ***Scan drivers***

Further you can pick the rootkit scanning mode:

- ***Quick rootkit scan*** - scans all running processes, loaded drivers and the system folder (*typically c:\Windows*)
- ***Full rootkit scan*** - scans all running processes, loaded drivers, the system folder (*typically c:\Windows*), plus all local disks (*including the flash disk, but excluding floppy disk/CD drives*)

9.13. Update



The ***Update*** navigation item opens a new dialog where you can specify general parameters regarding the AVG update:

When to update files

In this section you can select between two alternative options: update can be scheduled for the next PC restart or you can launch the update immediately. By default, the immediate update option is selected since this way AVG can secure the

maximum safety level. Scheduling an update for the next PC restart can only be recommended if you are sure the computer gets restarted regularly, at least daily.

If you decide to keep the default configuration and launch the update process immediately, you can specify the circumstances under which a possible required restart should be performed:

- ***Require confirmation from the user*** - you will be asked to approve a PC restart needed to finalize the update process
- ***Restart immediately*** - the computer will be restarted automatically immediately after the update process has finished, and your approval will not be required
- ***Complete at next computer restart*** - the update process finalization will be postponed until the next computer restart - again, please keep in mind that this option is only recommended if you can be sure the computer gets restarted regularly, at least daily

Post update memory scan

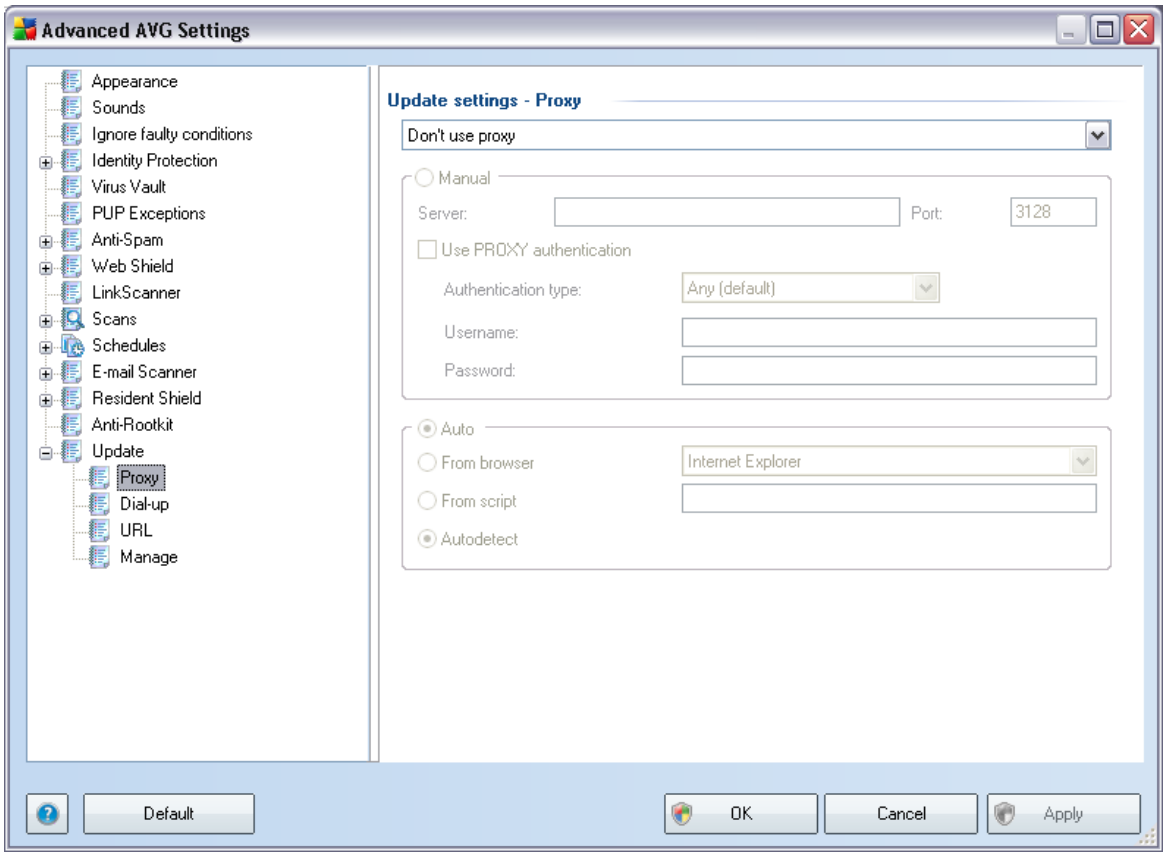
Mark this check box to define you want to launch a new memory scan after each successfully completed update. The latest downloaded update might have contained new virus definitions, and these could be applied in the scanning immediately.

Additional update options

- ***Build new system restore point after each program update*** - before each AVG program update launch, a system restore point is created. In case the update process fails and your operating system crashes you can always restore your OS in its original configuration from this point. This option is accessible via Start / All Programs / Accessories / System tools / System Restore, but any changes can be recommended to experienced users only! Keep this check-box ticked if you want to make use of this functionality.
- ***Use DNS update*** - mark this check box to confirm you want to use the update files detection method that eliminates data amount transferred between the update server and AVG client;
- ***Require confirmation to close running applications*** (*switched on by default*) will help you make sure no currently running applications will be closed without your permission - if required for the update process to be finalized;

- ***Check computer time*** - mark this option to declare you wish to have notification displayed in case the computer time differs from the correct time more than specified number of hours.

9.13.1. Proxy



The proxy server is a stand-alone server or a service running on a PC that guarantees safer connection to the Internet. According to the specified network rules you can then access the Internet either directly or via the proxy server; both possibilities can also be allowed at the same time. Then, in the first item of the ***Update settings - Proxy*** dialog you have to select from the combo box menu whether you want to:

- ***Use proxy***
- ***Do not use proxy server*** - default settings
- ***Try connection using proxy and if it fails, connect directly***

If you select any option using proxy server, you will have to specify some further data. The server settings can be configured either manually or automatically.

Manual configuration

If you select manual configuration (check *the **Manual** option to activate the respective dialog section*) you have to specify the following items:

- ***Server*** – specify the server's IP address or the name of the server
- ***Port*** – specify the number of the port that enables Internet access (*by default, this number is set to 3128 but can be set differently – if you are not sure, contact your network administrator*)

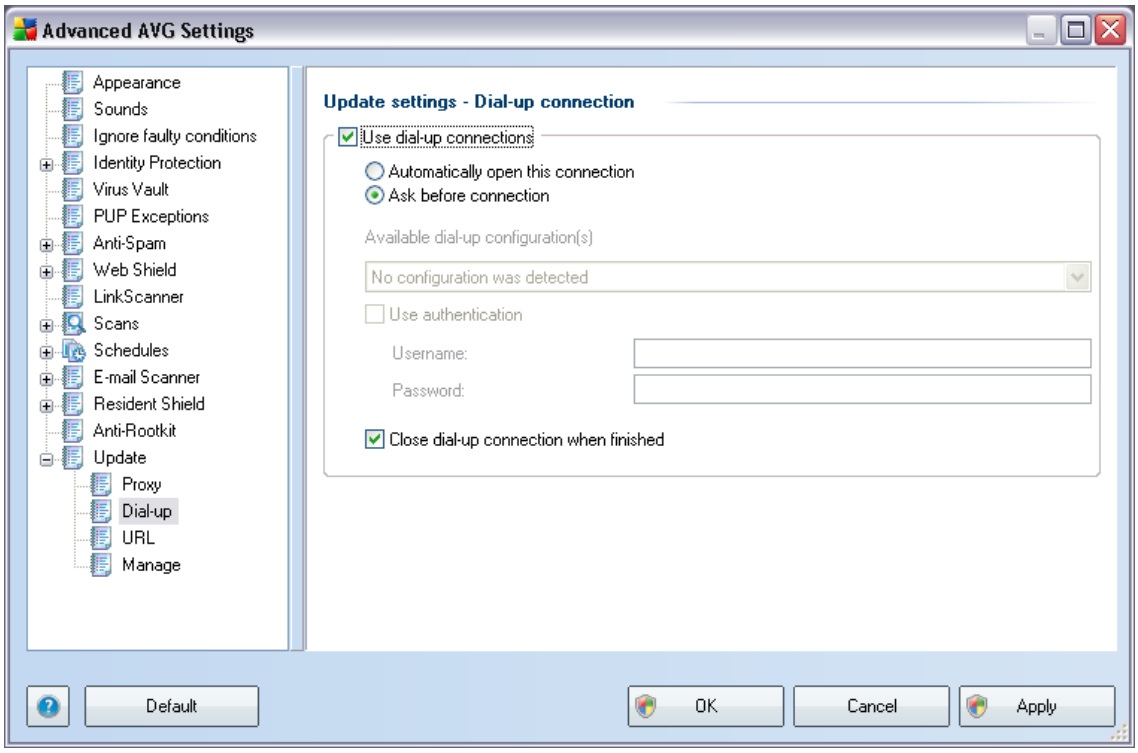
The proxy server can also have configured specific rules for each user. If your proxy server is set up this way, check the ***Use PROXY authentication*** option to verify that your user name and password are valid for connecting to the Internet via the proxy server.

Automatic configuration

If you select automatic configuration (*mark the **Auto** option to activate the respective dialog section*) then please select where the proxy configuration should be taken from:

- ***From browser*** - the configuration will be read from your default internet browser
- ***From script*** - the configuration will be read from a downloaded script with the function returning the proxy address
- ***Autodetect*** - the configuration will be detected automatically directly from the proxy server

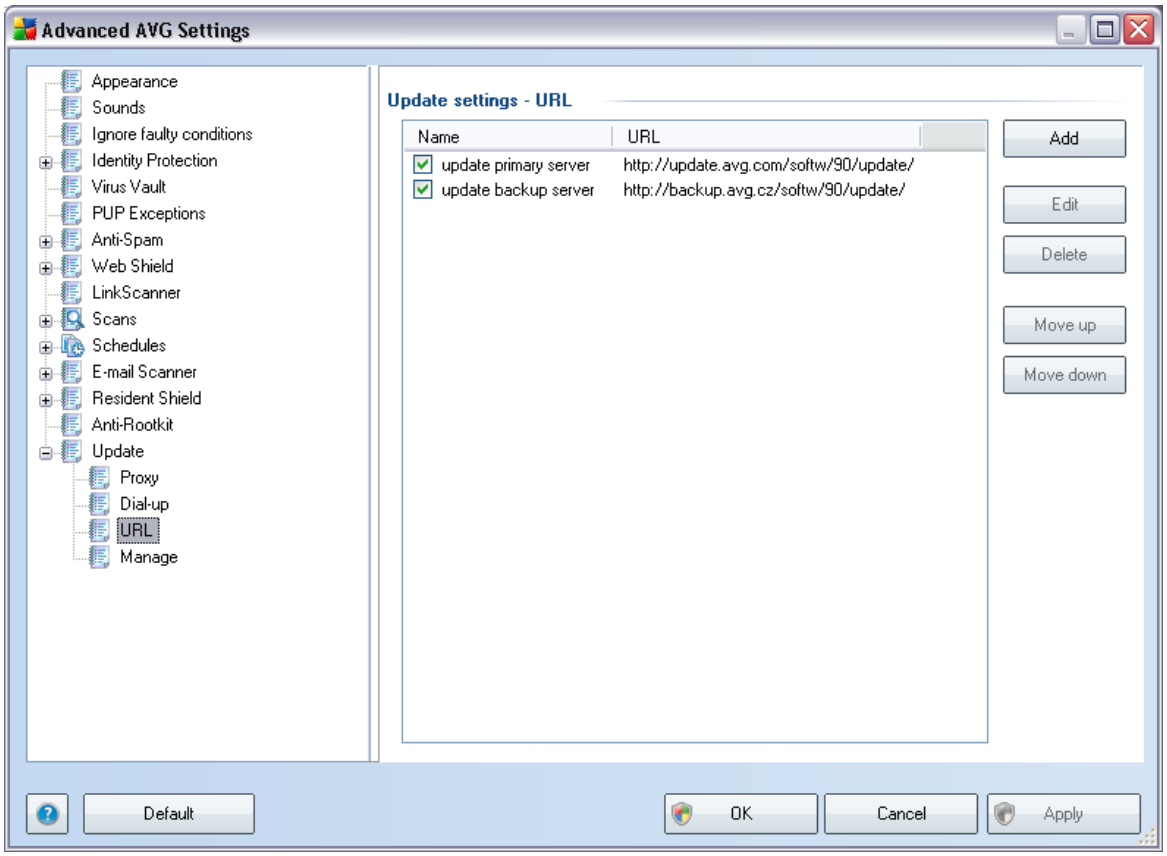
9.13.2. Dial-up



All parameters optionally defined in the ***Update settings - Dial-Up connection*** dialog refer to the dial-up connection to the Internet. The dialog's fields are inactive until you check the ***Use dial-up connections*** option that activates the fields.

Specify whether you want to connect to the Internet automatically (***Automatically open this connection***) or you wish to confirm the connection manually every time (***Ask before connection***). For automatic connection you should further select whether the connection should be closed after the update is finished (***Close dial-up connection when finished***).

9.13.3. URL

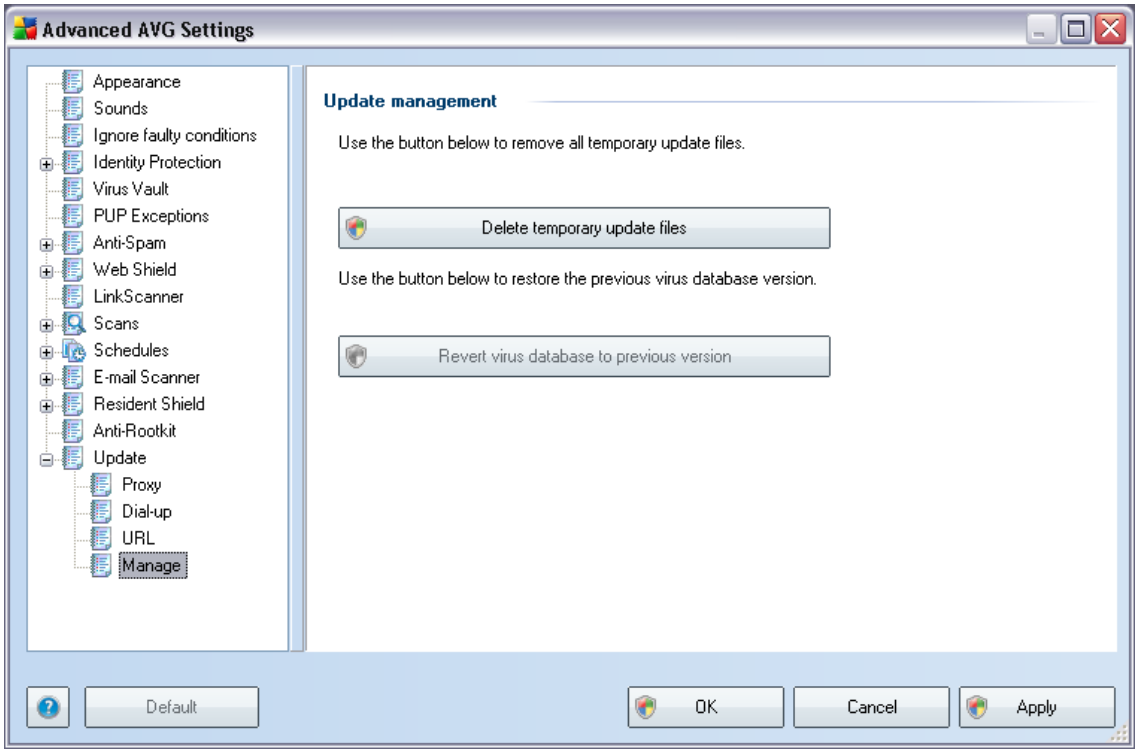


The ***URL*** dialog offers a list of Internet addresses from which the update files can be downloaded. The list and its items can be modified using the following control buttons:

- ***Add*** – opens a dialog where you can specify a new URL to be added to the list
- ***Edit*** - opens a dialog where you can edit the selected URL parameters
- ***Delete*** – deletes the selected URL from the list
- ***Move Up*** – moves the selected URL one position up in the list
- ***Move Down*** - moves the selected URL one position down in the list

