AVG Internet Security 2012

User Manual

Document revision 2012.22 (16.5.2012)

Contents

1. Introduction

This user manual provides comprehensive documentation for **AVG Internet Security 2012**.

AVG Internet Security 2012 provides multiple layers of protection for everything you do online, which means you don't have to worry about identity theft, viruses, or visiting harmful sites. AVG Protective Cloud Technology and AVG Community Protection Network are included, meaning we collect the latest threat information and share it with our community to make sure you receive the best protection:

- Shop and bank online safely with AVG Firewall, Anti-Spam & Identity Protection
- Stay safe on social networks with AVG Social Networking Protection
- Surf and search with confidence with LinkScanner's real-time protection

2. AVG Installation Requirements

2.1. Operation Systems Supported

AVG Internet Security 2012 is intended to protect workstations with the following operating systems:

- 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)

***Note**: The ID Protection component is not supported on Windows XP x64. On this operating system you can install AVG Internet Security 2012 but only without the IDP component.*

2.2. Minimum & Recommended HW Requirements

Minimum hardware requirements for **AVG Internet Security 2012**:

- Intel Pentium CPU 1.5 GHz
- 512 MB of RAM memory
- 1000 MB of free hard drive space (for installation purposes)

Recommended hardware requirements for **AVG Internet Security 2012**:

- Intel Pentium CPU 1.8 GHz
- 512 MB of RAM memory
- 1550 MB of free hard drive space (for installation purposes)

3. AVG Installation Process

Where do I get the installation file?

To install **AVG Internet Security 2012** on your computer, you need to get the latest installation file. To make sure you are installing the up-to-date version of **AVG Internet Security 2012**, it is recommended that you download the installation file from the AVG website (http://www.avg.com/). T he ***Support Center / Download*** section provides a structured overview of the installation files for each AVG edition.

If you are not sure which files you need to download and install, you may want to use the ***Select product*** service at the bottom of the web page. After you answer three simple questions, this service defines the exact files you need. Press the ***Continue*** button to get redirected to a complete list of download files customized for your personal needs.

What does the installation process look like?

Once you have downloaded and saved the installation file on your hard disk, you can launch the installation process. The installation is a sequence of simple and easy to understand dialogs. Each dialog briefly describes what do at each step of the installation process. We offer a detailed explanation of each dialog window below:

3.1. Welcome: Language Selection

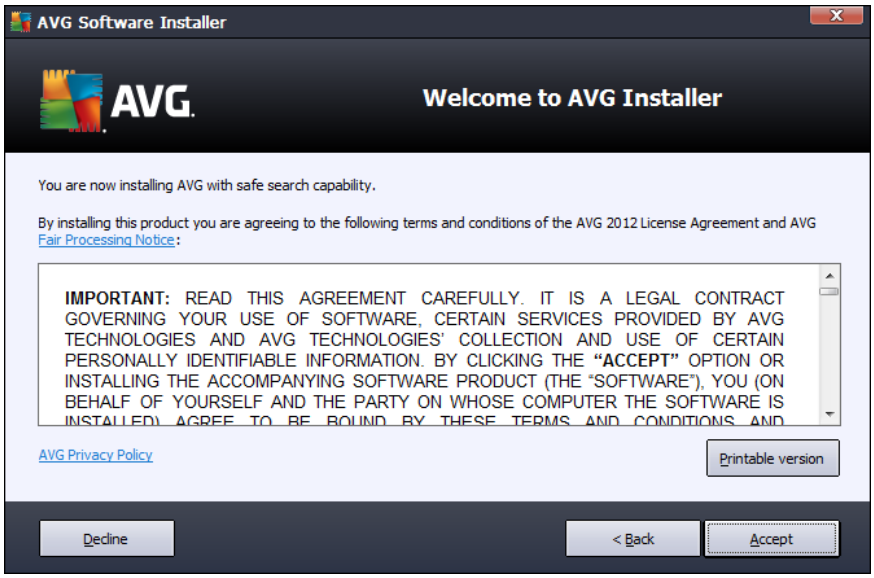
The installation process starts with the ***Welcome to AVG Installer*** dialog:

In this dialog you can select the language used for the installation process. Click the combo box to roll down the language menu. Select the desired language, and the installation process will proceed further in the language of your choice.

Attention: At the moment you are only selecting the language of the installation process. The AVG Internet Security 2012 application will be installed in the selected language, and in English which is always installed automatically. However, it is possible to have more languages installed and to work with AVG Internet Security 2012 in any of these. You will be invited to confirm your full selection of alternative languages in one of following setup dialogs named Custom Options.

3.2. Welcome: License Agreement

The ***Welcome to AVG Installer*** dialog provides then the full wording of the AVG license agreement:



Please read the entire text carefully. To confirm that you have read, understood, and accept the agreement press the ***Accept*** button. If you do not agree with the license agreement press the ***Decline*** button, and the installation process will be terminated immediately.

AVG Privacy Policy

Besides the license agreement, this setup dialog also offers you the option to learn more about the ***AVG Privacy Policy*** and ***AVG Fair Processing Notice***. Click the respective link to get redirected to AVG website (http://www.avg.com/) where you can find the full wording of these statements.

Control buttons

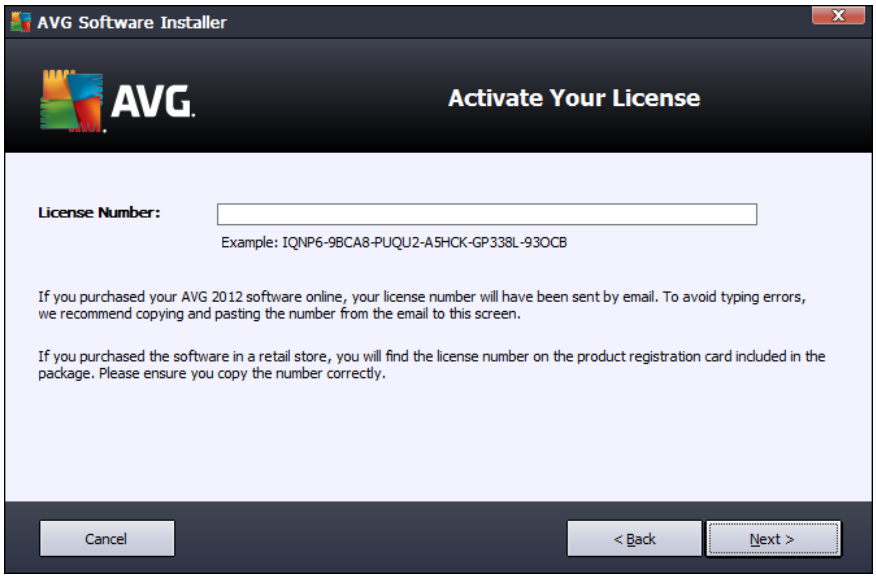
From the first setup dialog, there are only two control buttons available:

- ***Printable version*** - Click to have printed the full wording of the AVG license agreement.
- ***Decline*** - Click to refuse the license agreement. The setup process will quit immediately. **AVG Internet Security 2012** will not be installed!

- ***Back*** - Click to return one step back to the previous setup dialog.
- ***Accept*** - Click to confirm you have read, understood, and accepted the license agreement. The installation will continue, and you will go on one step further to the following setup dialog.

3.3. Activate your license

In the ***Activate Your License*** dialog you are invited to enter your license number into the provided text field:



Where to find the license number

The sales number can be found on the CD packaging in your **AVG Internet Security 2012** box. The license number will be in the confirmation email that you received after purchasing your **AVG Internet Security 2012** online. You must type in the number exactly as shown. If the digital form of the license number is available (*in the e-mail*), it is recommended that you use the copy and paste method to insert it.

How to use the Copy & Paste method

Using the ***Copy & Paste*** method to enter your **AVG Internet Security 2012** license number into the program ensures that the number is correctly entered. Please follow these steps:

- Open the e-mail containing your license number.
- Click the left mouse button at the beginning of the license number, hold and drag the mouse to the end of the number, and then release the button. The number should now be highlighted.

- Press and hold ***Ctrl***,and then press ***C***. This copies the number.
- Point and click the position where you would like to paste the copied number.
- Press and hold ***Ctrl***,and then press ***V***. This pastes the number to the location you selected.

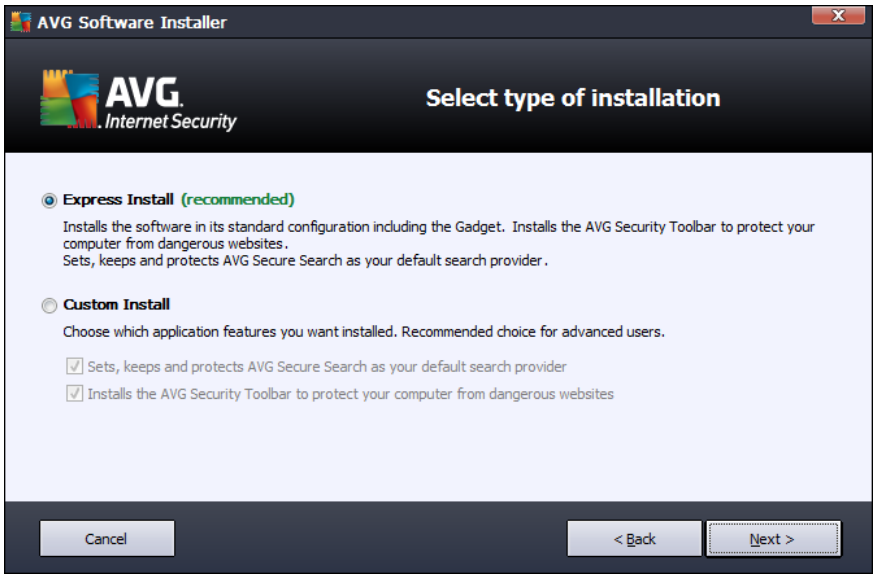
Control buttons

As in most setup dialogs, there are three control buttons available:

- ***Cancel*** - click to exit the setup process immediately; **AVG Internet Security 2012** will not be installed!
- ***Back*** - click to go one step back to the previous setup dialog.
- ***Next*** - click to continue the installation and go one step further.

3.4. Select type of installation

The ***Select type of installation*** dialog offers the choice of two installation options: ***Express*** and ***Custom Install***:



Express installation

For most users, it is highly recommended that you keep the standard ***Express*** installation. This way you install **AVG Internet Security 2012** in fully automatic mode with settings predefined by the program vendor, including the AVG Gadget, the AVG Security Toolbar, and having configured the AVG Secure Search as the default search provider. 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 option of doing so directly in the **AVG Internet Security 2012** application.

Press the ***Next*** button to proceed to the following dialog of the installation process.

Custom installation

Custom Install should only be used by experienced users who have a valid reason to install **AVG Internet Security 2012** with non-standard settings; e.g. to fit specific system requirements. In this section you can decide whether the following features should be installed *(both features are marked as to be installed, and will be installed automatically unless you opt-out)*:

- ***Sets, keeps and protects AVG Secure Search as your default search provider*** - keep checked to confirm you want to use the AVG Secure Search engine that closely cooperates with the Link Scanner component for your maximum security online.

- ***Installs the AVG Security Toolbar to protect your computer from dangerous websites*** - keep checked to have installed AVG Security Toolbar that guards your maximum security while browsing the Internet.

If you decide for this option, a new section called ***Destination Folder*** appears in the dialog. Here, you are supposed to specify the location where **AVG Internet Security 2012** should be installed. By default, **AVG Internet Security 2012** will be installed to the program files folder located on drive C:, as stated in the text field in the dialog. If you want to change this location, use the ***Browse*** button to display the drive structure, and select the respective folder. To revert to the default destination pre-set by the software vendor use the ***Default*** button.

Then, press the ***Next*** button to proceed to the Custom Options dialog.