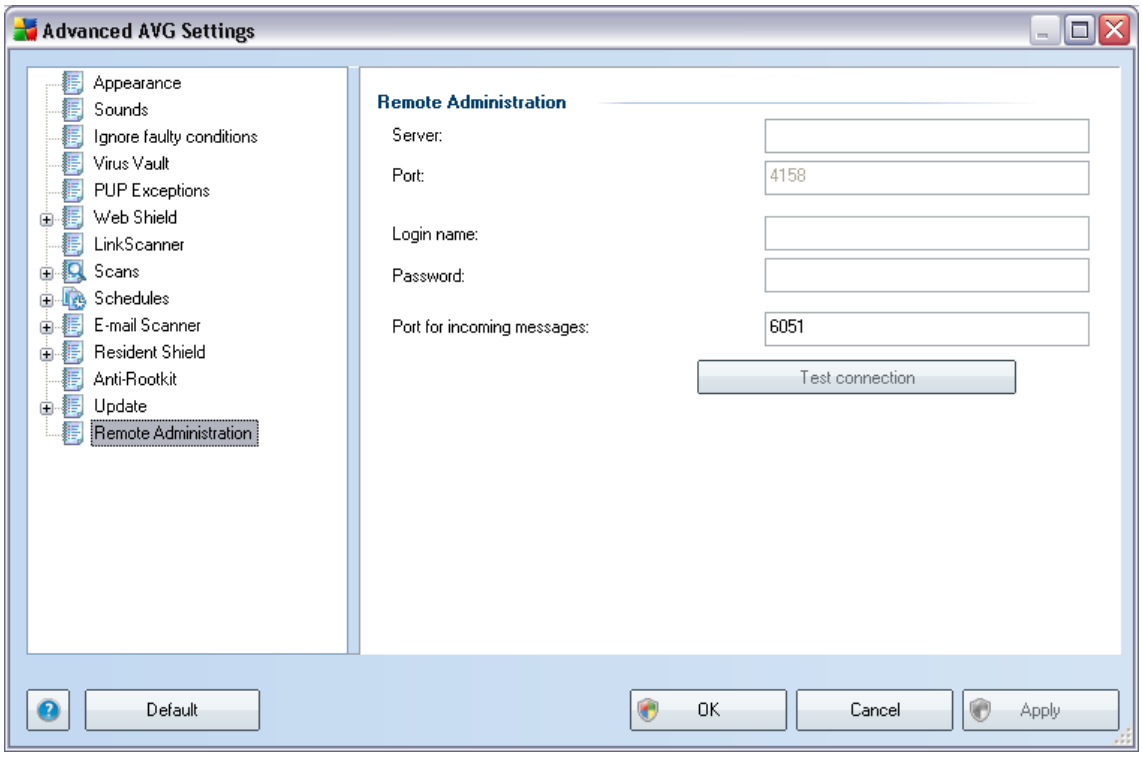
9.13.4. Manage

The ***Manage*** dialog offers two options accessible via two buttons:



- ***Delete temporary update files*** - press this button to delete all redundant update files from your hard disk (*by default, these files are being saved for 30 days*)
- ***Revert virus database to previous version*** – press this button to delete the latest virus base version from your hard disk, and to return to the previously saved version (*new virus base version will be a part of the following update*)

9.14. Remote Administration



The ***Remote Administration*** settings refer to connecting the AVG client station to the remote administration system. If you plan to connect the respective station to remote administration please specify the following parameters:

- ***Server*** - server name (or server IP address) where the AVG Admin Server is installed
- ***Port*** - provide the number of the port on which the AVG client communicates with the AVG Admin Server (*port number 4158 is considered as default - if you use this port number you do not have to specify it explicitly*)
- ***Login*** - if communication between the AVG client and the AVG Admin Server is defined as secured, provide your username ...
- ***Password*** - ... and your password
- ***Port for incoming messages*** - number of the port on which the AVG client accepts incoming messages from the AVG Admin Server

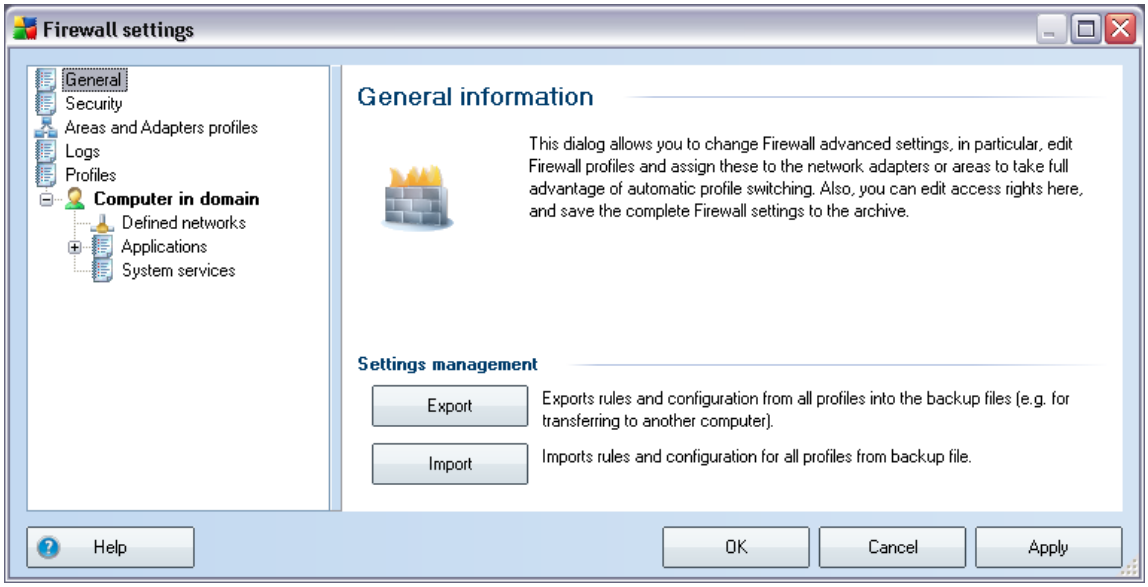
The ***Test connection*** button helps you to verify that all above stated data are valid and can be used to successfully connect to DataCenter.

Note: *For a detailed description on remote administration please consult the AVG Network Edition documentation.*

10. Firewall Settings

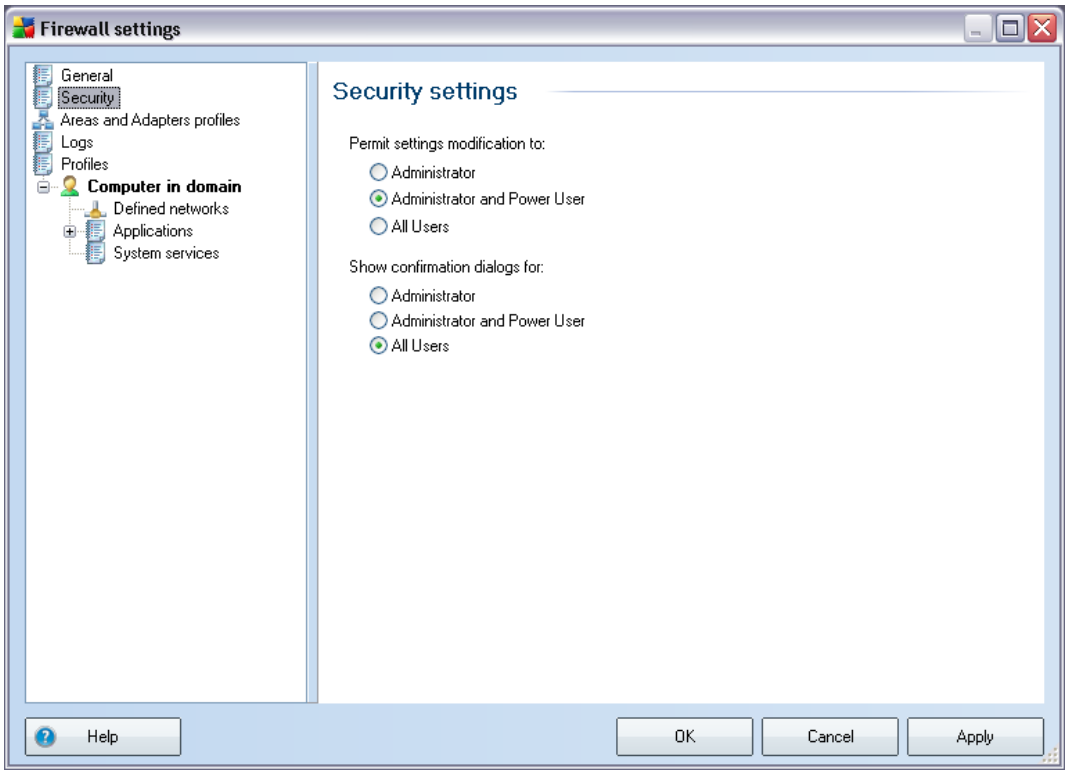
The ***Firewall*** configuration opens in a new window where in several dialogs can set up very advanced parameters of the component. ***However, the advanced configuration editing is only intended for experts and experienced users.***

10.1. General



In the ***General information*** you can ***Export*** / ***Import*** ***Firewall*** configuration; i.e. export the defined ***Firewall*** rules and settings to the back-up files, or on the other hand to import the entire back up file.

10.2. Security



In the ***Security settings*** dialog you can define general rules of ***Firewall***'s behavior regardless the selected profile:

- ***Permit settings modification to*** - specify who is allowed to change the ***Firewall***'s configuration
- ***Show confirmation dialog for*** - specify to whom the confirmation dialogs (*dialogs asking for decision in situation that is not covered by a defined* ***Firewall*** *rule*) should be displayed

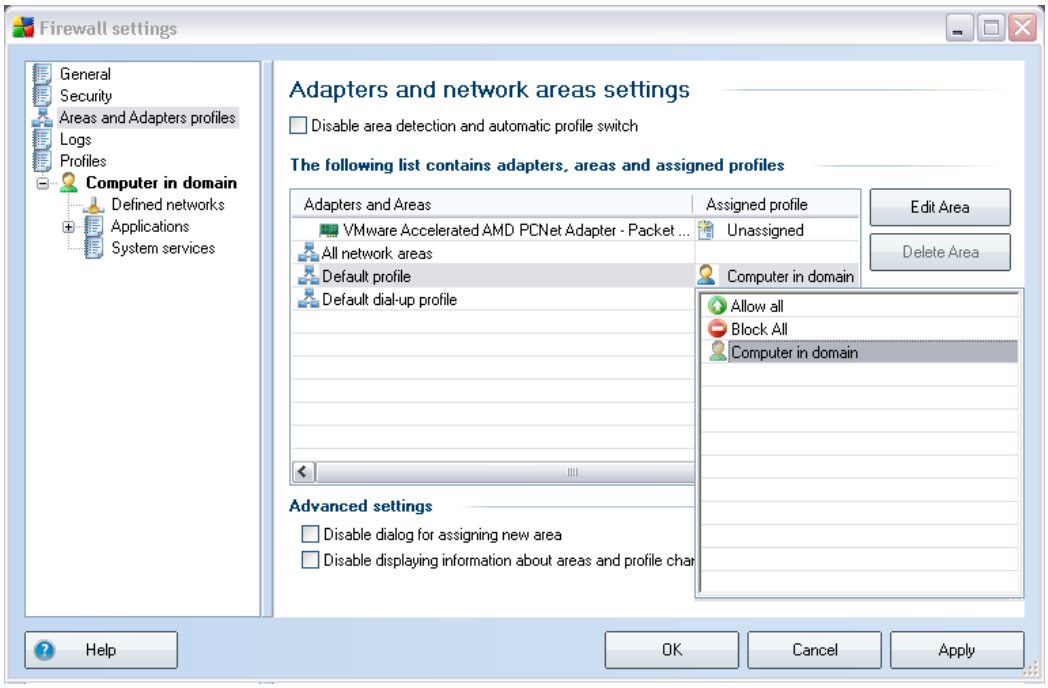
In both cases you can assign the specific right to one of the following user groups:

  - ***Administrator*** – controls the PC completely and has the right of assigning every user into groups with specifically defined authorities
  - ***Administrator and Power User*** – the administrator can assign any user

into a specified group (*Power User*) and define authorities of the group members

- ***All Users*** – other users not assigned into any specific group

10.3. Areas and Adapters Profiles



In the ***Adapters and network areas settings*** dialogs you can edit setting related to assigning of defined profiles to specific adapters and referring and respective networks:

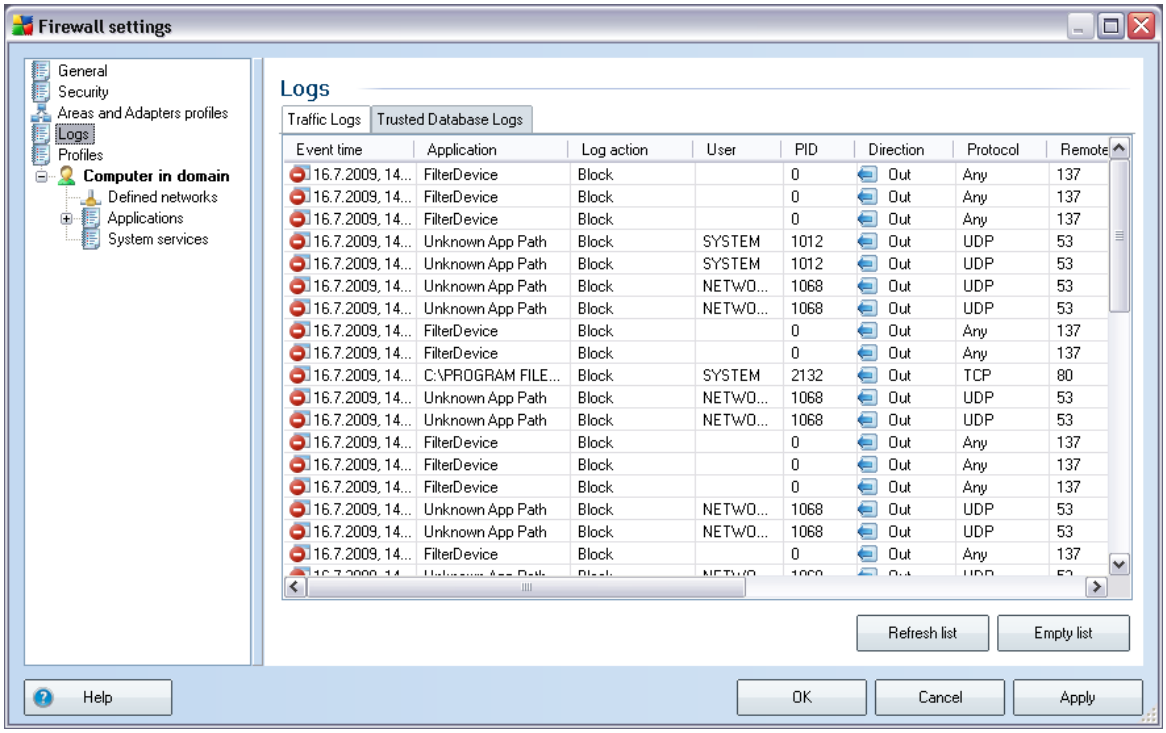
- ***Disable area detection and automatic profile switch*** - one of the defined profiles can be assigned to each network interface type, respectively to each area. If you do not wish to define specific profiles, one common profile defined based on your selection of computer usage and computer networking design during the ***Installation Process*** will be used. However, if you decide to distinguish profiles and assign them to specific adapters and areas, and later on - for some reason - you want to switch this arrangement temporarily, tick the ***Disable area detection and automatic profile switch*** option.

- ***List of adapters, areas and assigned profiles*** - in this list you can find an overview of detected adapters and areas. To each of them you can assign a

specific profile from the menu of defined profiles. To open this menu, click the respective item in the list of adapters, and select the profile.

- ***Advanced settings*** - ticking the respective option will deactivate the feature of displaying an information message.

10.4. Logs



The ***Logs*** dialog allows you to review the list of all logged ***Firewall*** actions and events with a detailed description of relevant parameters (*event time, application name, respective log action, user name, PID, traffic direction, protocol type, numbers of the remote and local ports, etc.*) on two tabs:

- ***Traffic Logs*** - offers information about activity of all application that have tried to connect to the network.