Control buttons

As within most setup dialogs, there are three control buttons available:

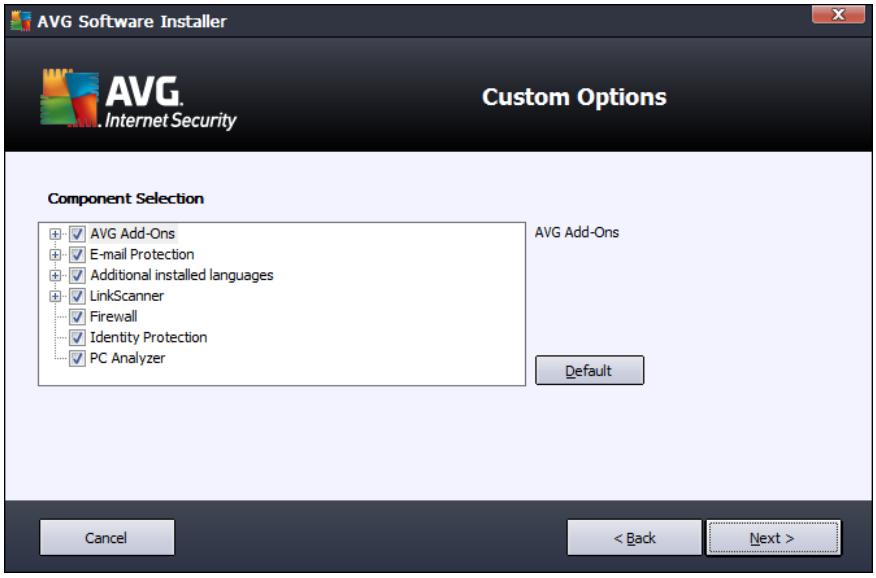
- ***Cancel*** - click to exit the setup process immediately; **AVG Internet Security 2012** will not be installed!

- ***Back*** - click to go one step back to the previous setup dialog.

- ***Next*** - click to continue the installation and go one step further.

3.5. Custom options

The ***Custom Options*** dialog allows you to set up detailed parameters for the installation:



The ***Component Selection*** section provides an overview of all **AVG Internet Security 2012** 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!

Highlight any item in the ***Component Selection*** list, and a brief description of the respective component will be displayed on the right side of this section. For detailed information on each component's functionality please consult the Components Overview chapter of this documentation. To revert to the default configuration pre-set by the software vendor use the ***Default*** button.

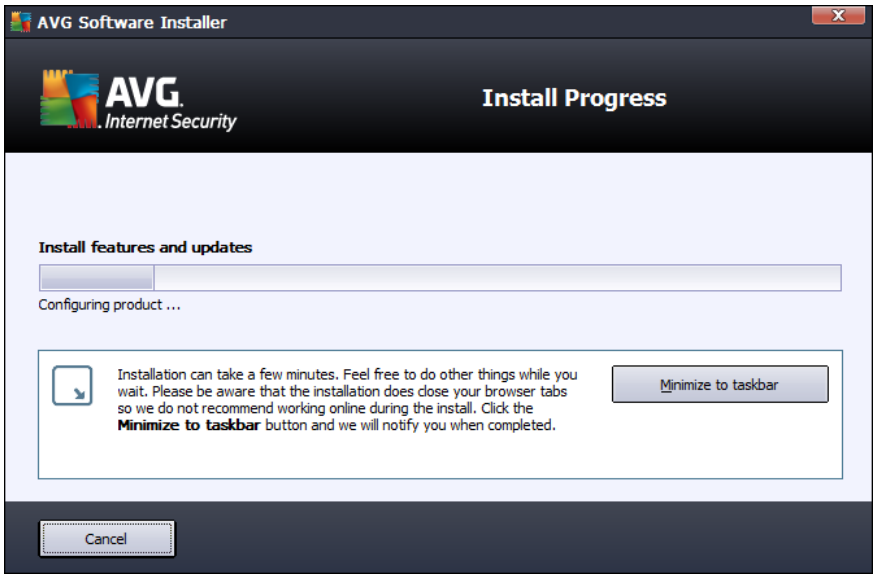
Control buttons

As in most setup dialogs, there are three control buttons available:

- ***Cancel*** - click to exit the setup process immediately; **AVG Internet Security 2012** will not be installed!
- ***Back*** - click to go one step back to the previous setup dialog.
- ***Next*** - click to continue the installation and go one step further.

3.6. Install progress

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



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

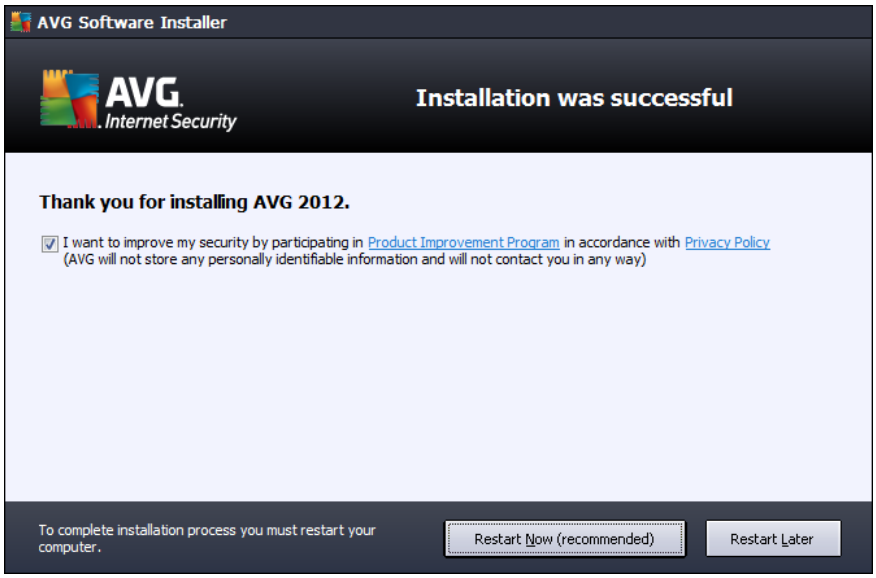
Control buttons

There are two control buttons available in this dialog:

- ***Minimize*** - The installation process may take several minutes. Click the button to minimize the dialog window into an icon visible on the system bar. The dialog appears again once the installation is completed.
- ***Cancel*** - This button should only be used if you want to stop the current installation process. Please mind that in such a case your **AVG Internet Security 2012** will not be installed!

3.7. Installation was successful

The ***Installation was successful*** dialog confirms that your **AVG Internet Security 2012** has been fully installed and configured:



Product Improvement Program and Privacy Policy

Here you can decide whether you want to participate in the ***Product Improvement Program*** (*for details see the chapter AVG Advanced Settings / Product Improvement Program*) that collects anonymous information on detected threats in order to increase the overall Internet security level. All data are treated as confidential and in compliance with AVG Privacy Policy; click the ***Privacy Policy*** link to get redirected to AVG website (http://www.avg.com/) where you can find the the full wording of AVG Privacy Policy. If you agree, please keep the option checked *(the option is confirmed, by default)*.

Computer restart

To finalize the installation process you need restart your computer: select whether you want to ***Restart Now***, or you want to postpone this action - ***Restart Later***.

4. After Installation

4.1. Product registration

Having finished the **AVG Internet Security 2012** installation, please register you product online on the AVG website (http://www.avg.com/). 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.

The easiest way to register is directly from the **AVG Internet Security 2012** user interface. In the main menu please select the Help/Register now item. You will be redirected to the ***Registration*** page on the AVG website (http://www.avg.com/). Please follow the instruction provided on the page.

4.2. Access to user interface

The AVG main dialog is accessible in several ways:

- double-click the AVG system tray icon
- double-click the AVG icon on the desktop
- from the menu ***Start / All Programs / AVG 2012***

4.3. Scanning of the whole computer

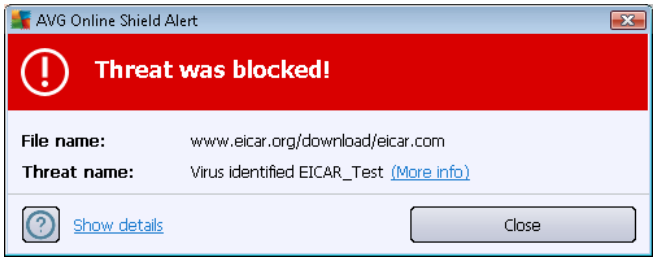
There is a potential risk that a computer virus has been transmitted to your computer prior to **AVG Internet Security 2012** installation. For this reason you should run a Scan of the whole computer to make sure there are no infections on your PC. The first scan might take quite some time *(about an hour)* but it is recommended that you launch it to make sure your computer has not been compromised by a threat. For instructions on running a Scan of the whole computer consult the chapter AVG Scanning.

4.4. Eicar test

To confirm that **AVG Internet Security 2012** 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 operation. 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 Online Shield (*a part of Link Scanner component*) 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*). Online Shield allows you to download this file and save it on your local disk but then the Resident Shield (*within Anti-Virus component*) 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!

4.5. AVG default configuration

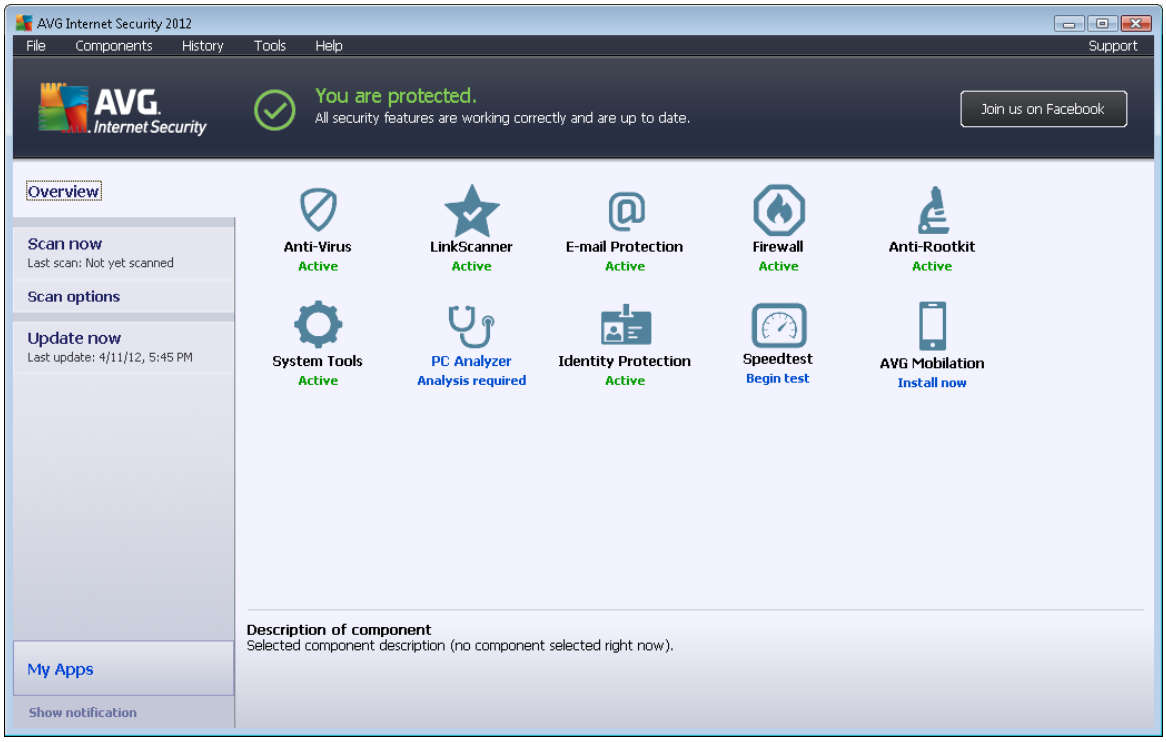
The default configuration (*i.e. how the application is set up right after installation*) of **AVG Internet Security 2012** is set by the software vendor so that all components and functions are tuned up to achieve optimum performance.

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 want to change the AVG configuration to better suit 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.