- ***Trusted Database Logs*** - *Trusted database* is AVG internal database collecting information on certified and trusted applications that can always be allowed to communicate online. The first time a new application tries to connect to the network (*i.e. where there is yet no firewall rule specified for this application*), it is necessary to find out whether the network

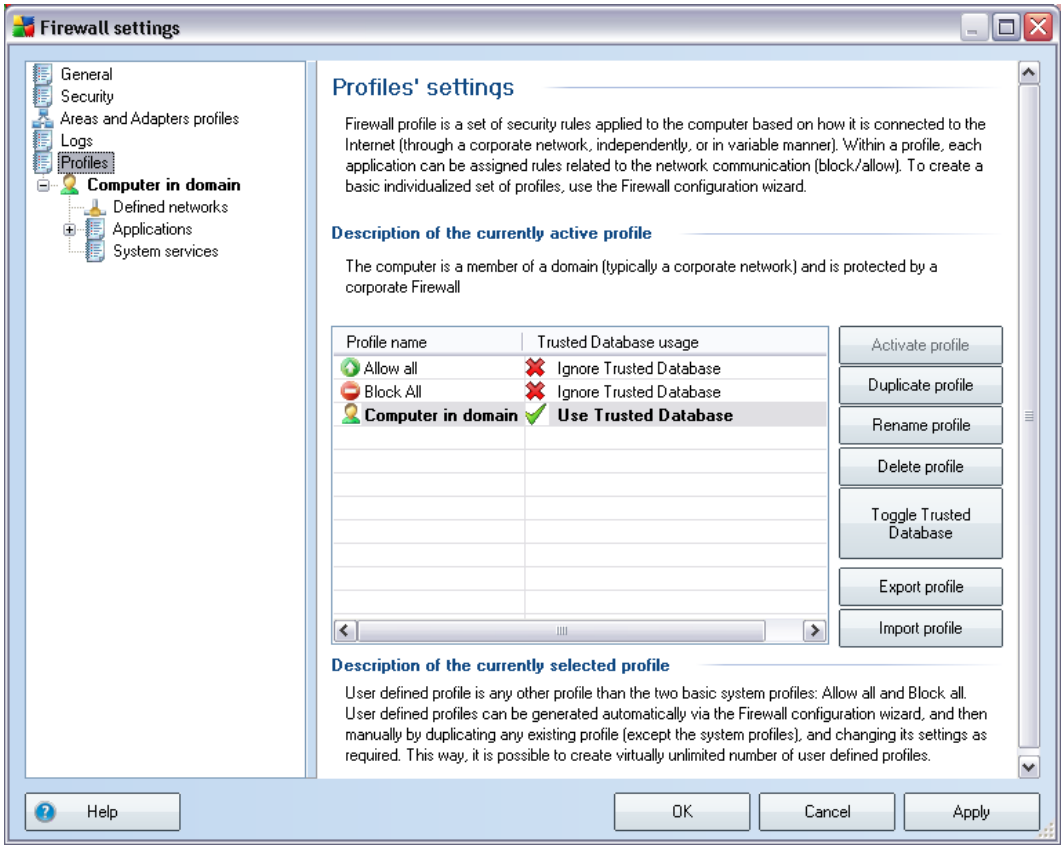
communication should be allowed for the respective application. First, AVG searches the *Trusted database*, and if the application is listed, it will be automatically granted access to the network. Only after that, provided there are no information on the application available in the database, you will be asked in a stand-alone dialog whether you want to allow the application to access network.

Control buttons

- ***Help*** - opens the dialog related help files.
- ***Refresh list*** - all logged parameters can be arranged according to the selected attribute: chronologically (*dates*) or alphabetically (*other columns*) - just click the respective column header. Use the ***Refresh list*** button to update the currently displayed information.
- ***Empty list*** - delete all entries in the chart.

10.5. Profiles

In the ***Profiles' settings*** dialog you can find a list of all profiles available.



All other then system profiles can then be edited right in this dialog using the following control buttons:

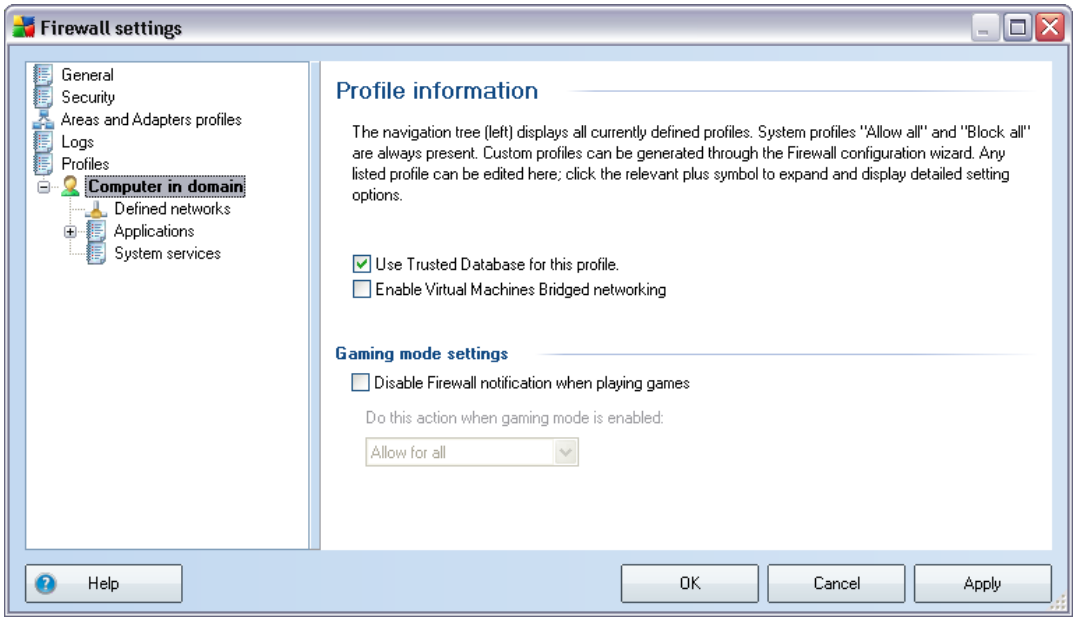
- ***Activate profile*** - this button sets the selected profile as active, which means the selected profile configuration will be used by ***Firewall*** to control the network traffic
- ***Duplicate profile*** - creates an identical copy of the selected profile; later you can edit and rename the copy to create a new profile based on the duplicated original one
- ***Rename profile*** - allows you to define a new new for a selected profile

- ***Delete profile*** - deletes the selected profile from the list
- ***Toggle Trusted Database*** - for the selected profile you can decide to use the *Trusted Database* information (*Trusted Database is AVG internal database collecting data on trusted and certified applications that can always be allowed to communicate online.*)
- ***Export profile*** - records the selected profile's configuration into a file that will be saved for possible further use
- ***Import profile*** - configures the selected profile's settings based on the data exported from the backup configuration file
- ***Help*** - opens the dialog related help file

In the bottom section of the dialog please find the description of a profile that is currently selected in the above list.

Based on the number of defined profiles that are mentioned in the list within the ***Profile*** dialog, the left navigation menu structure will change accordingly. Each defined profile creates a specific branch under the ***Profile*** item. Specific profiles can then be edited in the following dialogs (*that are identical for all profiles*):

10.5.1. Profile Information



The ***Profile information*** dialog is the first dialog of a section where you can edit configuration of each profile in separate dialogs referring to specific parameters of the profile.

- ***Use Trusted Database for this profile*** - (*on by default*) mark the option to activate the *Trusted Database* (*I.e. AVG internal database collecting information on trusted and certified application communicating online. If there is no rule specified for the respective application yet, it is necessary to find out whether the application can be granted access to the network. AVG searched the Trusted Database first, and if the application is listed, it will be considered safe and will be allowed to communicate over network. Otherwise, you will be invited to decide whether the application should be allowed to communicate over network*) for the respective profile

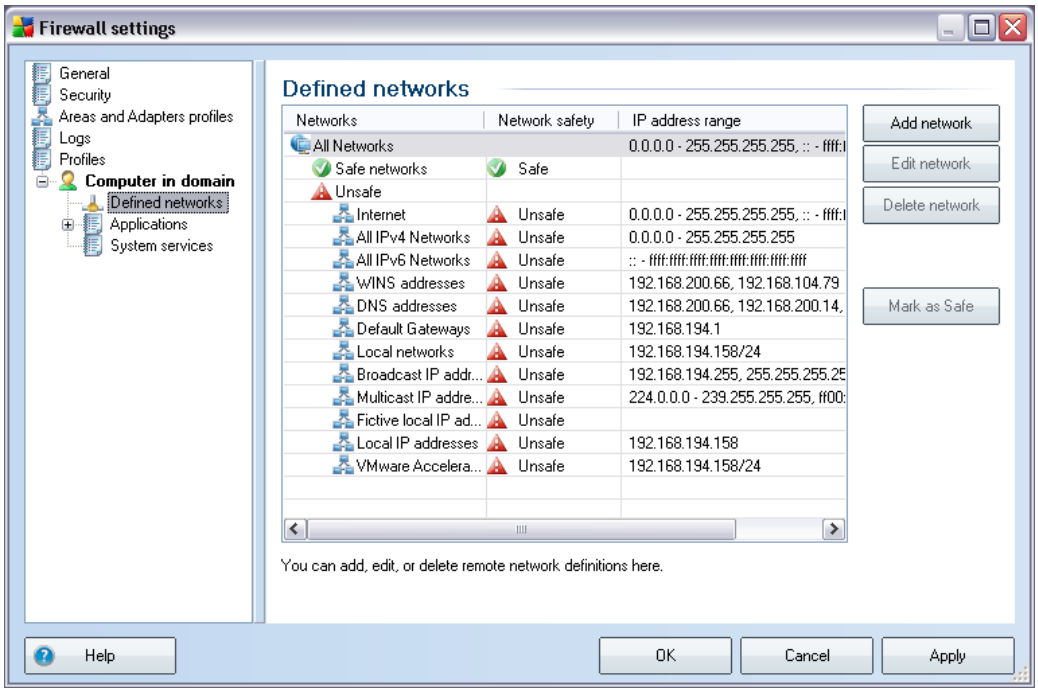
- ***Enable Virtual Machines Bridged networking*** - (*off by default*) tick this item to allow virtual machines in WMware to connect directly to the network

Gaming mode settings

In the ***Gaming mode settings*** section you can decide and confirm by ticking the respective item whether you want to have ***Firewall*** information messages displayed even while a full-screen application is running on your computer (*typically these are games, but applies to any full-screen applications, e.g. PPT presentations*). Since the information messages can be somewhat disruptive.

If you tick the ***Disable Firewall notifications when playing games*** item, in the roll-down menu then select what action is to be taken in case a new application with no rules specified yet tries to communicate over the network (*applications that would normally result in an ask dialog*) all these applications can be either allowed or blocked.

10.5.2. Defined Networks

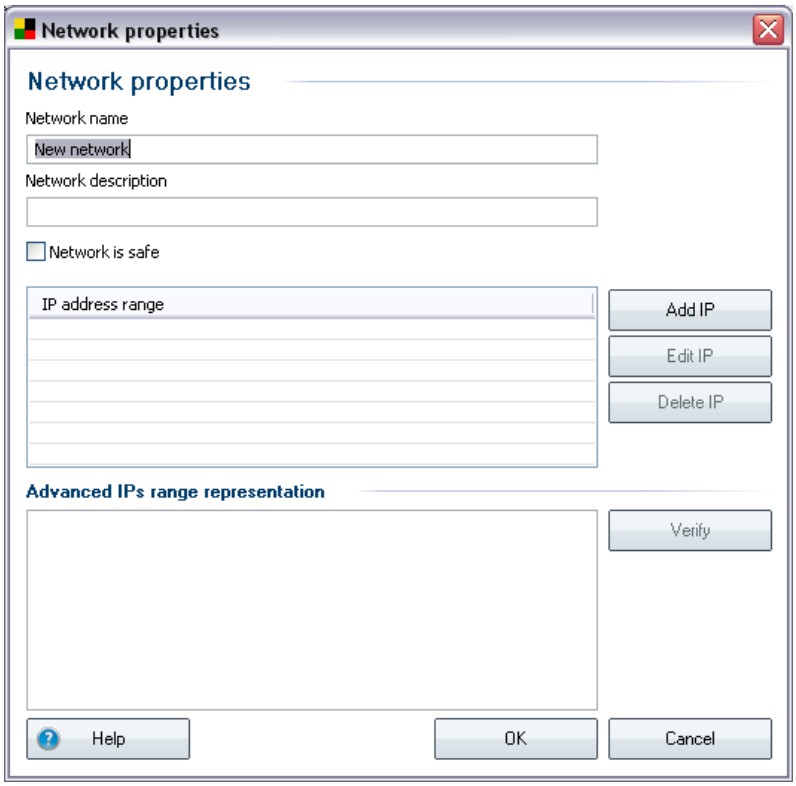


The ***Defined networks*** dialog offers a list of all networks that your computer is connected to. The following information is provided on every detected network:

- ***Networks*** - name list of all networks that the computer is connected to
- ***Network safety*** - by default, all networks are considered unsafe, and only if you are sure the respective network is safe, you can assign it so (*click the list item referring to the respective network and select Safe from the context menu*) - all safe networks will then be included into the group of those that the application can communicate over with the application rule set to ***Allow for safe***
- ***IP address range*** - each network will be detected automatically and specified in the form of IP addresses range

Control buttons

- ***Add network*** - opens the ***Network properties*** dialog window where you can edit parameters of the newly defined network:



Within this dialog, you can specify the ***Network name***, provide the ***Network description*** and possibly assign the network as safe. The new network can be either defined manually in a standalone dialog opened via the ***Add IP*** button (alternatively ***Edit IP*** / ***Delete IP***), within this dialog you can specify the network by providing its IP range or mask.

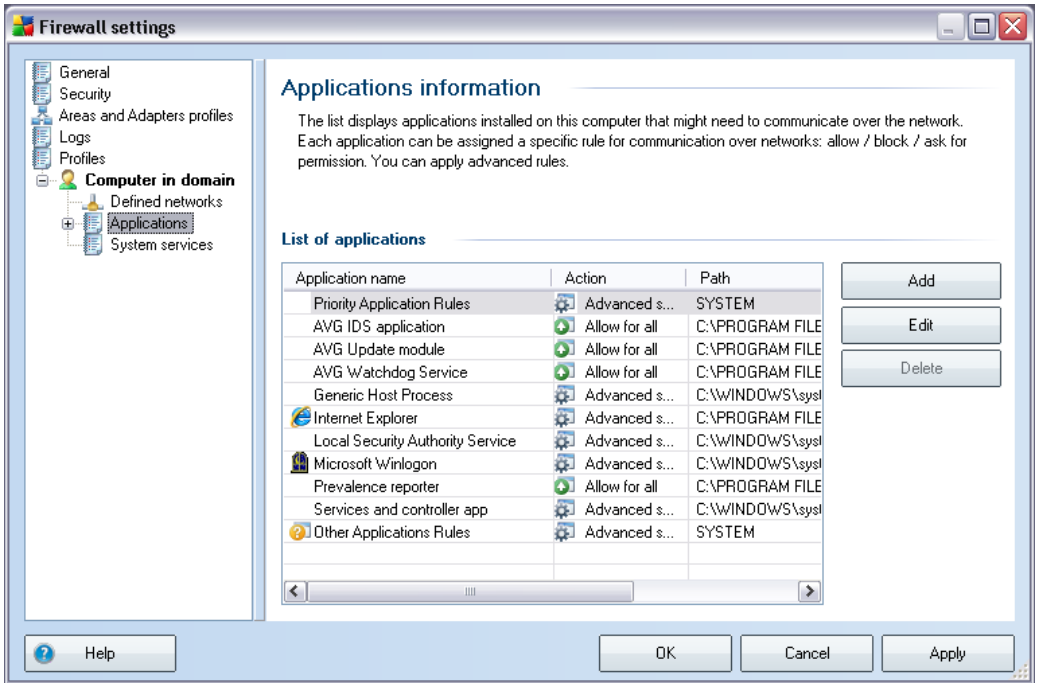
For large number of networks that should be defined as parts of the newly created network you can use the option of ***Advance IP range representation***: enter the list of all networks into the respective text field (*any standard format is supported*) and press the ***Verify*** button to make sure the format can be recognized. Then press ***OK*** to confirm and save the data.

- ***Edit network*** - opens the ***Network properties*** dialog window (*see above*) where you can edit parameters of an already defined network (*the dialog is identical with the dialog for adding new network, see the description in the previous paragraph*)
- ***Delete network*** - removes the note of a selected network from the list of networks

- ***Mark as safe*** - by default, all networks are considered unsafe, and only if you are sure the respective network is safe, you can use this button to assign it so (*and vice versa, once the network is assigned as safe, the button text changes to "Mark as unsafe"*).

- ***Help*** - opens the dialog related help file

10.5.3. Applications



The ***Applications information*** dialog lists all installed applications that might need to communicate over network, and icons for the assigned action:

- Allow communication for all networks

- Allow communication for networks defined as Safe only

- Block communication

- Display ask dialog (*user will be able to decide at the moment whether they want to allow or block the communication*)

- Advanced settings defined

The applications in the list were detected on your computer (*and assigned respective actions*) either during the ***Firewall Configuration Wizard's*** search, or, in case of an unknown or newly installed application, at a later time.