5. AVG User Interface

AVG Internet Security 2012 opens 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 components, services, and features of **AVG Internet Security 2012** - details >>
- ***Security Status Info*** *(upper section of the window)* provides you with information on the current status of your **AVG Internet Security 2012** - details >>
- ***Join us on Facebook*** *(upper right-hand section of the window)* button allows you to join the AVG community on Facebook. However, the button only appears in case all components are fully functional and working properly *(for details on how to recognize the status of AVG components see chapter Security Status Info)*
- ***Quick Links*** *(left section of the window)* allow you to quickly access the most important and most frequently used tasks of **AVG Internet Security 2012** - details >>
- ***My Apps*** *(left bottom section of the window)* open an overview of additional applications available for **AVG Internet Security 2012**: LiveKive, Family Safety, and PC Tuneup
- ***Components Overview*** *(central section of the window)* offers an overview of all components installed within **AVG Internet Security 2012** - details >>
- ***System Tray Icon*** *(bottom right corner of the monitor, on the system tray)* indicates the current status of **AVG Internet Security 2012** - details >>

- ***AVG gadget*** *(Windows sidebar, supported in Windows Vista/7)* allows quick access to scanning and updating within **AVG Internet Security 2012** - details >>

5.1. 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 Internet Security 2012** main window. Use the system menu to access specific AVG components, features, and services.

The system menu is divided into six main sections:

5.1.1. File

- ***Exit*** - closes the **AVG Internet Security 2012** user interface. However, the AVG application will continue running in the background and your computer will still be protected!

5.1.2. 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*** detects viruses, spyware, worms, trojans, unwanted executable files or libraries within your system, and protects you from malicious adware - details >>
- ***LinkScanner*** protects you from web-based attacks while you search and surf the Internet - details >>
- ***E-mail Protection*** checks your incoming e-mail messages for SPAM, and blocks viruses, phishing attacks, or other threats - details >>
- ***Firewall*** controls all communication on each network port, protecting you from malicious attacks and blocking all intrusion attempts - details >>
- ***Anti-Rootkit*** scans for dangerous rootkits hidden inside applications, drivers, or libraries - details >>
- ***System Tools*** offers a detailed summary of the AVG environment and operating system information - details >>
- ***PC Analyzer*** provides information about your computer status - details >>
- ***Identity Protection*** is constantly protecting your digital assets from new and unknown threats - details >>
- ***Remote Administration*** is only displayed within AVG Business Editions in case you have specified during the installation process you want to have this component installed

5.1.3. History

- Scan results - switches to the AVG testing interface, specifically to the Scan Results Overview dialog
- Resident Shield detection - opens a dialog with an overview of threats detected by Resident Shield
- E-mail Scanner detection - opens a dialog with an overview of mail messages attachments detected as dangerous by the E-mail Protection component
- Online Shield findings - opens a dialog with an overview of threats detected by Online Shield service within the LinkScanner component
- Virus Vault - opens the interface to 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, 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 Internet Security 2012** actions
- Firewall log - opens the Firewall settings interface on the Logs tab with a detailed overview of all Firewall actions

5.1.4. Tools

- Scan computer - 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 on a single specific file. Click this option to open a new window with the tree structure of your disk. Select the desired file, and confirm the scan launch.
- Update - automatically launches the update process for **AVG Internet Security 2012**.
- ***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 Internet Security 2012 configuration. Generally, it is recommended that you keep the default settings of the application as defined by the software vendor.
- Firewall settings... - opens a standalone dialog for advanced configuration of the Firewall component.

5.1.5. Help

- ***Contents*** - opens the AVG help files
- ***Get Support*** - opens the AVG website (http://www.avg.com/) at the customer support center page
- ***Your AVG Web*** - opens the 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 (*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 the AVG website (http://www.avg.com/). Please fill in your registration data; only customers who register their AVG product can receive free technical support.

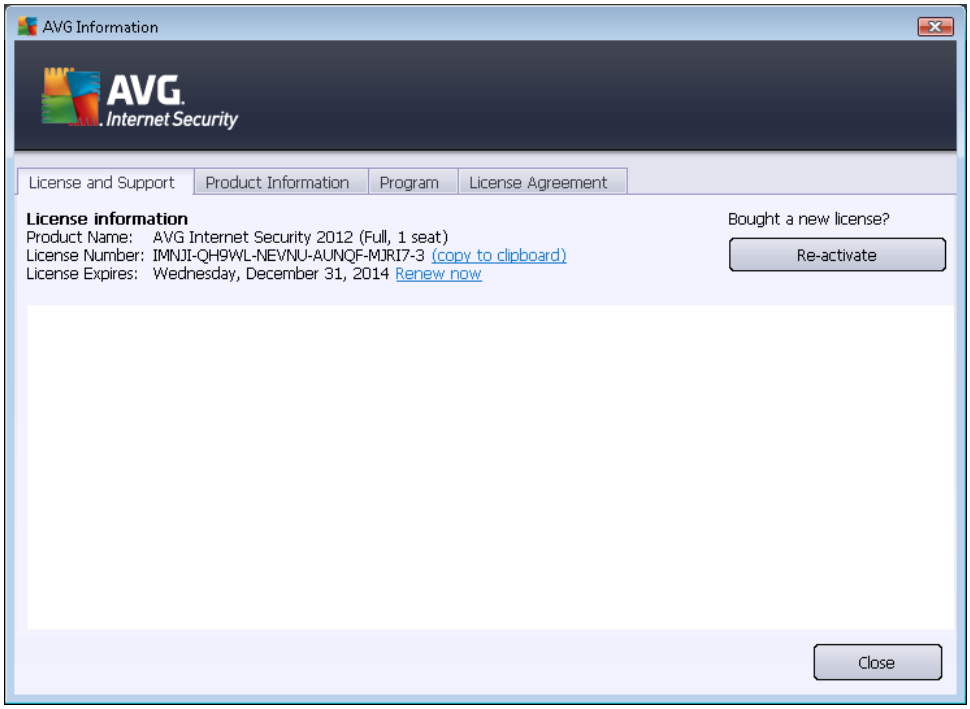
Note**: If using the trial version of* **AVG Internet Security 2012, the latter two items appear as* ***Buy now*** *and* ***Activate****, allowing you to buy the full version of the program right away. For* **AVG Internet Security 2012** *installed with a sales number, the items display as* ***Register*** *and* ***Activate****.*

- ***About AVG*** - opens the ***AVG Information*** dialog with four tabs providing data on your purchased license and accessible support, product and program information, and the full wording of the license agreement.

5.1.6. Support

The ***Support*** link opens a new ***AVG Information*** dialog with all types of information you might need when trying to find help. The dialog includes basic data on your installed AVG program (*program/ database version*), license details, and a list of quick support links. The ***AVG Information*** dialog is divided into four tabs:

The ***License and Support*** tab provides information on the product name *(type of licence, and number of seats)*, the license number, and the expiration date:



Control buttons and links

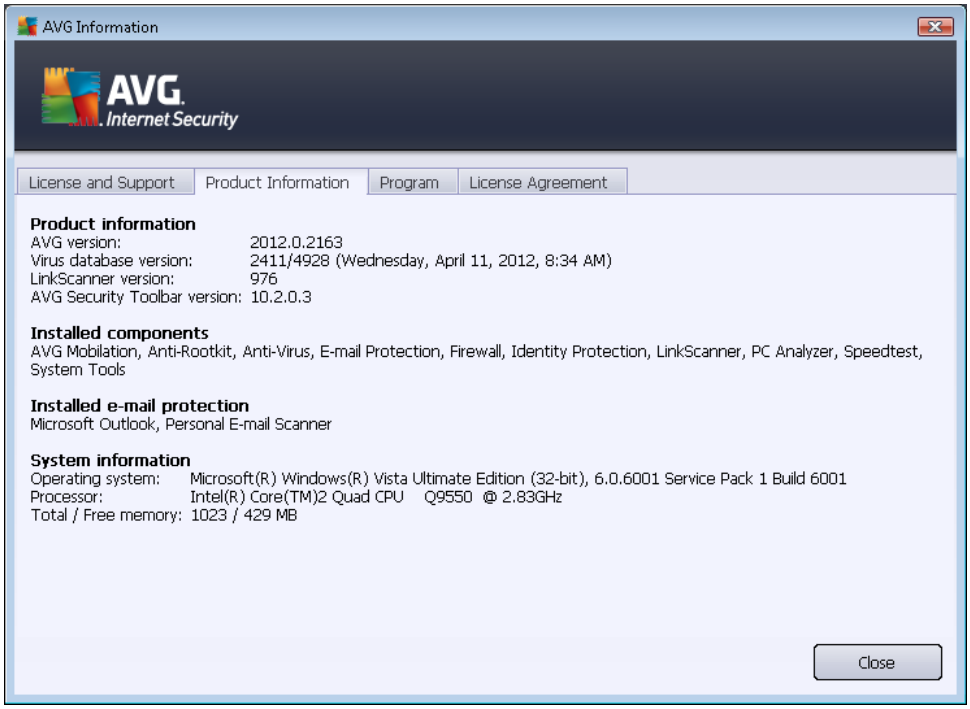
You will find the following buttons and hyperlinks in the tab:

- ***(Re)Activate*** - Click the button to open the new ***AVG Activate Software*** dialog. Fill in your license number into the respective field to either replace your sales number *(that you use during the AVG Internet Security 2012 installation)*, or to change your current license number for another *(e.g. when upgrading to a higher AVG product).*

- ***Copy to clipboard*** - Use this link to copy the license number, and paste it where needed. This way you can be sure the license number is entered correctly.

- ***Renew now*** - We recommend that you purchase your **AVG Internet Security 2012** license renewal in good time, at least one month prior to your current license expiration. You will be noticed of the approaching expiration date. Click this link to get redirected to AVG website (http://www.avg.com/) where you find detailed information on your license status, the expiration date, and the renewal/upgrade offer.

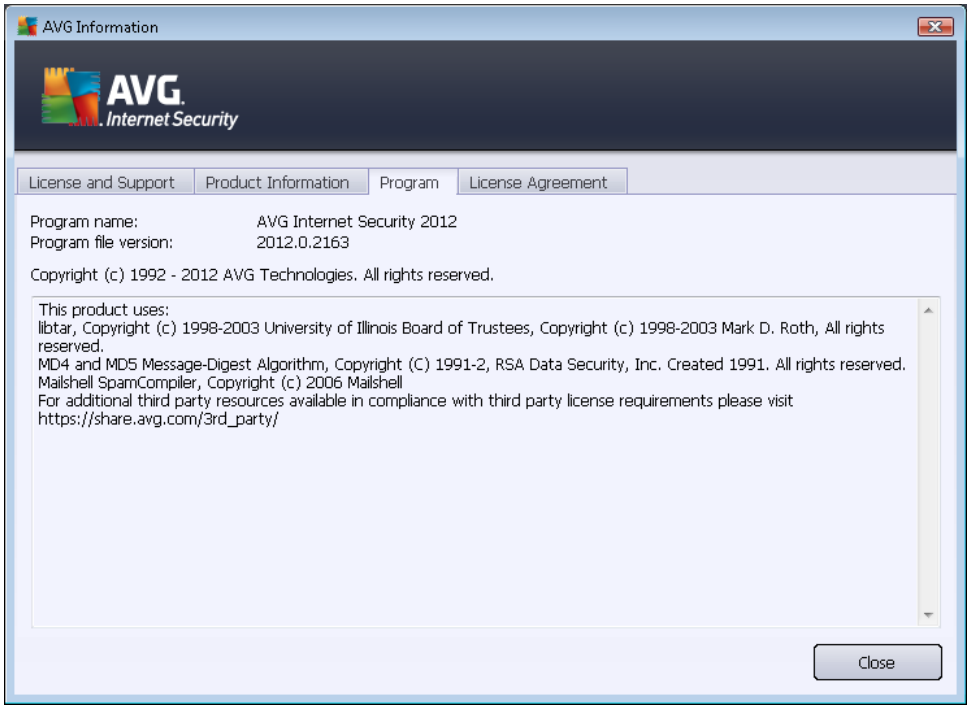
The ***Product Information*** tab provides an overview of the **AVG Internet Security 2012** most important technical data:



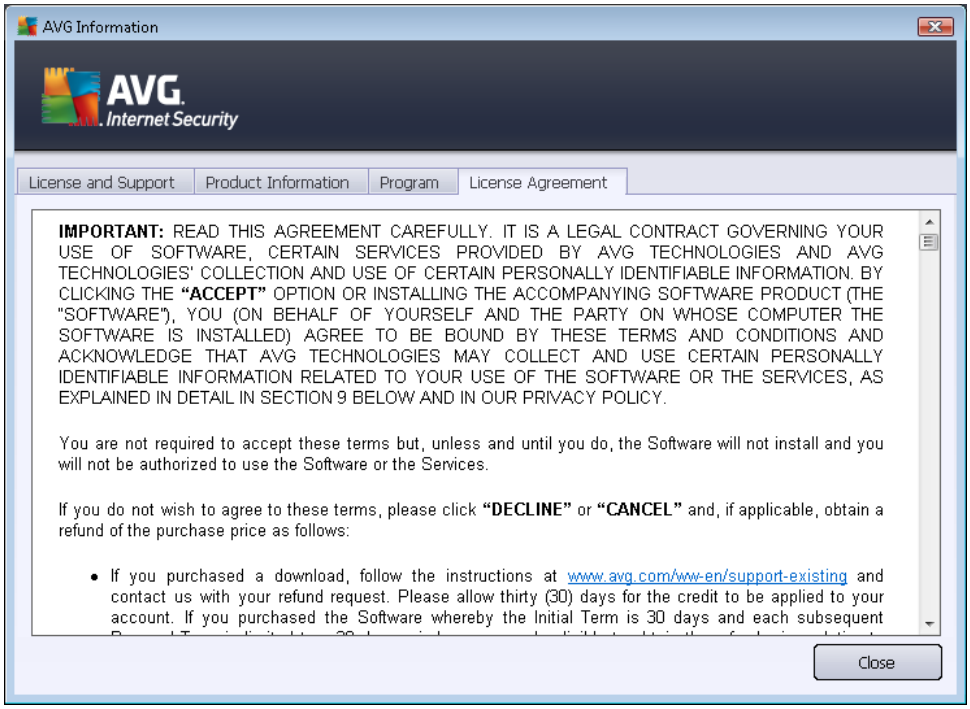
The tab is divided into several sections:

- ***Product information*** - provides information on the **AVG Internet Security 2012** version, the virus database version, the LinkScanner version, and the AVG Security Toolbar version.
- ***Installed components*** - provides a complete list of all currently installed components.
- ***Installed e-mail protection*** - offers an overview of all installed e-mail protection plug-ins.
- ***System information*** - lists all relevant parameters of your operating system *(processor type, operating system and its version, build number, service packs used, total memory size, and free memory size)*.

On the ***Program*** tab you can find information on the **AVG Internet Security 2012** program file version, and on the third parties code used in the product:



On the ***License Agreement*** tab you can read the full wording of the license agreement between you and AVG Technologies:



5.2. Security Status Info

The ***Security Status Info*** section is located in the upper part of the **AVG Internet Security 2012** main window. Within this section you will always find information on the current security status of your **AVG Internet Security 2012**. Please see an overview of icons possibly depicted in this section, and their meaning:

 - the green icon indicates that your ***AVG Internet Security 2012 is fully functional***. Your computer is completely protected, up-to-date, and all installed components are working properly.

 - the yellow icon warns that ***one or more components are incorrectly configured*** and you should check their properties/settings. There is no critical problem in **AVG Internet Security 2012** and you have probably decided to switch a component off for some reason. You are still protected!. However, please pay attention to the problem component's settings! Its name will be provided in the ***Security Status Info*** section.

The yellow 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 your mouse right-click*) over the respective component's icon in the component overview of

the **AVG Internet Security 2012** main window. Select this option to state you are aware of the component's error state but for some reason you wish to keep your **AVG Internet Security 2012** so and you do not want to be warned by the system tray icon. You may need to use this option in a specific situation but it is strictly recommended that you switch off the ***Ignore component state*** option as soon as possible.

Alternatively, the yellow icon will also be displayed if your **AVG Internet Security 2012** requires a computer restart (***Restart needed***). Please pay attention to this warning and restart your PC using the ***Restart now*** button.

 - the orange icon indicates that ***AVG Internet Security 2012 has a critical status***! One or more components does not work properly and **AVG Internet Security 2012** 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.

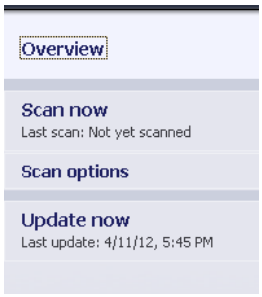
In case AVG Internet Security 2012 is not set to the optimum performance, a new button named Fix (alternatively Fix all if the problem involves more than one component) appears next to the security status information. Press the button to launch an automatic process of checking and configuring the program. This is an easy way to set AVG Internet Security 2012 to the optimum performance and reach the maximum security level!

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

Note: *AVG Internet Security 2012 status information can also be obtained at any time from the system tray icon.*

5.3. Quick Links

Quick links are located on the left side of **AVG Internet Security 2012** user interface. These links allow you to immediately access the most important and most frequently used features of the application, i.e. scanning and update. The quick links are accessible from all dialogs of the user interface:



Quick links are graphically divided into three sections:

- ***Scan now*** - by default, the button provides information on the last scan launched *(i.e. the scan type, and the date of last launch)*. Click the ***Scan now*** command to launch the same scan again. If you want to launch another scan, click the ***Scan options*** link. This is how

you open the AVG scanning interface where you can run scans, schedule scans, or edit their parameters. *(For details see chapter AVG Scanning)*

- ***Scan options*** - use this link to switch from any currently opened AVG dialog to the default window with an overview of all installed components. *(For details see chapter Components Overview)*

- ***Update now*** - the link provides the date and time of the update last launch. Press the button to run the update process immediately, and to follow its progress. *(For details see chapter AVG Updates)*

Quick links are accessible from AVG User Interface at all times. Once you use a quick link to run a specific process, either a scan or an update, the application will switch to a new dialog but the quick links are still available. Moreover, the running process is also graphically depicted in the navigation, so that you have a full control over all launched processes running within **AVG Internet Security 2012** at the moment.

5.4. Components Overview

Components Overview sections

The ***Components Overview*** section is located in the central part of your **AVG Internet Security 2012** user interface. The section is divided into two parts:

- ***Overview of all installed components*** consisting of graphic panels for all installed components. Each panel is labeled by the component's icon and providing information on whether the respective component is active or inactive at the moment.

- ***Component's description*** is located in the bottom part of this dialog. The description briefly explains the component's basic functionality. It also provides the information on the current status of the selected component.

Installed components' list

Within the **AVG Internet Security 2012** the ***Components Overview*** section contains information on the following components:

- ***Anti-Virus*** detects viruses, spyware, worms, trojans, unwanted executable files, or libraries within your system, and protects you from malicious adware - details >>

- ***LinkScanner*** protects you from web-based attacks while you search and surf the Internet - details >>

- ***E-mail Protection*** checks your incoming e-mail messages for SPAM, and blocks viruses, phishing attacks, or other threats - details >>

- ***Firewall*** controls all communication on each network port, protecting you from malicious attacks and blocking all intrusion attempts - details >>

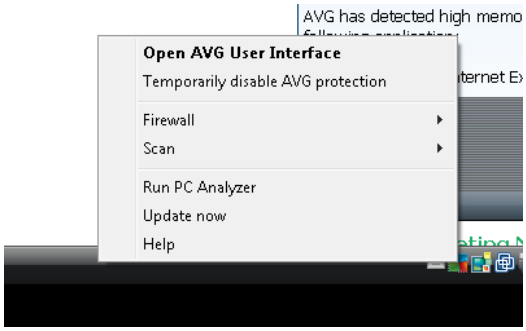
- ***Anti-Rootkit*** scans for dangerous rootkits hidden inside applications, drivers, or libraries - details >>
- ***System Tools*** offers a detailed summary of the AVG environment and operating system information - details >>
- ***PC Analyzer*** analyzer provides information about your computer status - details >>
- ***Identity Protection*** is constantly protecting your digital assets from new and unknown threats - details >>
- ***Remote Administration*** is only displayed within AVG Business Editions in case you have specified during the installation process you want to have this component installed

Actions accessible

- ***Move mouse over 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.
- ***Single-click any component's icon*** to open the component's own interface with a list of basic statistical data.
- ***Right-click you mouse over a component's icon*** to expand a context menu with several options:
  - ***Open*** - Click this option to open the component's own dialog *(just like a single-click on the component's icon)*.
  - ***Ignore the state of this component*** - Select this option to express you are aware of the component's error state but for some reason you wish to keep this status, and you do not want to be warned by the system tray icon.
  - ***Open in Advanced settings ...*** - This option is only available for some components; i.e. those that provide the option of advanced settings.

5.5. System Tray Icon

The ***AVG System Tray Icon*** *(on your Windows taskbar, right-hand bottom corner of your monitor)* indicates the current status of your **AVG Internet Security 2012**. It is visible at all times in your system tray, no matter whether the user interface of your **AVG Internet Security 2012** is opened or closed:



AVG System Tray Icon display

- In full color with no added elements the icon indicates that all **AVG Internet Security 2012** components are active and fully functional. However, the icon can also be displayed this way in a situation when one of the components is not fully functional but the user has decided to ignore the component state. *(Having confirmed the ignore for component state option you express, you are aware of the component's error state but for some reason you wish to keep it so, and you do not want to be warned about the situation.)*

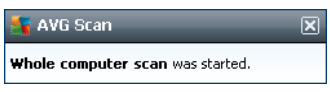
- The icon with an exclamation mark indicates that a component *(or even more components)* is in error state. Always pay attention to such a warning and try to remove the configuration issue for a component that is not set up properly. In order to be able to perform the changes in the component's configuration, double-click the system tray icon to open the application user interface. For detailed information on which components is in error state please consult the security status info section.

- The system tray icon can further be displayed in full color with a flashing and rotating beam of light. This graphic version signalizes a currently launched update process.

- The alternative display of a full color icon with an arrow means that one of the **AVG Internet Security 2012** scans is running now.

AVG System Tray Icon information

The ***AVG System Tray Icon*** also informs about current activities within your **AVG Internet Security 2012**, and on 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 system tray icon:



Actions accessible from AVG System Tray Icon

AVG System Tray Icon can also be used as a quick link to access the user interface of **AVG**

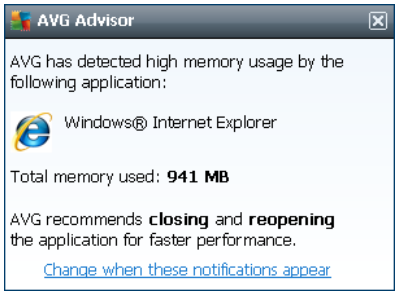
Internet Security 2012; just double-click the icon. By right-click the icon you open a brief context menu with the following options:

- ***Open AVG User Interface*** - click to open the user interface of **AVG Internet Security 2012**.
- ***Temporarily disable AVG protection*** - the option allows you to switch off the entire protection secured by your **AVG Internet Security 2012** at once. Please remember that you should not use this option unless it is absolutely necessary! In most cases, it is not necessary to disable **AVG Internet Security 2012** before installing new software or drivers, not even if the installer or software wizard suggests that running programs and applications be shut down first to make sure there are no unwanted interruptions during the installation process. If you do have to temporarily disable **AVG Internet Security 2012**, you should re-enable it as soon as you're done. If you are connected to the Internet or a network during the time your antivirus software is disabled, your computer is vulnerable to attacks.
- ***Firewall*** - click to open the context menu for Firewall settings options where you can edit the major parameters: Firewall status (*Firewall enabled/Firewall disabled/Emergency mode*), gaming mode switching and Firewall profiles.
- ***Scans*** - click to open the context menu for predefined scans (*Whole Computer scan, and Scan Specific Files or Folders*) and select the required scan; it will be launched immediately.
- ***Running scans ...*** - this item is displayed only if a scan is currently running on your computer. For this scan you can then set its priority, alternatively stop or pause the running scan. The following actions are also accessible: *Set priority for all scans, Pause all scans* or *Stop all scans*.
- ***Run PC Analyzer*** - click to launch the PC Analyzer component.
- ***Update now*** - launches an immediate update.
- ***Help*** - opens the help file on the start page.

5.6. AVG Advisor

AVG Advisor has been designed to detect problems that might be slowing your computer down, or putting it at risk, and to recommend an action to solve the situation. If you see a sudden computer slowdown *(Internet browsing, overall performance)*, it is not usually obvious what exactly the culprit is, and subsequently, how to solve the problem. That is where ***AVG Advisor*** comes in: It will display a notification in the system tray informing you what the problem might be, and suggesting how to fix it. ***AVG Advisor*** keeps monitoring all running processes within your PC for possible issues, and offering tips on how to avoid the problem.