Note: Please note that only application already installed could be detected, so if you install a new application later, you will have to define Firewall rules for it. By default, when the new application tries to connect over the network for the first time, the Firewall will either create a rule for it automatically according to the Trusted Database, or ask you whether you wish to allow or block the communication. In the latter case, you will be able to save your answer as a permanent rule (which will be then listed in this dialog).

Of course, you can also define rules for the new application immediately – in this dialog, press ***Add*** and fill in the application details.

Apart from applications, the list also contains two special items:

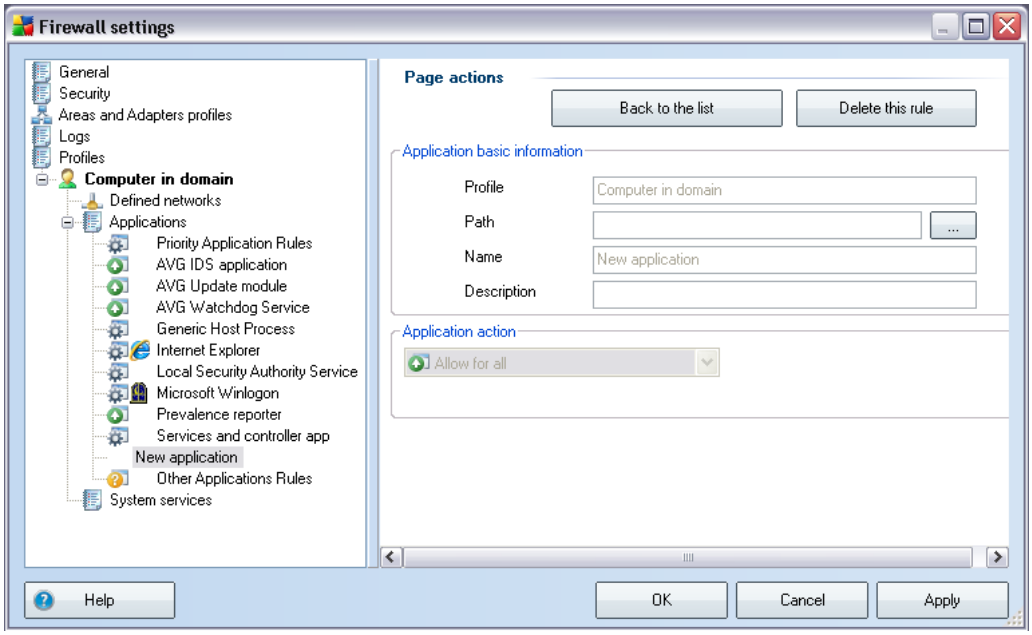
- ***Priority Application Rules*** (*at the top of the list*) are preferential, and are always applied prior to rules of any individual application.
- ***Other Applications Rules*** (*at the bottom of the list*) are used as a "last instance", when no specific application rules apply, e.g. for an unknown and undefined application.

These items have different setting options from common applications, and are only intended for experienced users. We strongly recommend that you do not modify the settings

Control buttons

The list can be edited using the following control buttons:

- ***Add*** - opens an empty ***Page Asctions*** dialog for defining new application rules
- ***Edit*** - opens the same ***Page Asctions*** dialog with data provided for editing of an existing application's rule set
- ***Delete*** - removes the selected application from the list
- ***Help*** - opens the dialog related help file



In this dialog, you can define settings for the respective application in detail.

Page actions

- ***Back to the list*** button will display the overview of all defined applications rules.
- ***Delete this rule*** button will erase currently displayed application rule. Please note that this action cannot be reversed!

Application basic information

In this section, fill in the ***Name*** of the application, and optionally a ***Description*** (*a brief comment for your information*). In the ***Path*** field, enter the full path to the application (*the executable file*) on the disk; alternatively, you can locate the application in the tree structure conveniently after pressing the "***...***" button.

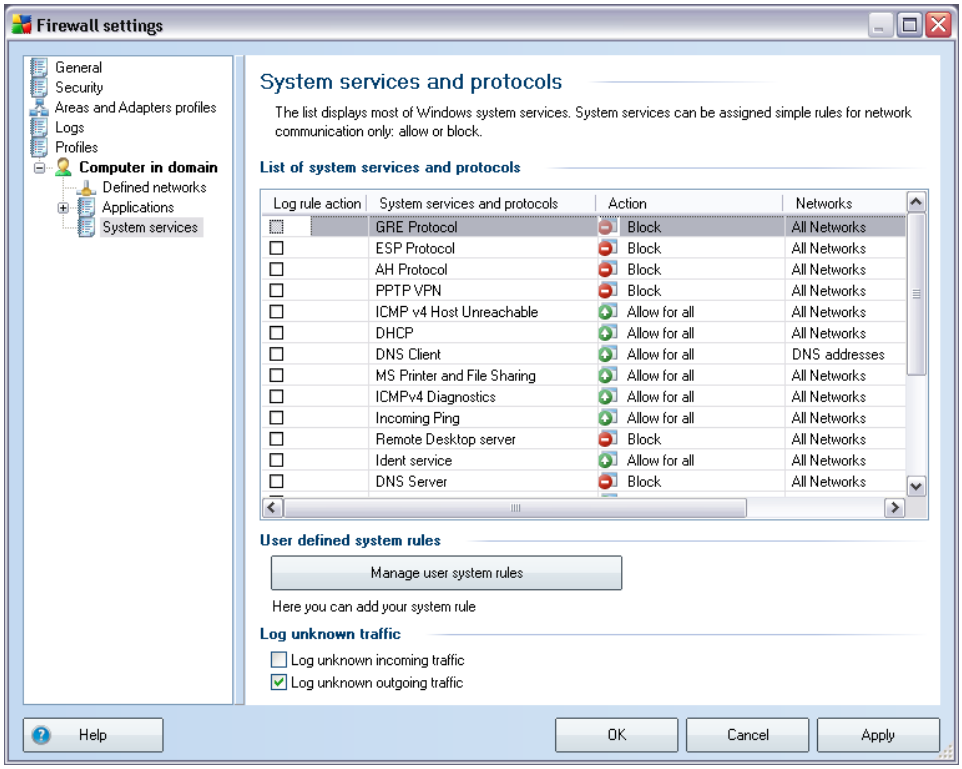
Application action

In the drop-down menu, you can select the Firewall rule for the application, i.e. what the Firewall should do when the application tries to communicate over the network:

- ***Allow for all*** will allow the application to communicate over all defined networks and adapters without limitations.
- ***Allow for safe*** will only allow the application to communicate over networks defined as Safe (trustworthy).
- ***Block*** will forbid the communication automatically; the application will not be allowed to connect to any network.
- ***Ask*** will display a dialog enabling you to decide whether you want to allow or block the communication attempt at that moment.
- ***Advanced settings*** displays further extensive and detailed setting options in the bottom part of the dialog in the ***Application detail rules*** section. The details will be applied according to the list order, so you can ***Move up*** or ***Move down*** the rules in the list as required to set their precedence. After clicking a specific rule in the list, the overview of the rule details will be displayed in the bottom part of the dialog. Any blue underlined value can be changed upon clicking in the respective settings dialog. To delete the highlighted rule, simply press ***Remove***. To define a new rule, use the ***Add*** button to open the ***Change rule detail*** dialog allowing you to specify all necessary details.

10.5.4. System Services

Any editing within the System services and protocols dialog is intended for experienced users ONLY!



The ***System services and protocols*** dialog lists Windows standard system services and protocols that might need to communicate over the network. The chart consists of the following columns:

- ***Log rule action*** - this box enables you to switch on recording each rule application in the Logs.
- ***System service and protocols*** - this column shows a name of the respective system service.
- ***Action*** - this column displays an icon for the assigned action:
  - Allow communication for all networks
  - Allow communication for networks defined as Safe only

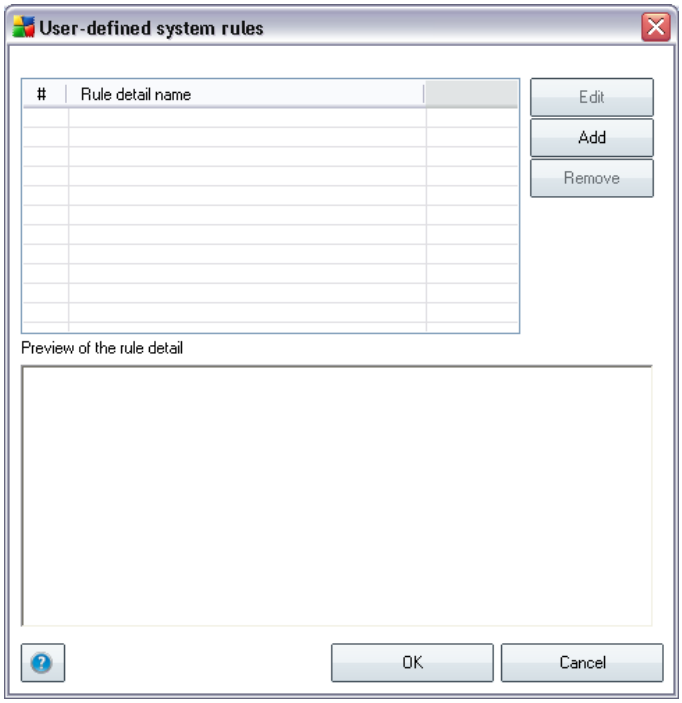
- Block communication

- ***Networks*** - this column states on which specific network the system rule applies.

The list (*including assigned actions*) can be edited using the following buttons:

- To edit settings of any item in the list (*including the assigned actions*), right-click the item and select ***Edit***.

- To open a new dialog for defining your own system service rule (*see picture below*), press the ***Manage user system rules*** button. The top section of the ***User-defined system rules*** dialog displays overview of all details of the currently edited system rule, the bottom section then displays the selected detail. User-defined rule details can be edited, added, or deleted by the respective button; manufacturer-defined rule details can only be edited:



Warning: Please note that detail rule settings are advanced, primarily intended for network administrators who need full control over Firewall configuration. If you are not familiar with types of communication protocols, network port

numbers, IP address definitions etc., please do not modify these settings!

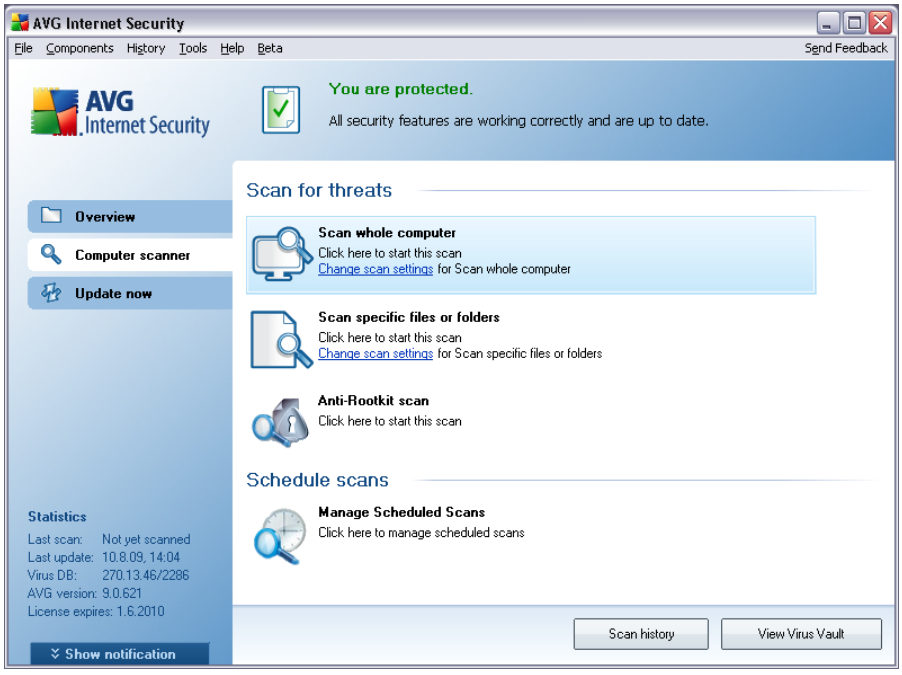
Log unknown traffic

- ***Log unknown incoming traffic*** – check the box to record in the Logs every unknown attempt to connect to your computer from outside.
- ***Log unknown outgoing traffic*** – check the box to record in the Logs every unknown attempt from your computer to connect to an outside location.

11. AVG Scanning

Scanning is a crucial part of **AVG 9 Anti-Virus plus Firewall** functionality. You can run on-demand tests or schedule them to run periodically at convenient times.

11.1. Scanning Interface



The AVG scanning interface is accessible via the ***Computer Scanner*** quick link. Click this link to switch to the ***Scan for threats*** dialog. In this dialog you will find the following:

- overview of predefined scans - three types of scans defined by the software vendor are ready to be used immediately on demand or scheduled:
  - ***Scan whole computer***
  - ***Scan specific files or folders***
  - ***Anti-Rootkit scan***
- scan scheduling section - where you can define new tests and create new schedules as needed.

Control buttons

Control buttons available within the testing interface are the following:

- ***Scan history*** - displays the Scan results overview dialog with the entire history of scanning
- ***View Virus Vault*** - opens a new window with the Virus Vault - a space where detected infections are quarantined

11.2. Predefined Scans

One of the main features of **AVG 9 Anti-Virus plus Firewall** is on-demand scanning. On-demand tests are designed to scan various parts of your computer whenever suspicion of possible virus infection arises. Anyway, it is strongly recommended to carry out such tests regularly even if you think that no virus can be found on your computer.

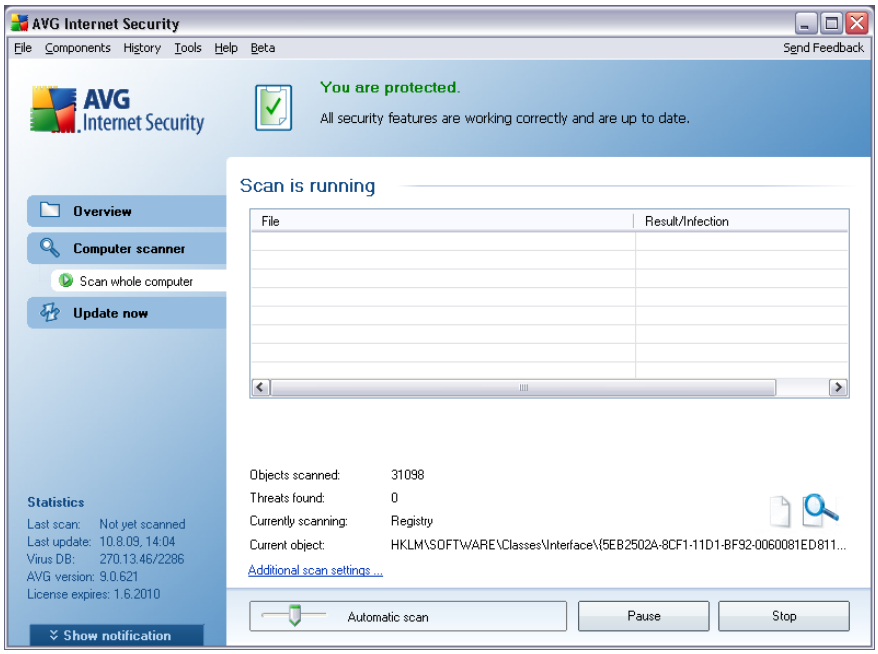
In the **AVG 9 Anti-Virus plus Firewall** you will find two types of scanning predefined by the software vendor:

11.2.1. Scan Whole Computer

Scan whole computer - scans your entire computer for possible infections and/or potentially unwanted programs. This test will scan all hard drives of your computer, will detect and heal any virus found, or remove the detected infection to the ***Virus Vault***. Scanning of the whole of your computer should be scheduled on a workstation at least once a week.