AVG Advisor is visible in the form of a sliding pop-up over the system tray:



Specifically, ***AVG Advisor*** monitors the following:

- ***The state of any currently opened web browser***. Web browsers may overload the memory, especially if multiple tabs or windows have been opened for some time, and consume too much of system resources, i.e. slowing down your computer. In such situation, restarting the web browser usually helps.

- ***Running Peer-To-Peer connections***. After using the P2P protocol for sharing files, the connection can sometimes remain active, using up certain amount of your bandwidth. As a result, you can see web browsing slowdown.

- ***Unknown network with a familiar name***. This usually only applies to users who connect to various networks, typically with portable computers: If a new, unknown network has the same name as a well-known, frequently used network *(e.g. Home or MyWifi)*, confusion can occur, and you can accidentally connect to a completely unknown and potentially unsafe network. ***AVG Advisor*** can prevent this by warning you that the known name actually represents a new network. Of course, if you decide that the unknown network is safe, you can save it to an ***AVG Advisor*** list of known networks so that it is not reported again in the future.

In each of these situation, ***AVG Advisor*** warns you of the possible problem that might occur, and it provides the name and icon of the conflicting process, or application. Also, ***AVG Advisor*** suggests what steps should be taken to avoid the possible problem.

Supported web browsers

The feature works with the following web browsers: Internet Explorer, Chrome, Firefox, Opera, Safari.

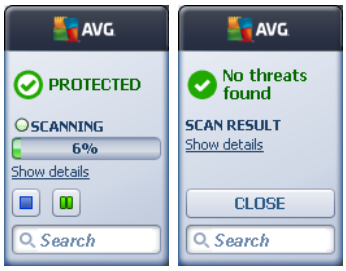
5.7. AVG Gadget

The ***AVG gadget*** is displayed on the Windows desktop (*Windows Sidebar*). This application is only supported in the operating systems Windows Vista and Windows 7. The ***AVG gadget*** offers immediate access to the most important **AVG Internet Security 2012** function, i.e. scanning and updating:

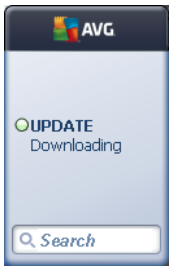
Quick access to scanning and updating

If needed, the ***AVG gadget*** allows you to launch a scan or an update immediately:

- ***Scan now*** - click the ***Scan now*** link to start the whole computer scan directly. You can watch the progress of the scanning in the alternative user interface of the gadget. A brief statistical overview provides information on the number of scanned objects, threats detected, and threats healed. During the scan you can always pause , or stop the scanning process. For detailed data related to the scan results please consult the standard Scan results overview dialog that can be opened directly from the gadget via the ***Show details*** option *(the respective scan results will be listed under Sidebar gadget scan)*.



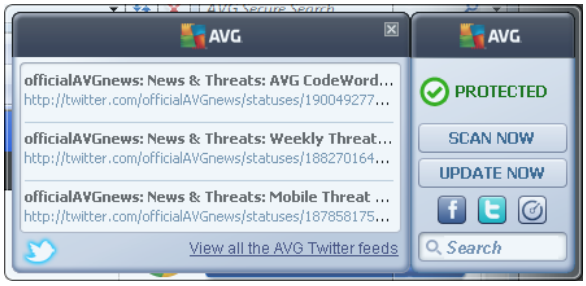
- ***Update now*** - click the ***Update now*** link to launch the **AVG Internet Security 2012** update directly from within the gadget:



Social networks access

AVG gadget also provides a quick link connecting you to the major social networks. Use the respective button to get connected to AVG communities in Twitter, Facebook, or LinkedIn:

- ***Twitter link*** - opens a new ***AVG gadget*** interface providing an overview of the latest AVG feeds posted to Twitter. Follow the ***View all the AVG Twitter feeds*** link to open your Internet browser in a new window, and you will be redirected directly to the Twitter website, specifically to the page devoted to AVG news:



- ***Facebook link*** - opens your Internet browser to the Facebook website, specifically on the ***AVG community*** page.

- ***LinkedIn*** - this option is only available within the network installation (*i.e. provided that you have installed AVG using one of the AVG Business Editions licenses*), and it opens your Internet browser on ***AVG SMB Community*** website within LinkedIn social network.

Other features accessible via gadget

- ***PC Analyzer*** - opens the user interface in the PC Analyzer component, and starts the analysis right away.

- ***Search box*** - type in a keyword and get the search results immediately in a newly opened window with your default web browser.

6. AVG Components

6.1. Anti-Virus

The ***Anti-Virus*** component is a cornerstone of your **AVG Internet Security 2012** and it combines several fundamental features of a security program:

- Scanning Engine
- Resident Protection
- Anti-Spyware Protection

6.1.1. Scanning Engine

The scanning engine which is the base of the ***Anti-Virus*** component 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 in the Virus Vault.

The important feature of AVG Internet Security 2012 protection is that no known virus can run on the computer!

Detection methods

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. ***Anti-Virus*** uses the following detection methods:

- *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

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. **AVG Internet Security 2012** 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 Internet Security 2012** 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.

AVG Internet Security 2012 provides non-stop protection for your computer!

6.1.2. Resident Protection

AVG Internet Security 2012 gives you continuous protection in the form of so-called resident protection. The ***Anti-Virus*** component scans every single file *(with specific extensions or without extensions at all)* that is being opened, saved, or copied. It guards the system areas of the computer, and removable media (*flash disk etc.*). In case a virus is discovered 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 the resident protection runs "in the background". You only get notified when threats are found; at the same time, ***Anti-Virus*** blocks the activation of the threat and removes it.

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

6.1.3. Anti-Spyware Protection

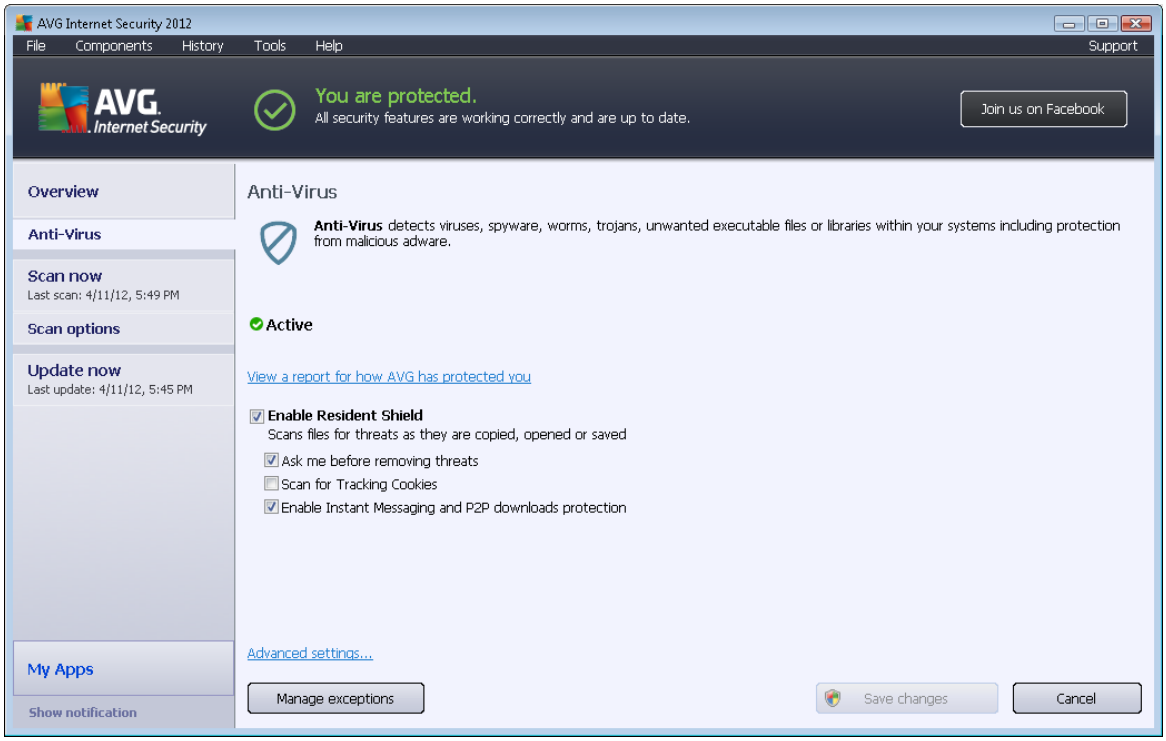
Anti-Spyware consists of a spyware database used for identifying known types of spyware definitions. AVG spyware experts work hard to identify and describe the latest spyware patterns as soon as they emerge, and then add the definitions to the database. Via the update process, these new definitions are downloaded to your computer so that you are always reliably protected even against the latest spyware types. ***Anti-Spyware*** allows you to fully scan your computer for malware/ spyware. It also detects sleeping and non-active malware, i.e. malware that has been downloaded but not yet activated.

What is spyware?

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***, which works like a resident shield and scans your applications in the background as you run them.

6.1.4. Anti-Virus Interface

The ***Anti-Virus*** component's interface provides brief information on the component's functionality, information on the component's current status *(Active)*, and basic configuration options for the component:



Configuration options

The dialog provides some elementary configuration options for features available within the ***Anti-Virus*** component. You can find a brief description of these below:

- ***View an online report for how AVG has protected you*** - the link redirects you to a specific page on the AVG website (http://www.avg.com/). On the page you can find a detailed statistical overview of all **AVG Internet Security 2012** activities performed on your computer within a specified period of time and in total.

- ***Enable Resident Shield*** - this option allows you to easily switch resident protection on/off. 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. By default, the function is on, and it is recommended that you keep it so! With resident protection on you can also decide how an detected infections should be treated:

    - ***Ask me before removing threats*** - keep the option checked to confirm you want to be asked whenever a threat is detected before it is removed to the Virus Vault. This choice has no impact on the security level, and it only reflects your preferences.

    - ***Scan for Tracking Cookies*** - independently of the previous options, you can decide whether you want to scan for tracking cookies. *(Cookies are 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.)* In specific cases you can switch this

option on to achieve maximum security levels, however it is switched off by default.

- o ***Enable Instant Messaging and P2P downloads protection*** - check this item if you wish to verify that the instant messaging communication (*e.g. ICQ, MSN Messenger, ...*) is virus free.

- ***Advanced settings***... - click the link to get redirected to the respective dialog within the Advanced settings of **AVG Internet Security 2012**. There you can edit the component's configuration in detail. However, please note that the default configuration of all components is set up so that **AVG Internet Security 2012** provides optimum performance, and maximum security. Unless you have a real reason to do so, it is recommended that you keep the default configuration!

Control buttons

Within the dialog you may use the following control buttons:

- ***Manage exceptions*** - opens a new dialog named ***Resident Shield - Exceptions***. The configuration of exceptions from Resident Shield scanning is also accessible from the main menu, following the sequence Advanced settings / Anti-Virus / Resident Shield / Exceptions *(please see the respective chapter for detailed descriptions)*. Within the dialog you may specify files and folders that should be excluded from the Resident Shield scanning. If this is not essential, we strongly recommend not excluding any items! The dialog provides the following control buttons:

  - o *Add Path* – specify a directory *(or directories)* to be excluded from the scanning by selecting them one by one from the local disk navigation tree.

  - o *Add File* – specify files to be excluded from the scanning by selecting them one by one from the local disk navigation tree.

  - o *Edit Item* – allows you to edit the specified path to a selected file or folder.

  - o *Remove Item* – allows you to delete the path to a selected item from the list.

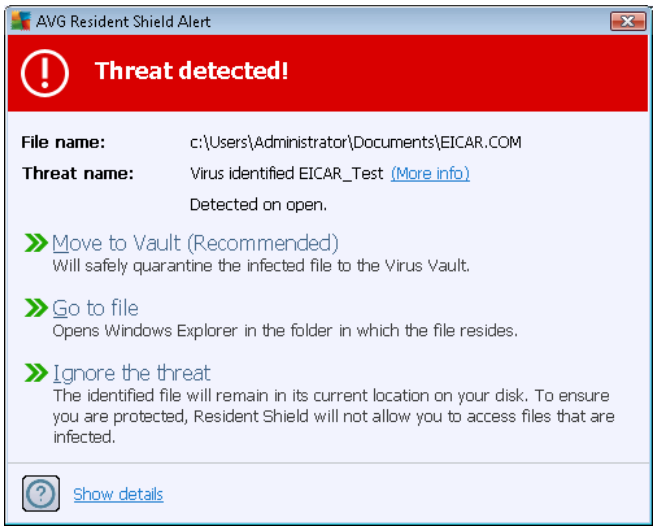
  - o *Edit List* - allows you to edit the entire list of defined exceptions in a new dialog that behaves like a standard text editor.

- ***Apply*** - saves all changes to the component's settings performed in this dialog, and returns to the main user interface of **AVG Internet Security 2012** (*components overview*).

- ***Cancel*** - cancels all changes to the component's settings performed in this dialog. No changes will be saved. You will return to the main user interface of **AVG Internet Security 2012** (*components overview*).

6.1.5. Resident Shield Detections

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:



Within this warning dialog you will find data on the file that was detected and assigned as infected (*File name*), the name of the recognized infection (*Threat name*), and a link to the Virus encyclopedia where you can find detailed information on the detected infection, if known (*More info*).

You also have to decide what action should be taken now. Several alternative options are available. ***Please note that, depending upon specific conditions (what kind of file is infected, and where it is located), not all of the options are always available!***

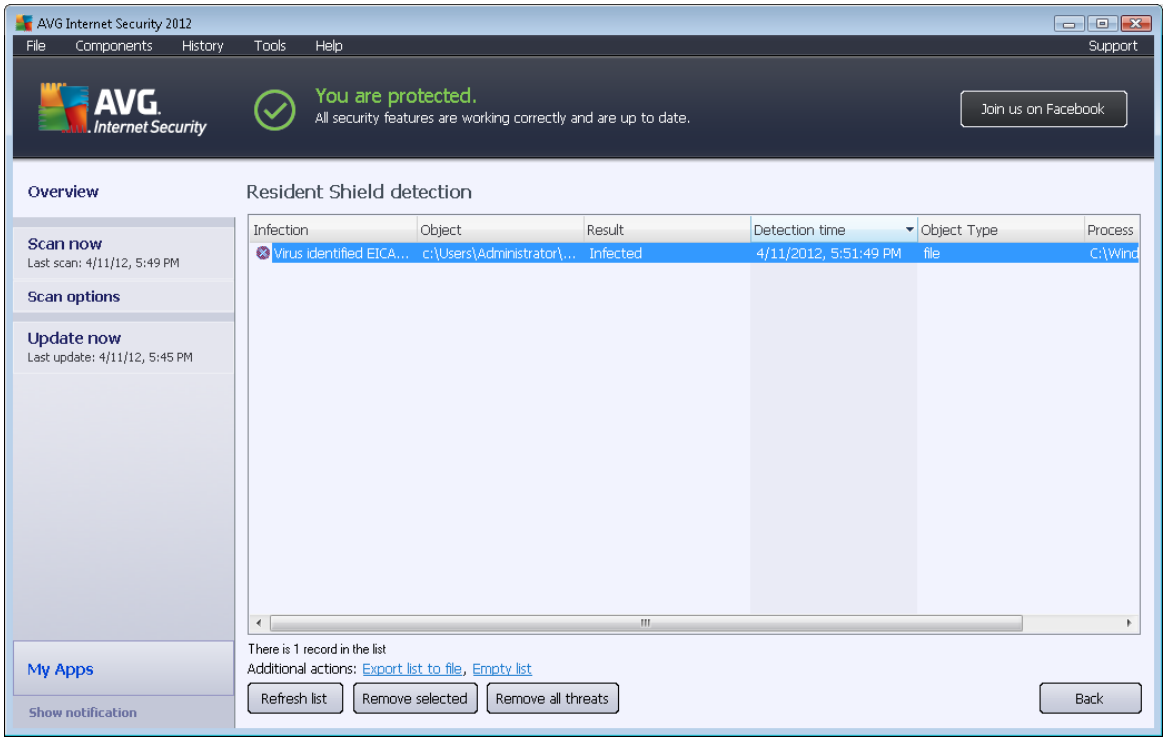
- ***Heal*** - this button only appears if the detected infection can be healed. Then, it removes it from the file, and restores the file to the original state. If the file itself is a virus, use this function to delete it (*i.e. removed to the Virus Vault*)
- ***Move to Vault (Recommended)*** - the virus will be moved to the Virus Vault
- ***Go to file*** - this option redirects you to the exact location of the suspicious object (*opens new Windows Explorer window*)
- ***Ignore the threat*** - we strictly recommend NOT using this option unless you have a very good reason to do so!

Note: *It may happen that the size of the detected object exceeds the free space limit in the Virus Vault. If so, a warning message pops up informing you about the issue as you try to move the infected object to the Virus Vault. However, the Virus Vault size can be modified. It is defined as an adjustable percentage of the real size of your hard disk. To increase the size of your Virus Vault, go to the Virus Vault dialog within the AVG Advanced Settings, via the 'Limit Virus Vault size' option.*

In the bottom section of the dialog you can find the ***Show details*** link - click it to open a pop-up window with detailed information on the process running while the infection was detected, and the process' identification.

Resident Shield detections overview

The entire overview of all threats detected by Resident Shield can be found in the ***Resident Shield detection*** dialog accessible from the system menu option History / Resident Shield detection:



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 up the potentially dangerous object so that it could be detected

In the bottom part of the dialog, below the list, you will find information on the total number of detected objects listed above. You can also 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 main dialog (*components overview*).

6.2. Link Scanner

LinkScanner protects you from the increasing number of 'here today, gone tomorrow' threats on the web. These threats can be hidden on any type of website, from governments to big, well-known brands to small businesses, and they rarely stick around on those sites for more than 24 hours. ***LinkScanner*** protects you by analyzing the web pages behind all the links on any web page you're viewing and making sure they're safe at the only time that matters – when you're about to click that link.

LinkScanner is not intended for server platforms protection!

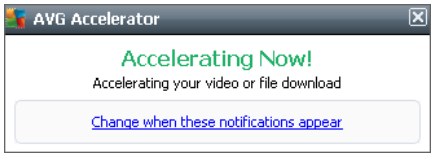
The ***LinkScanner*** technology consists of the following main features:

- Search-Shield contains list of websites *(URL addresses)* which are known to be dangerous. When searching with Google, Yahoo! JP, eBay, Twitter, Digg, SlashDot, AVG Secure Search, Yandex, Baidu, Bing, AOL, AltaVista, EarthLink, Ask, and Seznam, all results of the search are checked against this list and a verdict icon is shown *(for Yahoo! search results only "exploited website" verdict icons are shown)*.

- Surf-Shield scans the contents of the websites you are visiting, regardless of the websites address. Even if a website is not detected by 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 Surf-Shield once you try to visit it.

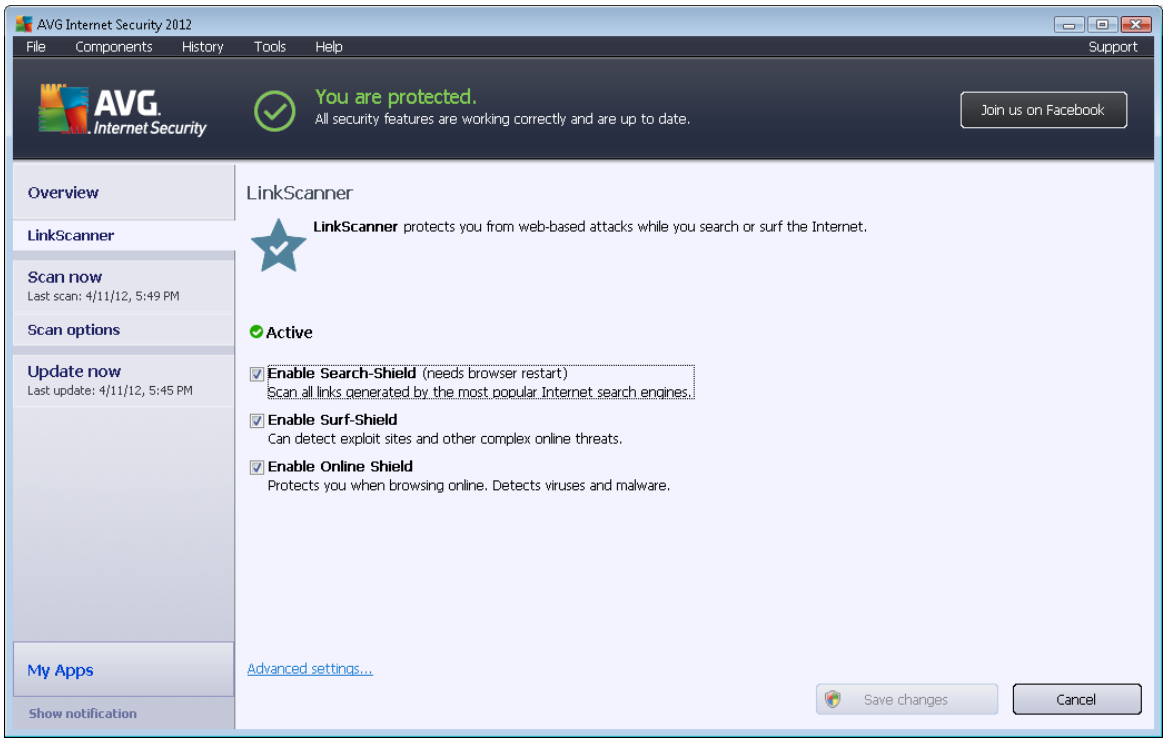
- Online Shield works as a real-time protection when surfing the Internet. It scans the contents of visited web pages, and possible files included in them, even before these are displayed in your web browser or downloaded to your computer. Online Shield detects viruses and spyware contained in the page you are about to visit and stops the download instantly so that no threats ever get to your computer.

- ***AVG Accelerator*** allows smoother online video playback and makes additional downloads easier. When the video-acceleration process is in progress, you will be notified via the system tray pop-up window.



6.2.1. Link Scanner Interface

The LinkScanner component main dialog provides a brief description of the component's functionality and information on its current status *(Active)*:



In the bottom part of the dialog basic configuration options for the component are available:

- ***Enable Search-Shield*** - (*on by default*): Uncheck the box only if you have a good reason to switch off the Search Shield functionality.
- ***Enable 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 Online Shield*** - (*on by default*): Real-time scanning of the web pages you are about to visit for possible viruses or spyware. If these are detected, the download stops immediately so that no threats ever get to your computer.

6.2.2. Search-Shield detections

When searching the Internet with the ***Search-Shield*** on, all search results returned from the most popular search engines (*Google, Yahoo! JP, AVG Secure Search, Yandex, Baidu, Bing, AOL, AltaVista, EarthLink, Ask, Seznam, eBay, Twitter, Digg, and SlashDot*) are evaluated for dangerous or suspicious links. By checking these links and marking the bad links, the LinkScanner 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 you that the link verification is in progress. When the evaluation is complete, the respective informative icon will be displayed:

The linked page is safe.