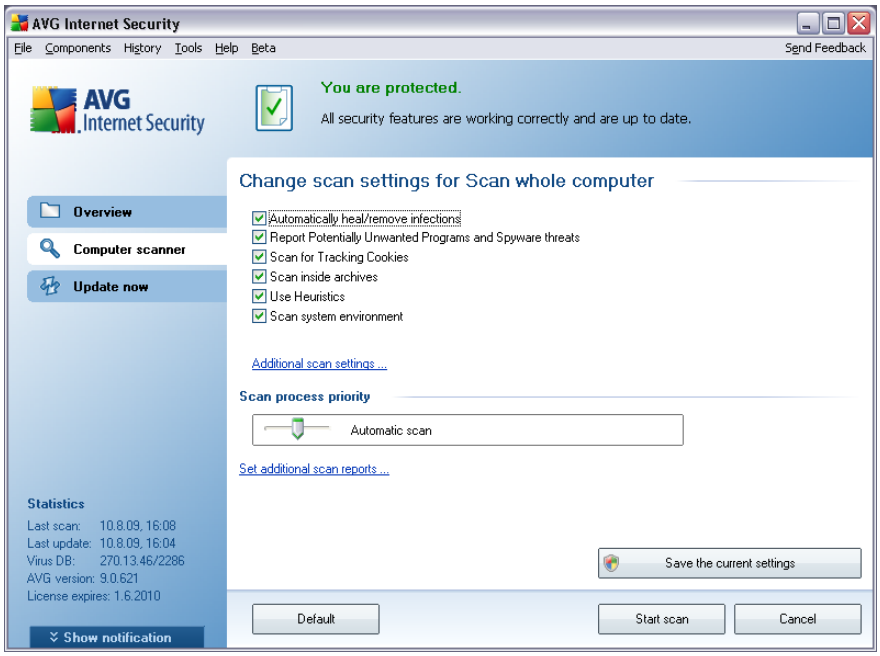
Scan launch

The ***Scan of a whole computer*** can be launched directly from the scanning interface by clicking on the scan's icon. No further specific settings have to be configured for this type of scan, the scanning will start immediately within the ***Scan is running*** dialog (*see screenshot*). The scanning can be temporarily interrupted (***Pause***) or canceled (***Stop***) if needed.



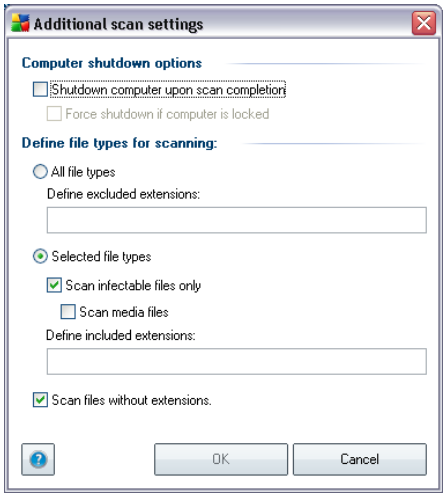
Scan configuration editing

You have the option of editing the predefined default settings of the ***Scan of the whole computer***. Press the ***Change scan settings*** link to get to the ***Change scan settings for Scan whole computer*** dialog. ***It is recommended to keep to the default settings unless you have a valid reason to change them!***



- ***Scanning parameters*** - in the list of scanning parameters you can switch on/ off specific parameters as needed. By default, most of the parameters are switched on and these will be used automatically during scanning.

- ***Additional scan settings*** - the link opens a new ***Additional scan settings*** dialog where you can specify the following parameters:



- ***Computer shutdown options*** - decide whether the computer should be shut down automatically once the running scanning process is over. Having confirmed this option (***Shutdown computer upon scan completion***), a new option activates that allows the computer to shut down even if it is currently locked (***Force shutdown if computer is locked***).

- ***Define file types for scanning*** - further you should decide whether you want to have scanned:

  - ***All file types*** with the possibility of defining exceptions from scanning by providing a list of comma separated file extensions that should not be scanned;

  - ***Selected file types*** - you can specify that you want to scan only files that are possibly infectable (*files that cannot get infected will not be scanned, for instance some plain text files, or some other non-executable files*), including media files (*video, audio files - if you leave this box unchecked, it will reduce the scanning time even more, because these files are often quite large and are not too likely to be infected by a virus*). Again, you can specify by extensions which files are those that should always be scanned.

  - Optionally, you can decide you want to ***Scan files without extension*** - this option is on by default, and it is recommended that you keep it so unless you have a real reason to change it. Files with no extension are rather suspicious and should be scanned at all times.

- ***Scan process priority*** - you can use the slider to change the scanning process priority. By default, the priority is set to medium level (*Automatic scan*) that optimizes the scanning process speed and the use of system resources. Alternatively, you can run the scanning process slower which means the system resources load will be minimized (*useful when you need to work on the computer but you do not care so much how long the scanning takes*), or faster with increased system resources requirements (*e.g. when the computer is temporarily unattended*).

- ***Set additional scan reports*** - the link opens a new ***Scan reports*** dialog where you can select what types of possible findings should be reported:

Warning: *These scan settings are identical to the parameters of a newly defined scan - as described in the chapter* ***AVG Scanning / Scan scheduling/ How to Scan****. Should you decide to change the default configuration of the* ***Scan the whole computer*** *you can then save your new setting as the default configuration to be used for all further scans of the whole computer.*

11.2.2. Scan Specific Files or Folders

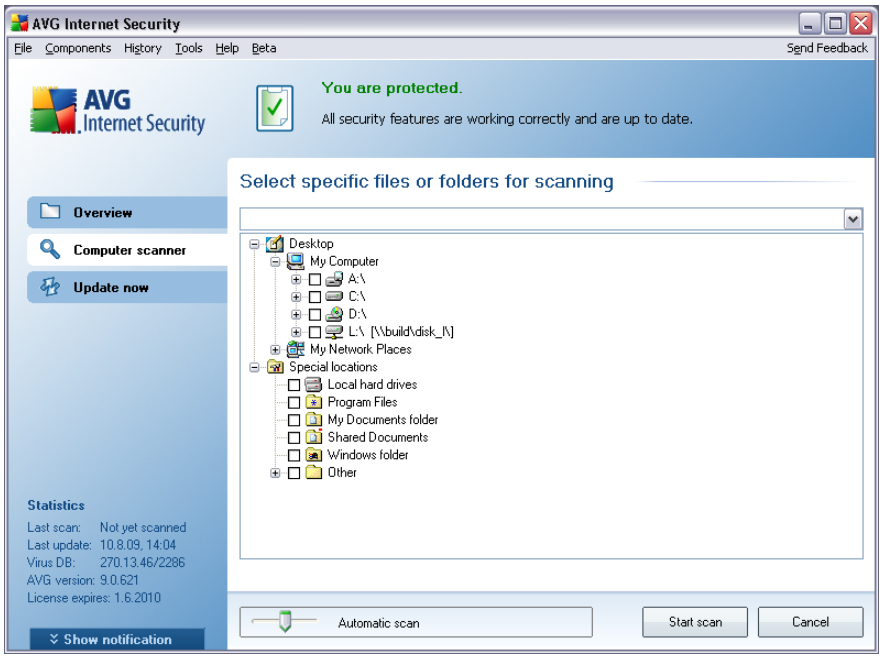
Scan specific files or folders - scans only those areas of your computer that you have selected to be scanned (*selected folders, hard disks, floppy discs, CDs, etc.*). The scanning progress in case of virus detection and its treatment is the same as with the scan of the whole computer: any virus found is healed or removed to the ***Virus Vault***. Specific files or folders scanning can be used to set up your own tests and their scheduling based on your needs.

Scan launch

The ***Scan of specific files or folders*** can be launched directly from the scanning interface by clicking on the scan's icon. A new dialog called ***Select specific files or folders for scanning*** opens. In the tree structure of your computer select those folders you want to have scanned. The path to each selected folder will generate automatically and appear in the text box in the upper part of this dialog.

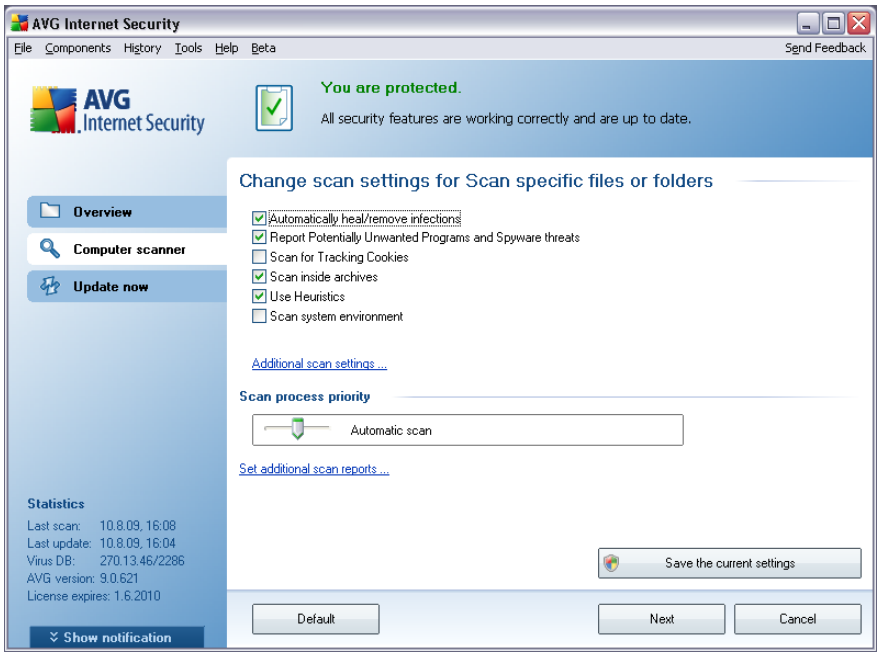
There is also a possibility of having a specific folder scanned while all its subfolders are excluded from this scanning; to do that write a minus sign "**-**" in front of the automatically generated path (*see screenshot*). To exclude the entire folder from scanning use the "!" parameter.

Finally, to launch the scanning, press the ***Start scan*** button; the scanning process itself is basically identical to the scan of a whole computer.



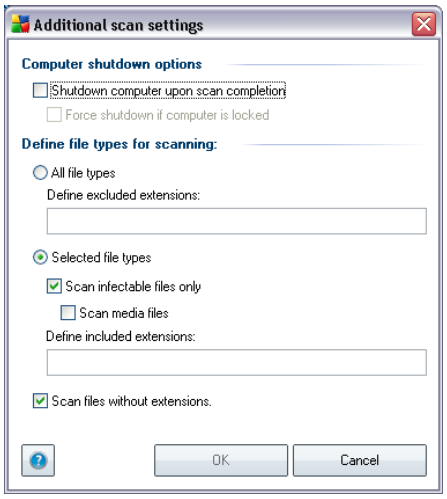
Scan configuration editing

You have the option of editing the predefined default settings of the ***Scan of specific files or folders***. Press the ***Change scan settings*** link to get to the ***Change scan settings for Scan of specific files or folders*** dialog. ***It is recommended to keep to the default settings unless you have a valid reason to change them!***



- ***Scanning parameters*** - in the list of scanning parameters you can switch on/off specific parameters as needed (*for detailed description of this settings please consult chapter AVG Advanced Settings / Scans / Scan Specific Files or Folders*).

- ***Additional scan settings*** - the link opens a new Additional scan settings dialog where you can specify the following parameters:



- ***Computer shutdown options*** - decide whether the computer should be shut down automatically once the running scanning process is over. Having confirmed this option (***Shutdown computer upon scan completion***), a new option activates that allows the computer to shut down even if it is currently locked (***Force shutdown if computer is locked***).

- ***Define file types for scanning*** - further you should decide whether you want to have scanned:

  - ***All file types*** with the possibility of defining exceptions from scanning by providing a list of comma separated file extensions that should not be scanned;

  - ***Selected file types*** - you can specify that you want to scan only files that are possibly infectable (*files that cannot get infected will not be scanned, for instance some plain text files, or some other non-executable files*), including media files (*video, audio files - if you leave this box unchecked, it will reduce the scanning time even more, because these files are often quite large and are not too likely to be infected by a virus*). Again, you can specify by extensions which files are those that should always be scanned.

  - Optionally, you can decide you want to ***Scan files without extension*** - this option is on by default, and it is recommended that you keep it so unless you have a real reason to change it. Files with no extension are rather suspicious and should be scanned at all times.

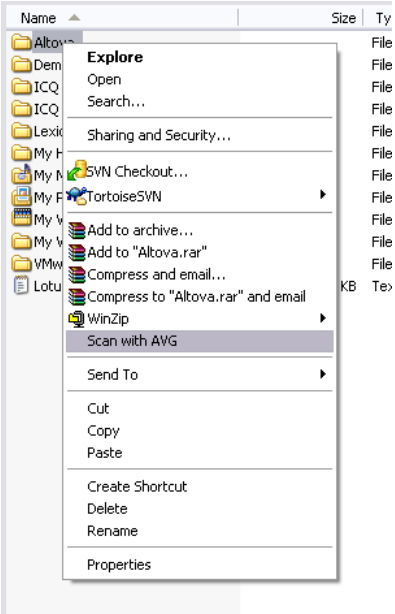
- ***Scan process priority*** - you can use the slider to change the scanning process priority. By default, the priority is set to medium level (*Automatic scan*) that optimizes the scanning process speed and the use of system resources. Alternatively, you can run the scanning process slower which means the system resources load will be minimized (*useful when you need to work on the computer but you do not care so much how long the scanning takes*), or faster with increased system resources requirements (*e.g. when the computer is temporarily unattended*).

- ***Set additional scan reports*** - the link opens a new ***Scan Reports*** dialog where you can select what types of possible findings should be reported:

Warning: *These scan settings are identical to the parameters of a newly defined scan - as described in the chapter* ***AVG Scanning / Scan scheduling/ How to Scan****. Should you decide to change the default configuration of the* ***Scan specific files or folders*** *you can then save your new setting as the default configuration to be used for all further scans of specific files or folders. Also, this configuration will be used as a template for all of your newly scheduled scans (all customized scans are based on the current configuration of the Scan of selected files or folders).*

11.3. Scanning in Windows Explorer

Besides the pre-defined scans launched for the entire computer or its selected areas, **AVG 9 Anti-Virus plus Firewall** also offers the option of quick scanning of a specific object directly in the Windows Explorer environment. If you want to open an unknown file and you cannot be sure of its content, you may want to have it checked on demand. Follow these steps:



- Within Windows Explorer highlight the file (or folder) you want to check
- Right-click your mouse over the object to open the context menu
- Select the ***Scan with AVG*** option to have the file scanned with AVG

11.4. Command Line Scanning

Within **AVG 9 Anti-Virus plus Firewall** there is the option of running the scan from the command line. You can use this option for instance on servers, or when creating a batch script to be launched automatically after the computer boot. From the command line, you can launch the scanning with most parameters as offered in AVG graphical user interface.

To launch AVG scan from the command line, run the following command within the folder where AVG is installed:

- ***avgscanx*** for 32 bits OS
- ***avgscana*** for 64 bits OS

Syntax of the command

The syntax of the command follows:

- ***avgscanx /parameter*** ... e.g. ***avgscanx /comp*** for scanning the whole computer
- ***avgscanx /parameter /parameter*** .. with multiple parameters these should be lined in a row and separated by a space and a slash character
- if a parameters requires specific value to be provided (e.g. the ***/scan*** parameter that requires information on what are the selected areas of your computer that are to be scanned, and you have to provide an exact path to the selected section), the values are divided by semicolons, for instance: ***avgscanx /scan=C:\;D:***

Scanning parameters

To display a complete overview of available parameters, type the respective command together with the parameter /? or /HELP (e.g. ***avgscanx /?***). The only obligatory parameter is /SCAN to specify what areas of the computer should be scanned. For a more detailed explanation of the options, see the command line parameters overview.

To run the scan press ***Enter***. During scanning you can stop the process by ***Ctrl+C*** or ***Ctrl+Pause***.

CMD scanning launched from graphic interface

When you run your computer in Windows Safe Mode, there is also a possibility to launch the command line scan from the graphic user interface. The scan itself will be launched from the command line, the ***Command Line Composer*** dialog only allows you to specify most scanning parameters in the comfortable graphic interface.

Since this dialog is only accessible within the Windows Safe Mode, for detailed description of this dialog please consult the help file opened directly from the dialog.