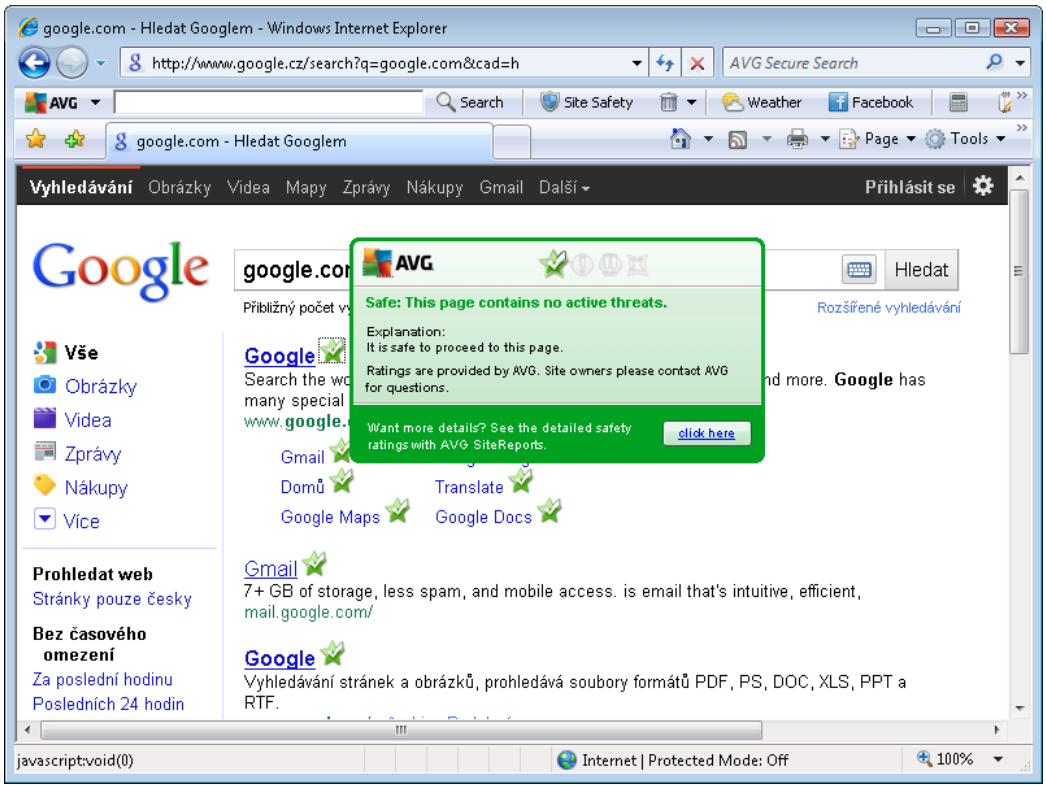
The linked page does not contain threats but is somewhat suspicious (*questionable in origin or motive, therefore not recommended for e-shopping etc.*).

The linked page may itself be safe but contains further links to positively dangerous pages; or the code is suspicious, though is 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*):

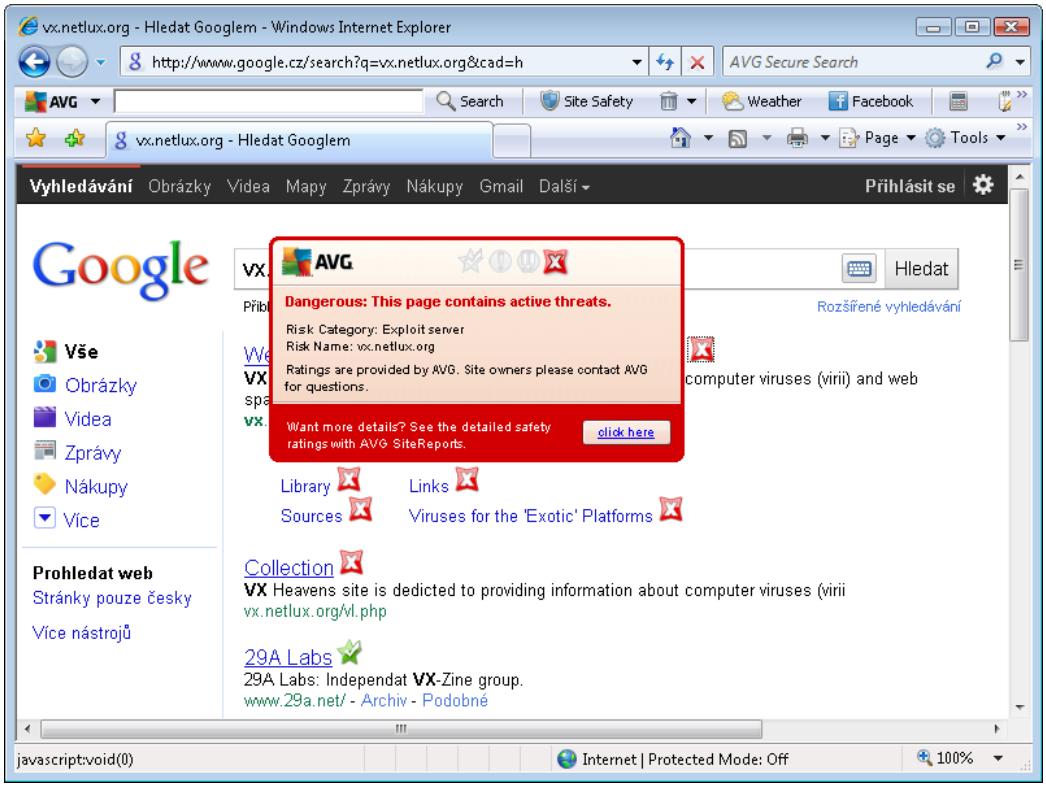


6.2.3. Surf-Shield detections

This powerful protection will block malicious content of any web page 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 web page containing exploitation or other serious threats, the LinkScanner will not allow your browser to display it.

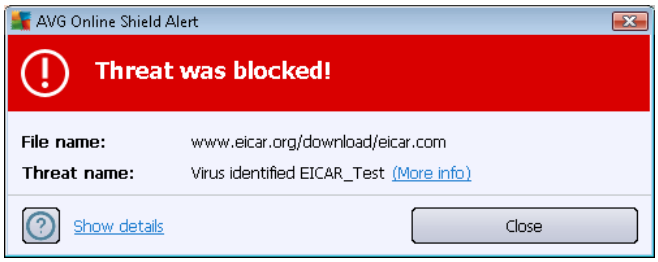
If you do encounter a malicious web site, within your web browser the LinkScanner will warn you with a screen similar to:



Entering such website is highly risky and cannot be recommended!

6.2.4. Online Shield detections

Online 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:

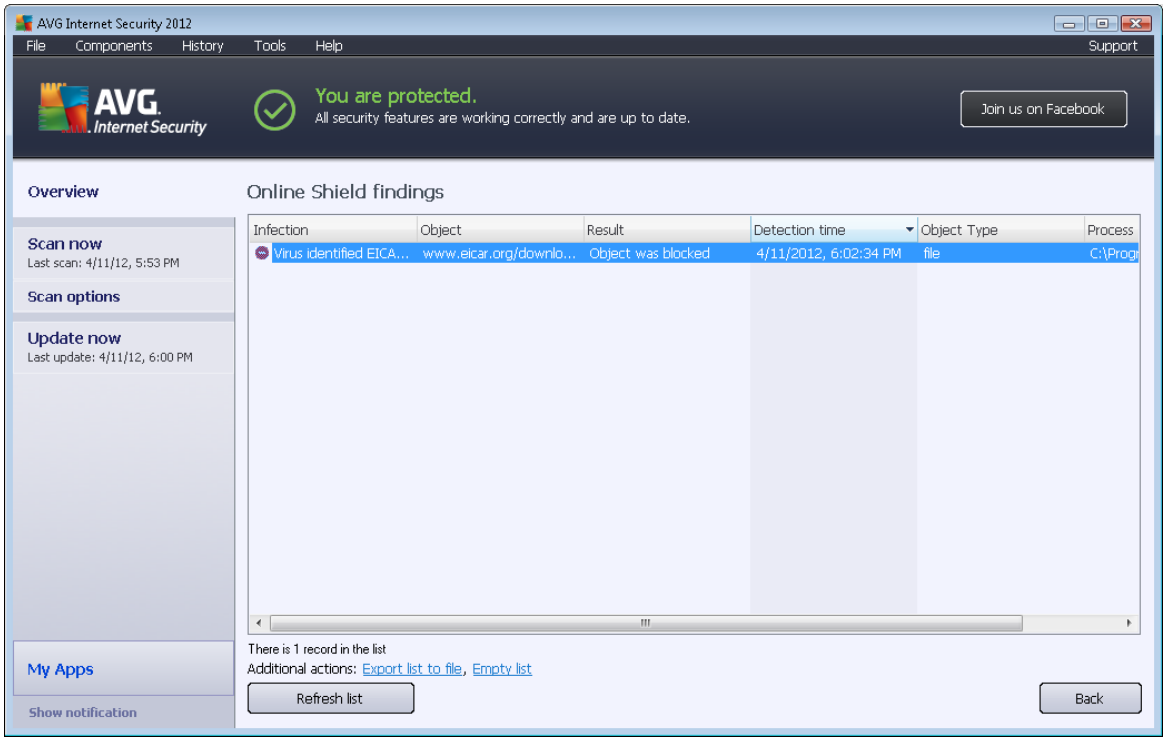


Within this warning dialog you will find data on the file that was detected and assigned as infected (

File name), the name of the recognized infection (*Threat name*), and a link to the Virus encyclopedia where you can find detailed information on the detected infection (*if known*). The dialog provides the following buttons:

- ***Show details*** - click the ***Show details*** button to open a new pop-up window where you can find information on the process running while the infection was detected, and the process' identification.
- ***Close*** - click the button to close the warning dialog.

The suspicious web page will not be opened, and the threat detection will be logged in the list of ***Online Shield findings*** - this overview of detected threats is accessible via the system menu History / Online 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 up the potentially dangerous object so that it

could be detected

In the bottom part of the dialog, below the list, you will find information on the total number of detected objects listed above. You can also 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

- ***Refresh list*** - update the list of findings detected by ***Online Shield***
- ***Back*** - switch back to the default AVG main dialog *(components overview)*

6.3. E-mail Protection

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.

The ***E-mail Protection*** component is responsible for scanning every e-mail message sent or received; whenever a virus is detected in an e-mail, it is removed to the Virus Vault immediately. The component can also filter out certain types of e-mail attachments, and add a certification text to infection-free messages. ***E-mail Protection*** consists of two main functions:

- E-mail Scanner
- Anti-Spam

6.3.1. E-mail Scanner

Personal E-mail Scanner scans incoming/outgoing e-mails automatically. You can use it with e-mail clients that do not have their own plug-in in AVG (*but can be also used to scan e-mail messages for e-mail clients that AVG supports with a specific plug-in, i.e. Microsoft Outlook*). Primarily, it is to be used with e-mail applications such as Outlook Express, Incredimail, etc.

During AVG installation 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 the 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 the Virus Vault immediately. Then the message is passed to the e-mail client.
- ***Outgoing mail:*** The message is sent from the 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).

E-mail Scanner is not intended for server platforms!

6.3.2. Anti-Spam

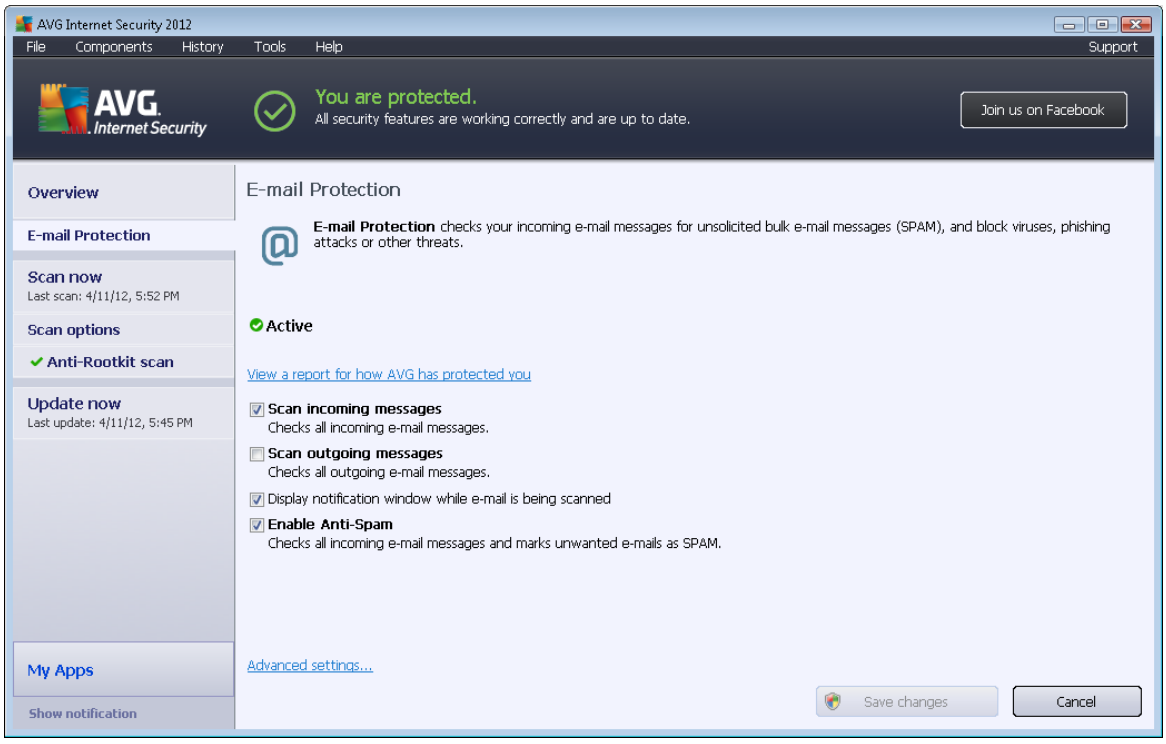
How does Anti-Spam work?