11.4.1. CMD Scan Parameters

Following please find a list of all parameters available for the command line scanning:

- ***/SCAN*** Scan specific files or folders /SCAN=path;path (e.g. /SCAN=C:\;D:\)
- ***/COMP*** Scan whole computer

- ***/HEUR*** Use heuristic analyse
- ***/EXCLUDE*** Exclude path or files from scan
- ***/@*** Command file /file name/
- ***/EXT*** Scan these extensions /for example EXT=EXE,DLL/
- ***/NOEXT*** Do not scan these extensions /for example NOEXT=JPG/
- ***/ARC*** Scan archives
- ***/CLEAN*** Clean automatically
- ***/TRASH*** Move infected files to the Virus Vault
- ***/QT*** Quick test
- ***/MACROW*** Report macros
- ***/PWDW*** Report password-protected files
- ***/IGNLOCKED*** Ignore locked files
- ***/REPORT*** Report to file /file name/
- ***/REPAPPEND*** Append to the report file
- ***/REPOK*** Report uninfected files as OK
- ***/NOBREAK*** Do not allow CTRL-BREAK to abort
- ***/BOOT*** Enable MBR/BOOT check
- ***/PROC*** Scan active processes
- ***/PUP*** Report "Potentially unwanted programs"
- ***/REG*** Scan registry
- ***/COO*** Scan cookies
- ***/?*** Display help on this topic
- ***/HELP*** Display help on this topic

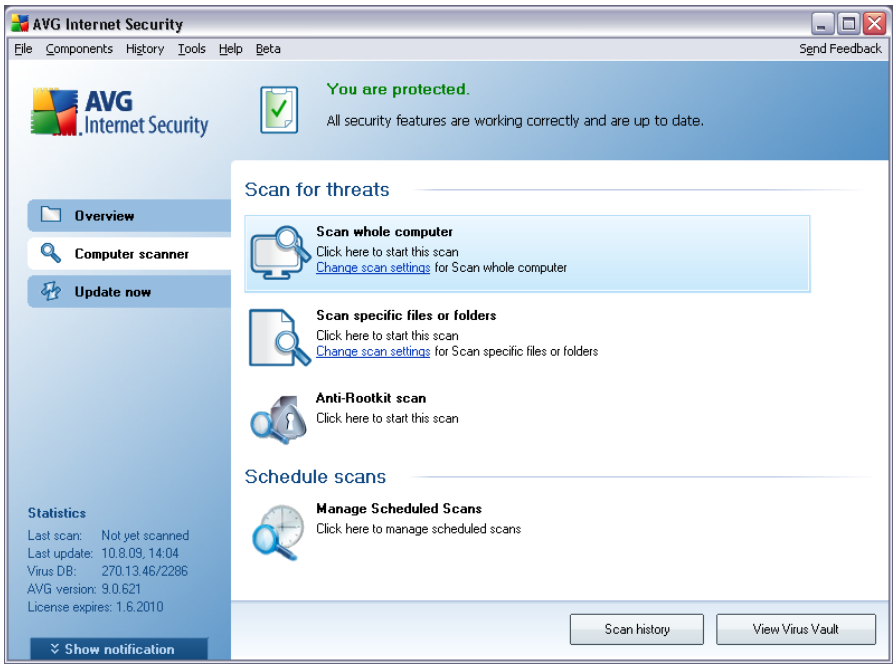
- ***/PRIORITY*** Set scan priority /Low, Auto, High/ (see Advanced settings / Scans)
- ***/SHUTDOWN*** Shutdown computer upon scan completion
- ***/FORCESHUTDOWN*** Force computer shutdown upon scan completion
- ***/ADS*** Scan Alternate Data Streams (NTFS only)

11.5. Scan Scheduling

With **AVG 9 Anti-Virus plus Firewall** you can run scanning on demand (for instance when you suspect an infection has been dragged to your computer) or based on a scheduled plan. It is highly recommended to run the scans based on a schedule: this way you can make sure your computer is protected from any possibility of getting infected, and you will not have to worry about if and when to launch the scan.

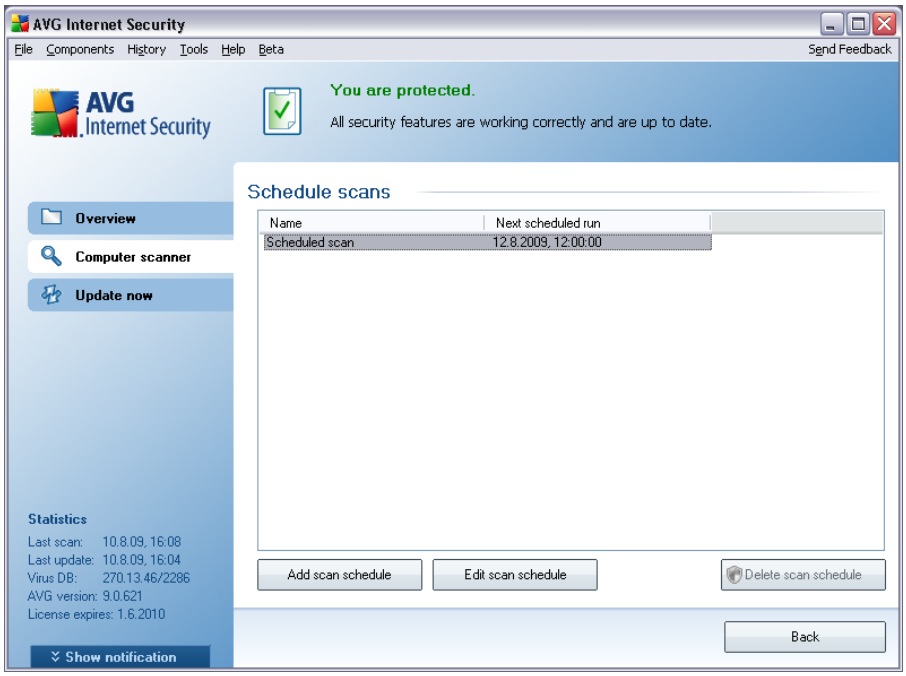
You should launch the ***Scan whole computer*** regularly, at least once a week. However, if possible, launch the scan of your entire computer daily - as set up in the scan schedule default configuration. If the computer is "always on" then you can schedule scans out of working hours. If the computer is sometimes switched off, then schedule scans to occur on a computer start-up when the task has been missed.

To create new scan schedules, see the AVG scanning interface and find the bottom section called ***Schedule scans***:



Schedule scans

Click the graphical icon within the ***Schedule scans*** section to open a new ***Schedule scans*** dialog where you find a list of all currently scheduled scans:

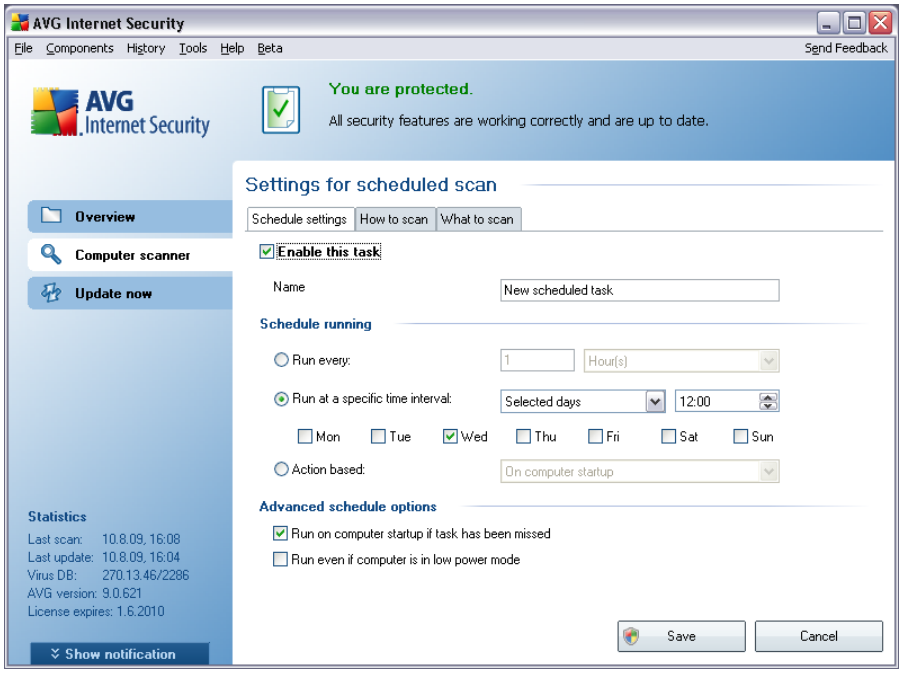


You can edit / add scans using the following control buttons:

- ***Add scan schedule*** - the button opens the ***Settings for scheduled scan*** dialog, ***Schedule settings*** tab. In this dialog you can specify the parameters of the newly defined test.
- ***Edit scan schedule*** - this button can only be used if you have already previously selected an existing test from the list of scheduled tests. In that case the button appears as active and you can click it to switch to the ***Settings for scheduled scan*** dialog, ***Schedule settings*** tab. Parameters of the selected test are already specified in here and can be edited.
- ***Delete scan schedule*** - this button is also active if you have already previously selected an existing test from the list of scheduled tests. This test can then be deleted from the list by pressing the control button. However, you can only remove your own tests; the ***Whole computer scan schedule*** pre-defined within the default settings can never be deleted.
- ***Back*** - return to AVG scanning interface

11.5.1. Schedule Settings

If you wish to schedule a new test and its regular launch, enter the ***Settings for scheduled test*** dialog (*click the* ***Add scan schedule*** *button within the* ***Schedule scans*** *dialog*). The dialog is divided into three tabs: ***Schedule settings*** - *see picture below* (*the default tab that you will be automatically redirected to*), ***How to scan*** and ***What to scan***.



On the ***Schedule settings*** tab you can first check/uncheck the ***Enable this task*** item to simply deactivate the scheduled test temporarily, and switch it on again as the need arises.

Next, give a name to the scan you are about to create and schedule. Type the name into the text field by the ***Name*** item. Try to use brief, descriptive and apt names for scans to make it easier to later recognize the scan from others.

Example: *It is not appropriate to call the scan by the name of "New scan" or "My scan" since these names do not refer to what the scan actually checks. On the other hand, an example of a good descriptive name would be "System areas scan" etc. Also it is not necessary to specify in the scan's name whether it is the scan of the whole of the computer or just a scan of selected files or folders - your own scans will always be a specific version of the scan of selected files or folders.*

In this dialog you can further define the following parameters of the scan:

- ***Schedule running*** - specify the time intervals for the newly scheduled scan launch. The timing can either be defined by the repeated scan launch after a certain period of time (***Run every ...***) or by defining an exact date and time (***Run at specific time ...***), or possibly by defining an event that the scan launch should be associated with (***Action based on computer startup***).

- ***Advanced schedule options*** - this section allows you to define under which conditions the scan should/should not be launched if the computer is in low power mode or switched off completely.

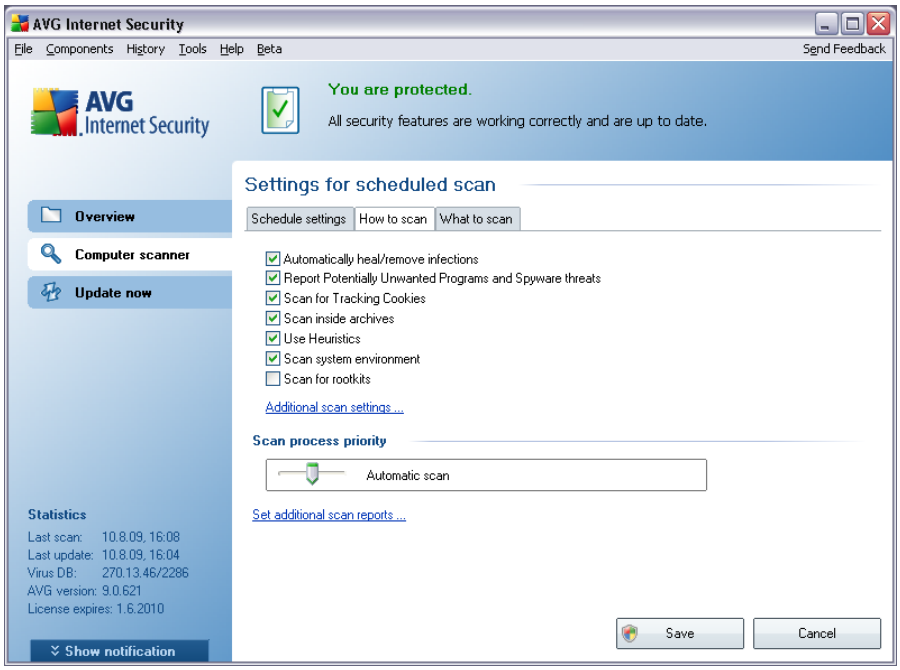
Control buttons of the Settings for scheduled scan dialog

There are two control buttons available on all three tabs of the ***Settings for scheduled scan*** dialog (***Schedule settings***, ***How to scan*** and ***What to scan***) and these have the same functionality no matter on which tab you currently are:

- ***Save*** - saves all changes you have performed on this tab or on any other tab of this dialog and switches back to the AVG scanning interface default dialog. Therefore if you wish to configure the test parameters on all tabs, press the button to save them only after you have specified all your requirements.

- ***Cancel*** - cancels any changes you have performed on this tab or on any other tab of this dialog and switches back to the AVG scanning interface default dialog.

11.5.2. How to Scan



On the ***How to scan*** tab you will find a list of scanning parameters that can be optionally switched on/off. By default, most parameters are switched on and the functionality will be applied during scanning. Unless you have a valid reason to change these settings we recommend to keep to the pre-defined configuration:

- ***Automatically heal/remove infection*** - (*switched on, by default*): if a virus is identified during scanning it can be healed automatically if a cure is available . In case the infected file cannot be healed automatically, or if you decide to switch off this option, you will be notified upon a virus detection and will have to decide what to do with the detected infection. The recommended action is to remove the infected file to the ***Virus Vault***.

- ***Report Potentially Unwanted Programs and Spyware threats*** - (*switched on, by default*): this parameter controls the ***Anti-Virus*** and ***Anti-Spyware*** components functionality that allows detection of potentially unwanted programs (*executable files that can run as spyware or adware*) and these can then be blocked, or removed;

- ***Scan for Tracking Cookies*** - (*switched on, by default*): this parameter of the ***Anti-Spyware*** component defines that cookies should be detected during scanning (*HTTP cookies are used for authenticating, tracking, and maintaining*

specific information about users, such as site preferences or the contents of their electronic shopping carts);

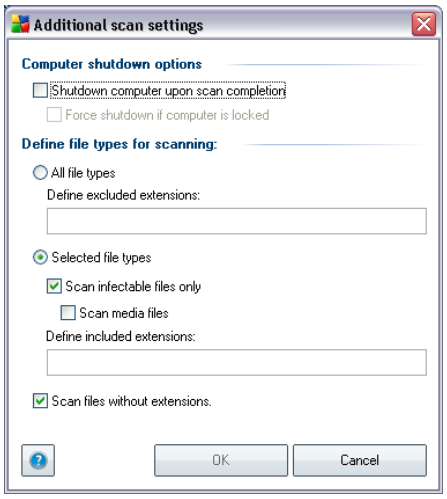
- ***Scan inside archives*** - (*switched on, by default*): this parameters defines that the scanning should check all files even if these are packed inside some type of archive, e.g. ZIP, RAR, ...

- ***Use Heuristics*** - (*switched on, by default*): heuristic analysis (*dynamic emulation of the scanned object's instructions in a virtual computer environment*) will be one of the methods used for virus detection during scanning;

- ***Scan system environment*** - (*switched on, by default*): scanning will also check the system areas of your computer;

Then, you can change the scan configuration as follows:

- ***Additional scan settings*** - the link opens a new ***Additional scan settings*** dialog where you can specify the following parameters:



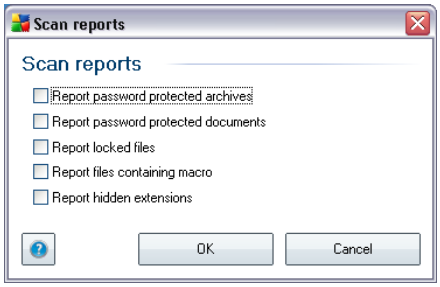
  - ***Computer shutdown options*** - decide whether the computer should be shut down automatically once the running scanning process is over. Having confirmed this option (***Shutdown computer upon scan completion***), a new option activates that allows the computer to shut down even if it is currently locked (***Force shutdown if computer is locked***).

  - ***Define file types for scanning*** - further you should decide whether you

want to have scanned:

- ***All file types*** with the possibility of defining exceptions from scanning by providing a list of comma separated file extensions that should not be scanned;
- ***Selected file types*** - you can specify that you want to scan only files that are possibly infectable (*files that cannot get infected will not be scanned, for instance some plain text files, or some other non-executable files*), including media files (*video, audio files - if you leave this box unchecked, it will reduce the scanning time even more, because these files are often quite large and are not too likely to be infected by a virus*). Again, you can specify by extensions which files are those that should always be scanned.
- Optionally, you can decide you want to ***Scan files without extension*** - this option is on by default, and it is recommended that you keep it so unless you have a real reason to change it. Files with no extension are rather suspicious and should be scanned at all times.

- ***Scan process priority*** - you can use the slider to change the scanning process priority. By default, the priority is set to medium level (*Automatic scan*) that optimizes the scanning process speed and the use of system resources. Alternatively, you can run the scanning process slower which means the system resources load will be minimized (*useful when you need to work on the computer but you do not care so much how long the scanning takes*), or faster with increased system resources requirements (*e.g. when the computer is temporarily unattended*).
- ***Set additional scan reports*** - the link opens a new ***Scan reports*** dialog where you can select what types of possible findings should be reported:



Note: *By default, the scanning configuration is set up for optimum performance. Unless you have a valid reason to change the scanning settings it is highly recommended to stick to the predefined configuration. Any configuration changes*

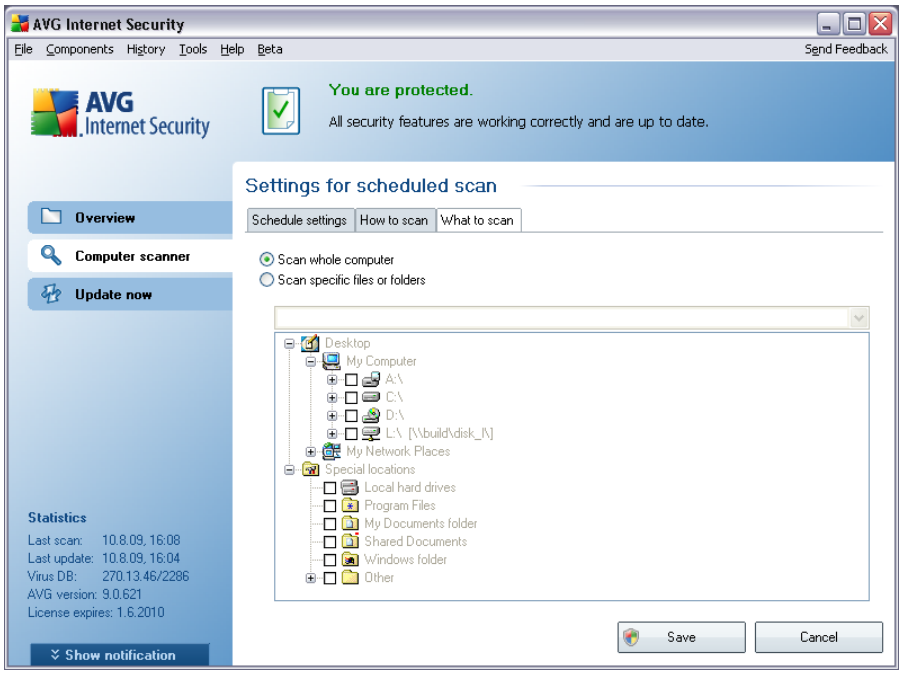
*should be performed by experienced users only. For further scanning configuration options see the **Advanced settings** dialog accessible via the **File / Advanced setting** system menu item.*

Control buttons

There are two control buttons available on all three tabs of the ***Settings for scheduled scan*** dialog (***Schedule settings***, ***How to scan*** and ***What to scan***) and these have the same functionality no matter on which tab you currently are:

- ***Save*** - saves all changes you have performed on this tab or on any other tab of this dialog and switches back to the AVG scanning interface default dialog. Therefore if you wish to configure the test parameters on all tabs, press the button to save them only after you have specified all your requirements.
- ***Cancel*** - cancels any changes you have performed on this tab or on any other tab of this dialog and switches back to the AVG scanning interface default dialog.

11.5.3. What to Scan



On the ***What to scan*** tab you can define whether you want to schedule scanning of

the whole computer or scanning of specific files or folders.

In case you select scanning of specific files or folders, in the bottom part of this dialog the displayed tree structure activates and you can specify folders to be scanned (*expand items by clicking the plus node until you find the folder you wish to scan*). You can select multiple folders by checking the respective boxes. The selected folders will appear in the text field on the top of the dialog, and the drop-down menu will keep your selected scans history for later use. Alternatively, you can enter full path to the desired folder manually (*if you enter multiple paths, it is necessary to separate with semi-colons without extra space*).

Within the tree structure you can also see a branch called ***Special locations***. Following find a list of locations that will be scanned once the respective check box is marked:

- ***Local hard drives*** - all hard drives of your computer
- ***Program files*** - C:\Program Files\
- ***My Documents folder*** - C:\Documents and Settings\User\My Documents\
- ***Shared Documents*** - C:\Documents and Settings\All Users\Documents\
- ***Windows folder*** - C:\Windows\
- ***Other***
    - *System drive* - the hard drive on which the operating system is installed (usually C:)
    - *System folder* - Windows/System32
    - *Temporary Files folder* - Documents and Settings/User/Local Settings/Temp
    - *Temporary Internet Files* - Documents and Settings/User/Local Settings/Temporary Internet Files

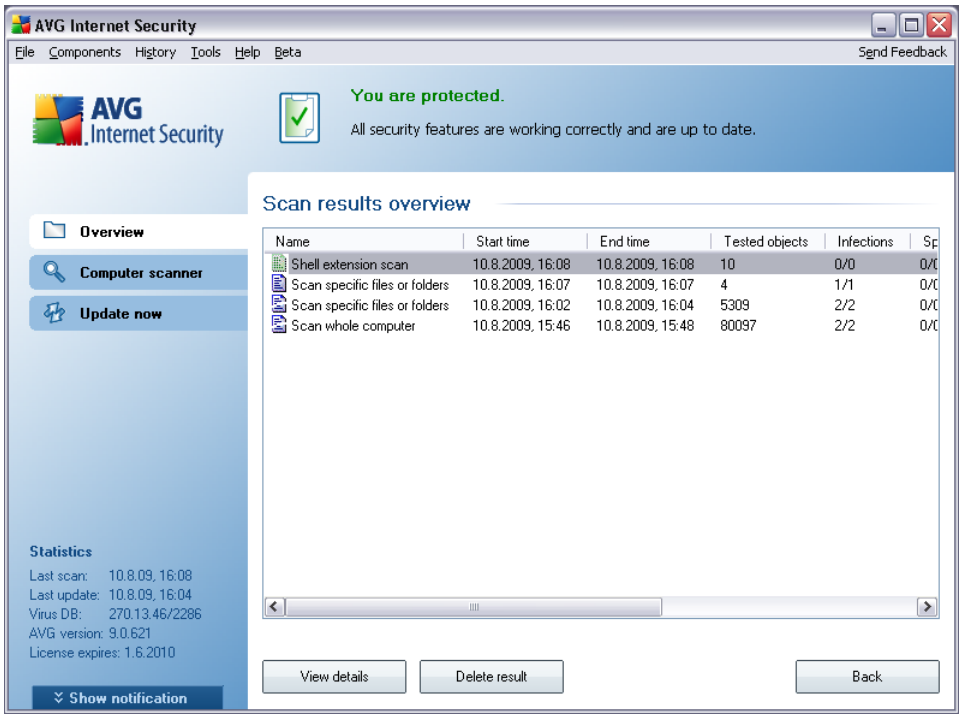
Control buttons of the Settings for scheduled scan dialog

There are two control buttons available on all three tabs of the ***Settings for scheduled scan*** dialog (***Schedule settings***, ***How to scan*** and ***What to scan***) and these have the same functionality no matter on which tab you currently are:

- ***Save*** - saves all changes you have performed on this tab or on any other tab of this dialog and switches back to the AVG scanning interface default dialog. Therefore if you wish to configure the test parameters on all tabs, press the button to save them only after you have specified all your requirements.

- ***Cancel*** - cancels any changes you have performed on this tab or on any other tab of this dialog and switches back to the AVG scanning interface default dialog.

11.6. Scan Results Overview



The ***Scan results overview*** dialog is accessible from the AVG scanning interface via the ***Scan history*** button. The dialog provides a list of of all previously launched scans and information of their results:

- ***Name*** - scan designation; it can either be the name of one of the predefined scans, or a name you have given to your own scheduled scan. Every name includes an icon indicating the scan result:

  - green icon informs there was no infection detected during the scan

 - blue icon announces there was an infection detected during the scan but the infected object was removed automatically

 - red icon warns there was an infection detected during the scan and it could not be removed!

Each icon can either be solid or cut in half - the solid icons stands for a scan that was completed and finished properly; the cut-in-half icon means the scan was canceled or interrupted.

Note: *For detailed information on each scan please see the* ***Scan Results*** *dialog accessible via the* ***View details*** *button (in the bottom part of this dialog).*

- ***Start time*** - date and time when the scan was launched
- ***End time*** - date and time when the scan ended
- ***Tested objects*** - number of objects that were checked during scanning
- ***Infections*** - number of virus infections detected / removed
- ***Spyware*** - number of spyware detected / removed
- ***Scan log information*** - information relating to the scanning course and result (typically on its finalization or interruption)

Control buttons

The control buttons for the ***Scan results overview*** dialog are:

- ***View details*** - press it to switch to the ***Scan results*** dialog to view detailed data on the selected scan
- ***Delete result*** - press it to remove the selected item from the scan results overview
- ***Back*** - switches back to the default dialog of the AVG scanning interface

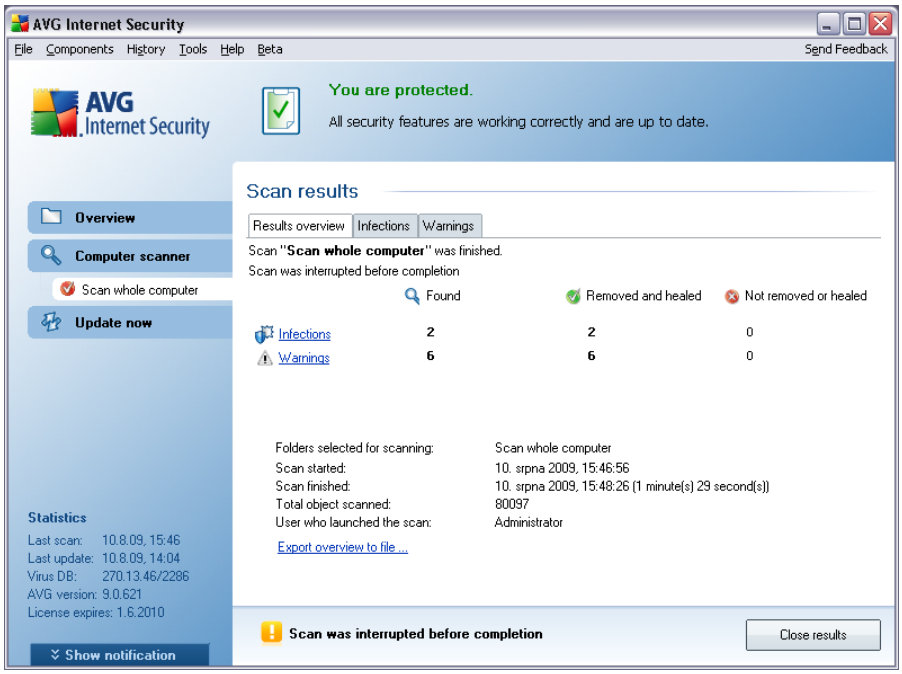
11.7. Scan Results Details

If in the ***Scan Results Overview*** dialog a specific scan is selected, you can then click the ***View details*** button to switch to the ***Scan Results*** dialog providing detailed data on the course and result of the selected scan.

The dialog is further divided into several tabs:

- ***Results Overview*** - this tab is displayed at all times and provides statistical data describing the scan progress
- ***Infections*** - this tab is displayed only if a virus infection was detected during scanning
- ***Spyware*** - this tab is displayed only if spyware was detected during scanning
- ***Warnings*** - this tab is displayed for instance if cookies were detected during scanning
- ***Information*** **-** this tab is displayed only if some potential threats were detected but these cannot be classified as any of the above categories; then the tab provides a warning message on the finding. Also, you will find here information on objects that could not be scanned (e.g. password protected archives).

11.7.1. Results Overview Tab



On the ***Scan results*** tab you can find detailed statistics with information on:

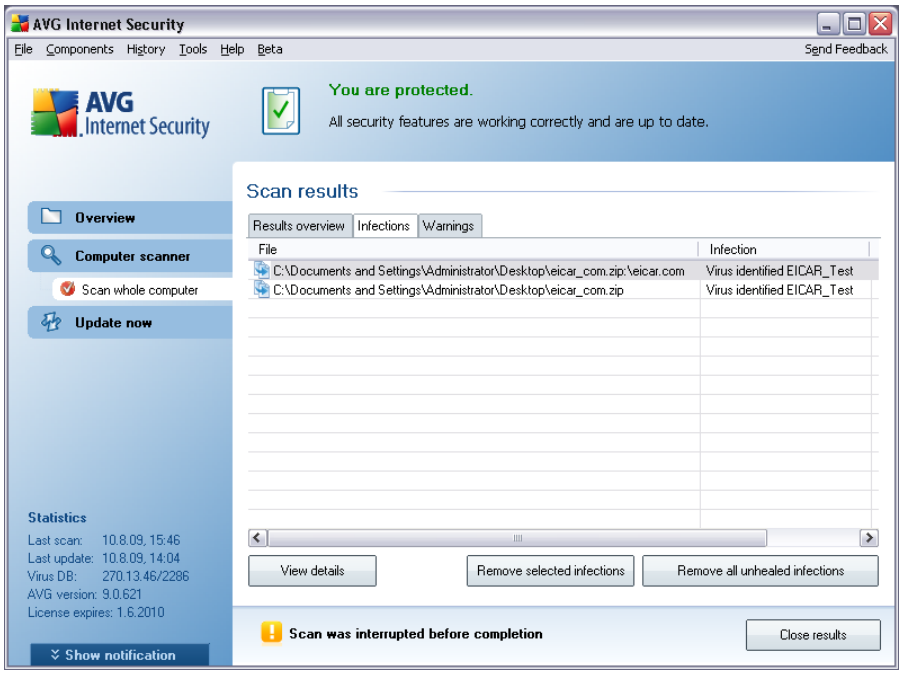
- detected virus infections / spyware
- removed virus infections / spyware
- the number of virus infections / spyware that cannot be removed or healed

In addition you will find information on the date and exact time of the scan launch, on the total number of scanned objects, on the scanning duration and the number of errors that have occurred during scanning.

Control buttons

There is only one control button available in this dialog. The ***Close results*** button returns to the ***Scan results overview*** dialog.

11.7.2. Infections Tab



The ***Infections*** tab is only displayed in the ***Scan results*** dialog if a virus infection was detected during scanning. The tab is divided into three sections providing the following information:

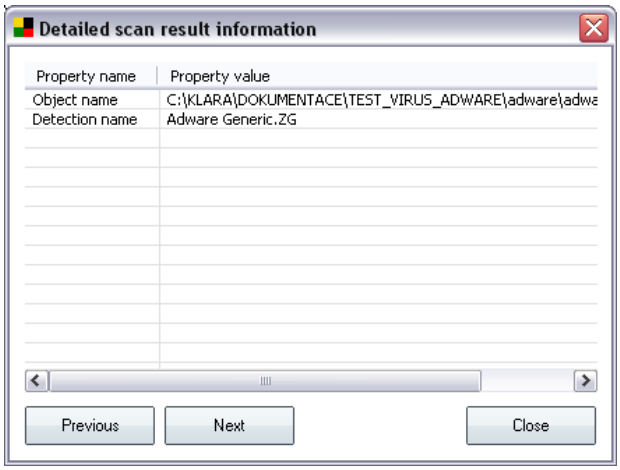
- ***File*** - full path to the original location of the infected object
- ***Infections*** - name of the detected virus (*for details on specific viruses please consult the Virus Encyclopedia online*)
- ***Result*** - defines the current status of the infected object that was detected during scanning:
    - ***Infected*** - the infected object was detected and left in its original location (*for instance if you have switched off the automatic healing option in a specific scan settings*)
    - ***Healed*** - the infected object was healed automatically and left in its original location
    - ***Moved to Virus Vault*** - the infected object was moved to the ***Virus Vault*** quarantine

- **Deleted** - the infected object was deleted
- **Added to PUP exceptions** - the finding was evaluated as an exception and added to the list of PUP exceptions (*configured in the* ***PUP Exceptions*** *dialog of the advanced settings*)
- **Locked file - not tested** - the respective object is locked and AVG is therefore unable to scan it
- **Potentially dangerous object** - the object was detected as potentially dangerous but not infected (*it can contain macros, for instance*); the information should be taken as a warning only
- **Reboot is required to finish the action** - the infected object cannot be removed, to remove it completely you have to restart your computer

Control buttons

There are three control buttons available in this dialog:

- ***View details*** - the button opens a new dialog window named ***Detailed scan result information***:



In this dialog you can find information on the location of the detected infectious object (***Property name***). Using the ***Previous*** / ***Next*** buttons you can view information on specific findings. Use the ***Close*** button to close this dialog.

- ***Remove selected infections*** - use the button to move the selected finding to the ***Virus Vault***

- ***Remove all unhealed infections*** - this button deletes all findings that cannot be healed or moved to the ***Virus Vault***

- ***Close results*** - terminates the detailed information overview and returns to the ***Scan results overview*** dialog

11.7.3. Spyware Tab

The ***Spyware*** tab is only displayed in the ***Scan results*** dialog in if spyware was detected during scanning. The tab is divided into three sections providing the following information:

- ***File*** - full path to the original location of the infected object

- ***Infections*** - name of the detected spyware (*for details on specific viruses please consult the **Virus Encyclopedia** online*)

- ***Result*** - defines the current status of the object that was detected during scanning:

    - ***Infected*** - the infected object was detected and left in its original location (for instance if you have switched off the automatic healing option in a specific scan settings)

    - ***Healed*** - the infected object was healed automatically and left in its original location

    - ***Moved to Virus Vault*** - the infected object was moved to the ***Virus Vault*** quarantine

    - ***Deleted*** - the infected object was deleted

    - ***Added to PUP exceptions*** - the finding was evaluated as an exception and added to the list of PUP exceptions (*configured in the **PUP Exceptions** dialog of the advanced settings*)

    - ***Locked file - not tested*** - the respective object is locked and AVG is therefore unable to scan it

    - ***Potentially dangerous object*** - the object was detected as potentially dangerous but not infected (it can contain macros, for instance); the

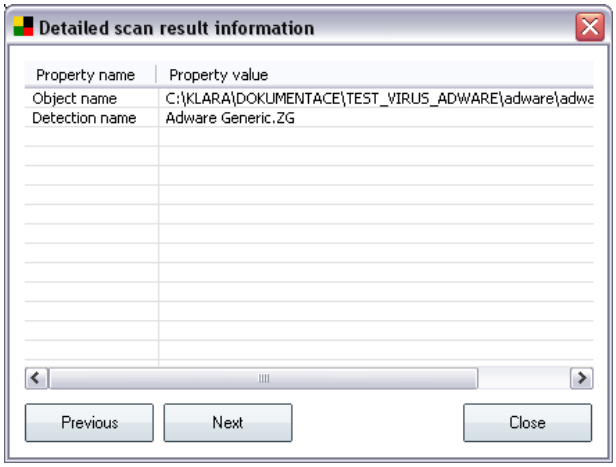
information is a warning only

- **Reboot is required to finish the action** - the infected object cannot be removed, to remove it completely you have to restart your computer

Control buttons

There are three control buttons available in this dialog:

- ***View details*** - the button opens a new dialog window named ***Detailed scan result information***:

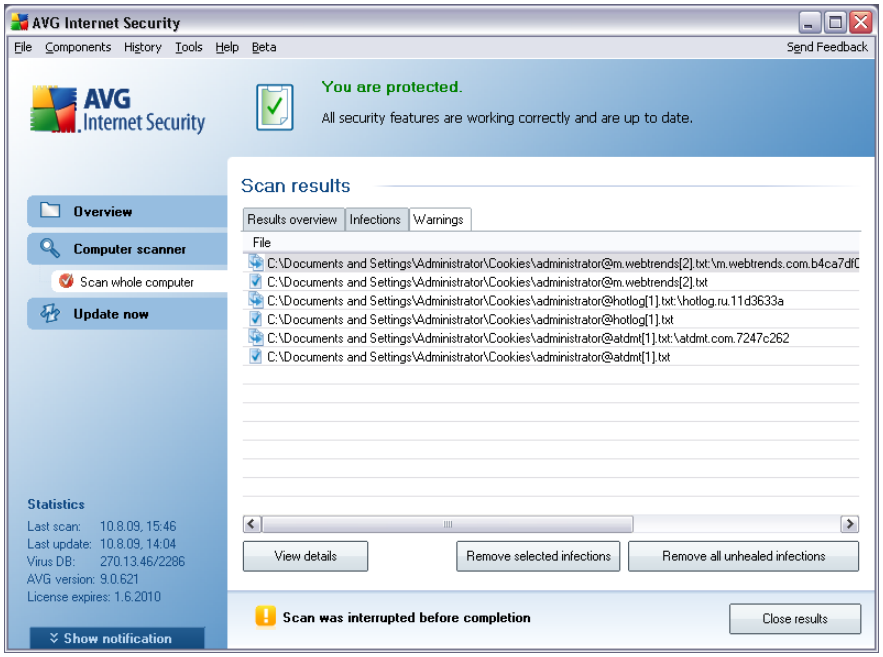


  In this dialog you can find information on the location of the detected infectious object (***Property name***). Using the ***Previous*** / ***Next*** buttons you can view information on specific findings. Use the ***Close*** button to leave this dialog.

- ***Remove selected infections*** - use the button to move the selected finding to the ***Virus Vault***
- ***Remove all unhealed infections*** - this button deletes all findings that cannot be healed or moved to the ***Virus Vault***
- ***Close results*** - terminates the detailed information overview and returns to the ***Scan results overview*** dialog

11.7.4. Warnings Tab

The ***Warnings*** tab displays information on "suspected" objects (*typically files*) detected during scanning. When detected by the ***Resident Shield***, these files are blocked from being accessed. Typical examples of this kind of findings are: hidden files, cookies, suspicious registry keys, password protected documents or archives, etc. Such files do not present any direct threat to your computer or security. Information about these files is generally useful in case there is an adware or spyware detected on your computer. If there are only Warnings detected by an AVG test, no action is necessary.



This is a brief description of the most common examples of such objects:

- ***Hidden files*** - The hidden files are by default not visible in Windows, and some viruses or other threats may try to avoid their detection by storing their files with this attribute. If your AVG reports a hidden file which you suspect to be malicious, you can move it to your ***AVG Virus Vault***.
- ***Cookies*** - Cookies are plain-text files which are used by websites to store user-specific information, which is later used for loading custom website layout, pre-filling user name, etc.
- ***Suspicious registry keys*** - Some malware stores its information into Windows registry, to ensure it is loaded on startup or to extend its effect on the

operating system.

11.7.5. Rootkits Tab

The ***Rootkits*** tab displays information on rootkits detected during scanning if you have launched the ***Anti-Rootkit scan***, or manually added the option of anti-rootkit scanning into the ***Scan of the Whole Computer*** (*this option is switched off by default*).

A ***rootkit*** is a program designed to take fundamental control of a computer system, without authorization by the system's owners and legitimate managers. Access to the hardware is rarely required as a rootkit is intended to seize control of the operating system running on the hardware. Typically, rootkits act to obscure their presence on the system through subversion or evasion of standard operating system security mechanisms. Often, they are also Trojans as well, thus fooling users into believing they are safe to run on their systems. Techniques used to accomplish this can include concealing running processes from monitoring programs, or hiding files or system data from the operating system.

The structure of this tab is basically the same as the ***Infections tab*** or the ***Spyware tab***.

11.7.6. Information Tab

The ***Information*** tab contains data on such "findings" that cannot be categorized as infections, spyware, etc. They can neither be positively labeled as dangerous but they are still worth your attention. AVG scan is able to detect files which may not be infected, but are suspicious. These files are reported either as ***Warning***, or as ***Information***.

The severity ***Information*** can be reported for one of the following reasons:

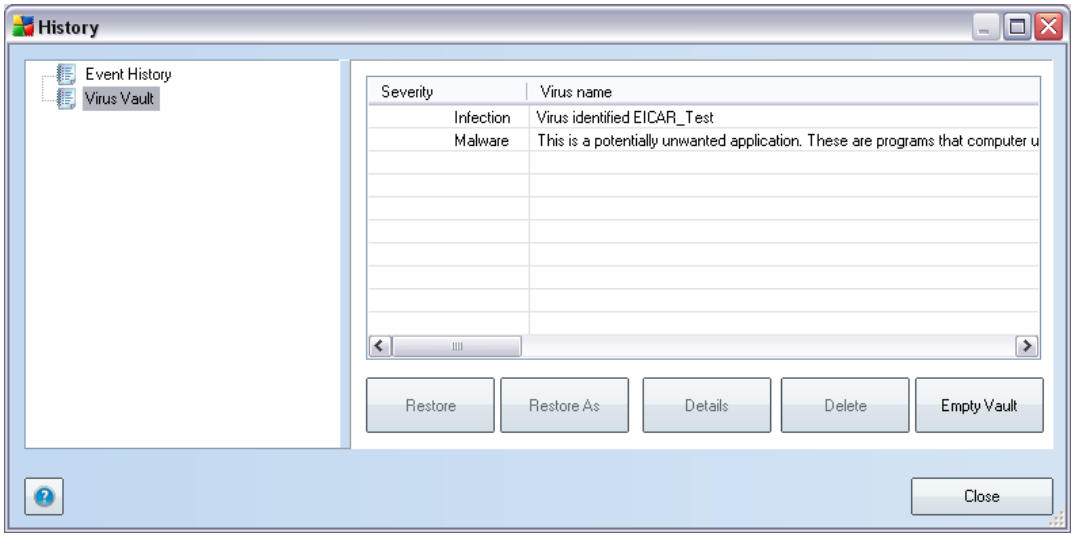
- ***Run-time packed*** - The file was packed with one of less common run-time packers, which may indicate an attempt to prevent scanning of such file. However, not every report of such file indicates a virus.
- ***Run-time packed recursive*** - Similar to above, however less frequent amongst common software. Such files are suspicious and their removal or submission for analysis should be considered.
- ***Password protected archive or document*** - Password protected files can not be scanned by AVG (*or generally any other anti-malware program*).
- ***Document with macros*** - The reported document contains macros, which may be malicious.

- ***Hidden extension*** - Files with hidden extension may appear to be e.g. pictures, but in fact they are executable files (*e.g. picture.jpg.exe*). The second extension is not visible in Windows by default, and AVG reports such files to prevent their accidental opening.

- ***Improper file path*** - If some important system file is running from other than default path (*e.g. winlogon.exe running from other than Windows folder*), AVG reports this discrepancy. In some cases, viruses use names of standard system processes to make their presence less apparent in the system.

- ***Locked file*** - The reported file is locked, thus cannot be scanned by AVG. This usually means that some file is constantly being used by the system (*e.g. swap file*).

11.8. Virus Vault



Virus Vault is a safe environment for the management of suspect/infected objects detected during AVG tests. Once an infected object is detected during scanning, and AVG is not able to heal it automatically, you are asked to decide what is to be done with the suspect object. The recommended solution is to move the object to the ***Virus Vault*** for further treatment.

The ***Virus vault*** interface opens in a separate window and offers an overview of information on quarantined infected objects:

- ***Severity*** - information on the infection type (*based on their infective level - all listed objects can be positively or potentially infected*)

- ***Virus Name*** - specifies the name of the detected infection according to the Virus encyclopedia (online)
- ***Path to file*** - full path to the original location of the detected infectious file
- ***Original object name*** - all detected objects listed in the chart have been labeled with the standard name given by AVG during the scanning process. In case the object had a specific original name that is known (*e.g. a name of an e-mail attachment that does not respond to the actual content of the attachment*), it will be provided in this column.
- ***Date of storage*** - date and time the suspected file was detected and removed to the ***Virus Vault***

Control buttons

The following control buttons are accessible from the ***Virus Vault*** interface:

- ***Restore*** - removes the infected file back to its original location on your disk
- ***Restore As*** - in case you decide to move the detected infectious object from the ***Virus Vault*** to a selected folder, use this button The suspicious and detected object will be saved with its original name. If the original name is not known, the standard name will be used.
- ***Delete*** - removes the infected file from the ***Virus Vault*** completely
- ***Empty Vault*** - removes all ***Virus Vault*** content completely

12. AVG Updates

Keeping your AVG up-to-date is crucial to ensure that all newly discovered viruses will be detected as soon as possible. Since AVG updates are not released according to any fixed schedule but rather in reaction to amount and severity of new threats, it is recommended to check for new updates at least once a day. Checking every 4 hours will guarantee that your AVG Virus base is kept up-to-date also during the day.

12.1. Update Levels

AVG offers two update levels to select from:

- ***Definitions update*** contains changes necessary for reliable anti-virus protection. Typically, it does not include any changes to the code and updates only the definition database. This update should be applied as soon as it is available.
- ***Program update*** contains various program changes, fixes and improvements.

When scheduling an update, it is possible to select which priority level should be downloaded and applied.

Note: *If a time coincidence of a scheduled program update and scheduled scan occurs, the update process is of higher priority and the scan will get interrupted.*

12.2. Update Types

You can distinguish between two types of update:

- ***On demand update*** is an immediate AVG update that can be performed any time the need arises.
- ***Scheduled update*** - within AVG it is also possible to pre-set an update plan. The planned update is then performed periodically according to the setup configuration. Whenever new update files are present on the specified location, they are downloaded either directly from the Internet, or from the network directory. When no newer updates are available, nothing happens.

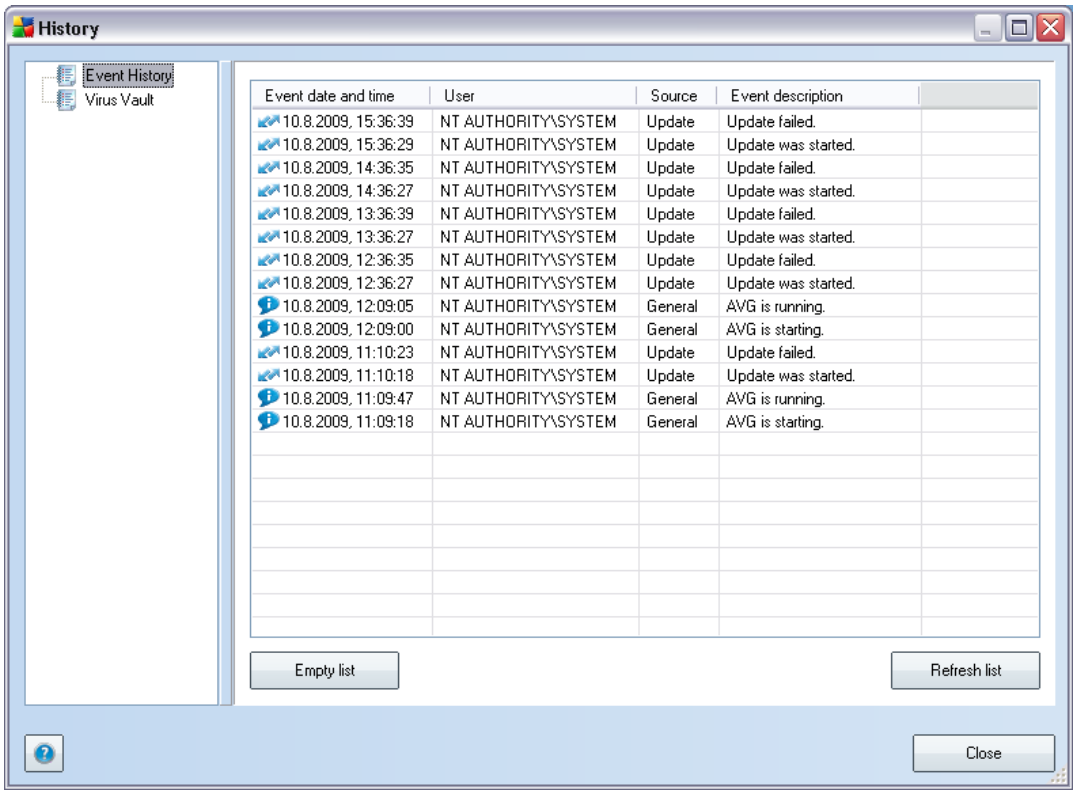
12.3. Update Process

The update process can be launched immediately as the need arises by the ***Update now*** quick link. This link is available at all times from any AVG user interface dialog. However, it is still highly recommended to perform updates regularly as stated in the update schedule editable within the Update manager component.

Once you start the update, AVG will first verify whether there are new update files available. If so, AVG starts their downloading and launches the update process itself. During the update process you will get redirected to the ***Update*** interface where you can view the process progressing in its graphical representation as well as in an overview of relevant statistic parameters (*update file size, received data, download speed, elapsed time, ...*).

***Note**: Before the AVG program update launch a system restore point is created. In case the update process fails and your operating system crashes you can always restore your OS in its original configuration from this point. This option is accessible via Start / All Programs / Accessories / System tools / System Restore. Recommended to experienced users only!*

13. Event History



The ***Event History*** dialog is accessible from the system menu via the ***History/Event History Log*** item. Within this dialog you can find a summary of important events that occurred during **AVG 9 Anti-Virus plus Firewall** operation. ***Event History*** records the following types of events:

- Information about updates of the AVG application
- Scanning start, end or stop (including automatically performed tests)
- Events connected with virus detection (by the Resident Shield or scanning) including occurrence location
- Other important events

Control buttons

- ***Empty list*** - deletes all entries in the list of events
- ***Refresh list*** - updates all entries in the list of events

14. FAQ and Technical Support

Should you have any problems with your AVG, either business or technical, please refer to the ***FAQ*** section of AVG website (http://www.avg.com/).

If you do not succeed in finding help this way, contact the technical support department by email. Please use the contact form accessible from the system menu via ***Help / Get help online***.