Anti-Spam checks all incoming e-mail messages and marks unwanted e-mails as spam. ***Anti-Spam*** can modify the subject of the email (*that has been identified as spam*) by adding a special text string. You can then easily filter your emails in your email client. The ***Anti-Spam*** component uses several analysis methods to process each e-mail message, offering maximum possible protection from unwanted e-mail messages. ***Anti-Spam*** uses a regularly updated database for the detection of spam. It is also possible to use RBL servers (*public databases of "known spammer" email addresses*) and to manually add email addresses to your Whitelist (*never mark as spam*) and Blacklist (*always mark as spam*).

What is a spam?

Spam refers to unsolicited e-mail, mostly advertising a product or service that is mass mailed to a huge number of e-mail addresses at the same time, filling recipients' mail boxes. Spam does not refer to legitimate commercial e-mail for which consumers have given their consent. Spam is not only annoying, but also can often be a source of scams, viruses, or offensive content.

6.3.3. E-mail Protection Interface



In the ***E-mail Protection*** dialog you can find a brief text describing the component's functionality, and information on its current status *(Active).* Use the ***View an online report for how AVG has protected you*** link to review detailed statistics of **AVG Internet Security 2012** activities and detections on a dedicated page on the AVG website (http://www.avg.com/).

Basic E-mail Protection settings

In the ***E-mail Protection*** dialog you can also edit some elementary features of the component's functionality:

- ***Scan incoming messages*** *(on by default)* - tick the box to specify that all e-mails delivered to your account should be scanned for viruses.
- ***Scan outgoing messages*** *(off by default)* - tick the box to confirm all e-mail sent from your account should be scanned for viruses.
- ***Display notification window while e-mail is being scanned*** *(on by default)* - mark the item to confirm you want to be informed via a notification dialog displayed over the AVG icon on the system tray during the scanning of your e-mail.
- ***Enable Anti-Spam*** *(on by default)* - mark the item to specify whether you want to have your incoming mail filtered for unsolicited e-mail.

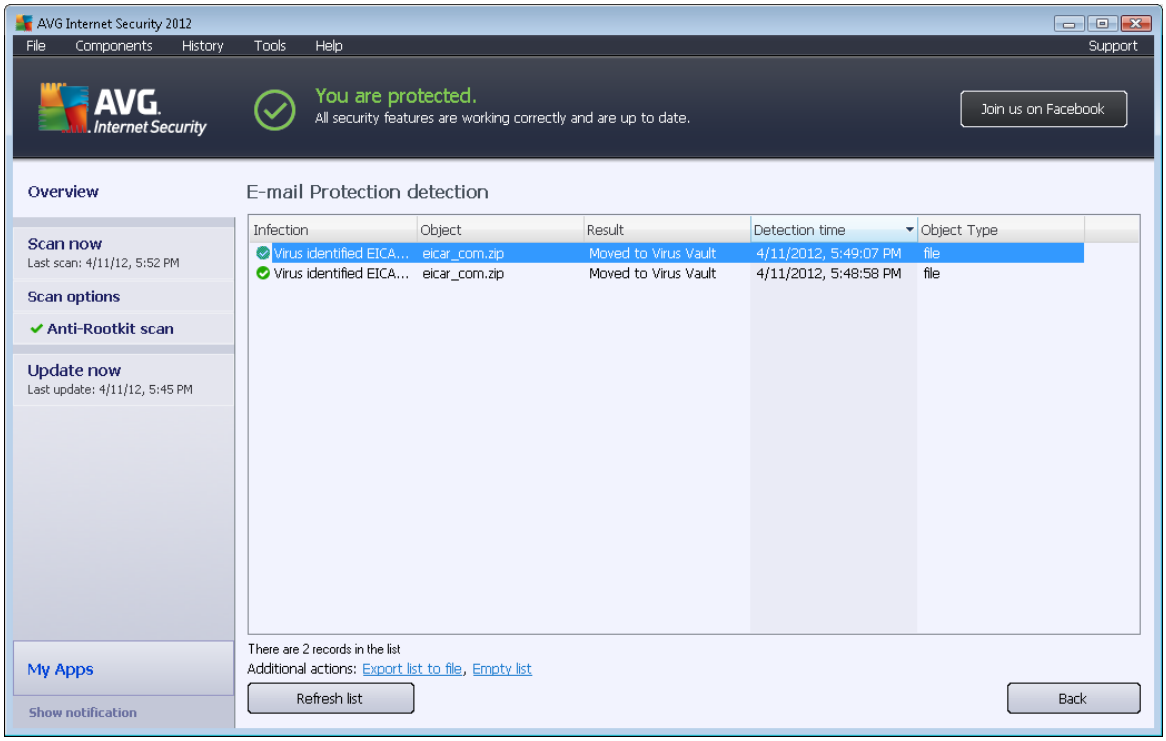
The software vendor has set up all AVG components to give optimum performance. Unless you have a real reason to do so, do not change the AVG configuration. Any changes to settings should only be performed by an experienced user. If you need to change the AVG configuration, select the system menu item 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 Protection*** dialog 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 main dialog (*components overview*)

6.3.4. E-mail Scanner Detections



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 Protection 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, below the list, you will find information on total number of detected objects listed above. You can also 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 previously displayed dialog.

6.4. Firewall

The ***Firewall*** is a system that enforces an access control policy between two or more networks by blocking/permitting traffic. The ***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 the ***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 and 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, ***Firewall*** also protects individual computers from attacks initiated by internal users on other computers in the network.

Computers that are not protected by the Firewall become an easy target to computer hackers and data thefts.

Recommendation: *Generally it is not recommended that you 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.*

6.4.1. Firewall Principles

In **AVG Internet Security 2012**, the ***Firewall*** controls all traffic on every network port of your computer. Based on the defined rules, ***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.

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

6.4.2. Firewall Profiles

The Firewall allows you to define specific security rules based on whether your computer is located in a domain, 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 the 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 external networks, nor can communicate outside. This system profile cannot be duplicated, deleted, and its settings cannot be modified.

- ***Custom profiles*** - the custom profiles enable you to take advantage of automatic profile switching which can be especially useful if you connect to various networks frequently *(e.g. with a notebook).* Custom profiles are generated automatically after **AVG Internet Security 2012** installation, and covering any individual needs for Firewall policy rules. The following custom profiles are available:

    - ***Directly connected to the Internet*** – suitable for common desktop home computers or notebooks connected directly to the Internet, without any extra protection. This option is also recommended when you connect your notebook to various unknown and probably unsecured networks (*e.g. in an Internet cafe, hotel room, etc.*).The strictest Firewall policy rules of this profile ensure that such a computer is adequately protected.

    - ***Computer within domain*** – suitable for computers in a local network, typically at school or work. It is assumed that the network is professionally administered and protected by some additional measures, so the security level can be lower than in the above-mentioned cases, allowing access to shared folders, disk units etc.

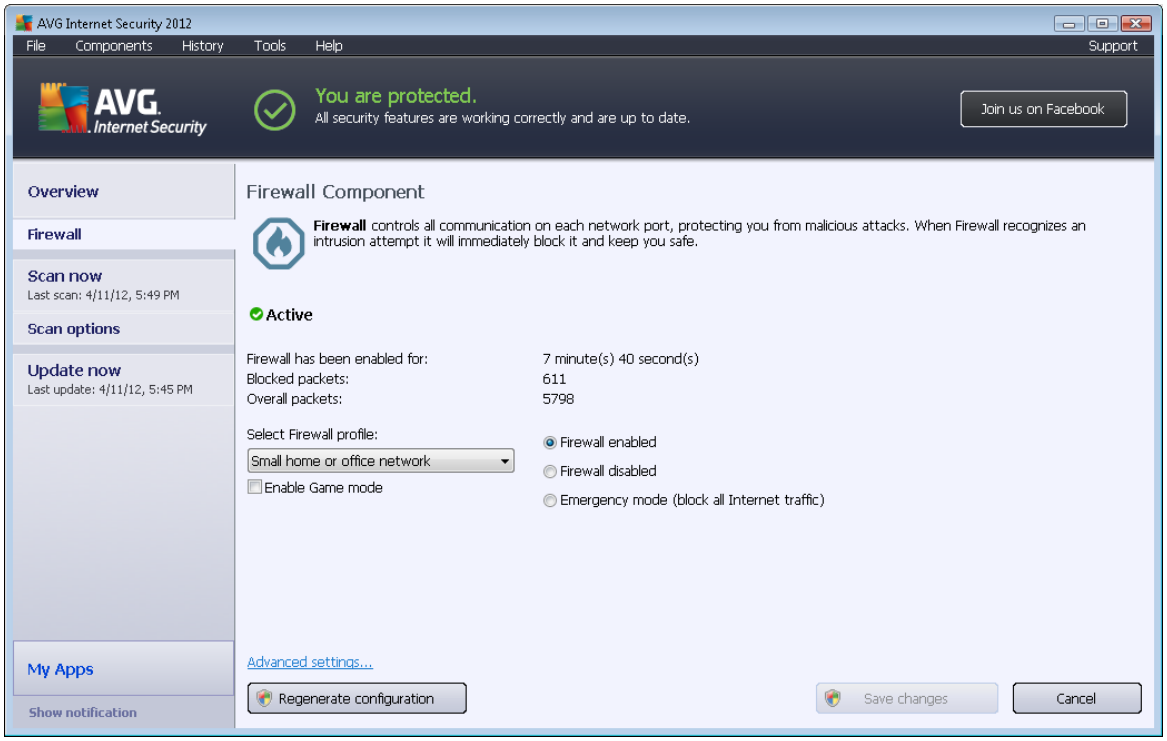
    - ***Small home or office network*** – suitable for computers in a small network, typically at home or in a small business. Usually, this kind of network has no "central" administrator, and only consists of several computers connected together, often sharing a printer, scanner or similar device, which the Firewall rules must reflect.

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.

6.4.3. Firewall Interface



The main dialog named ***Firewall Component*** provides some basic information on the component's functionality, its status *(Active)*, and a brief overview of the component's statistics:

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

Basic Firewall settings

- ***Select Firewall profile*** - from the roll-down menu select one of the defined profiles (*for a detailed description of each profile and its recommended use please consult chapter Firewall Profiles*)

- ***Enable Game mode*** - check this option to ensure that when running full-screen applications (*games, presentations, movies, 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. ***Note:*** With the gaming mode on, all scheduled tasks (scans, updates) are postponed till the application is closed.

- Furthermore, in this basic settings section you can select from three alternative options defining the current status of the Firewall component:

    - ***Firewall enabled*** *(by default)* - select this option to allow communication to those applications that are 'allowed' in the set of rules defined within the selected Firewall profile.

    - ***Firewall disabled*** - this option switches the 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; the Firewall is still running but all network traffic is stopped.

Please note: *The software vendor has set up all AVG Internet Security 2012 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 the Firewall configuration, select the system menu item* ***Tools/Firewall settings*** *and edit the Firewall configuration in the newly opened Firewall Settings dialog.*

Control buttons

- ***Regenerate configuration*** - press this button to overwrite the current Firewall configuration, and to revert to the default configuration based on automatic detection.

- ***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 main dialog (*components overview*).

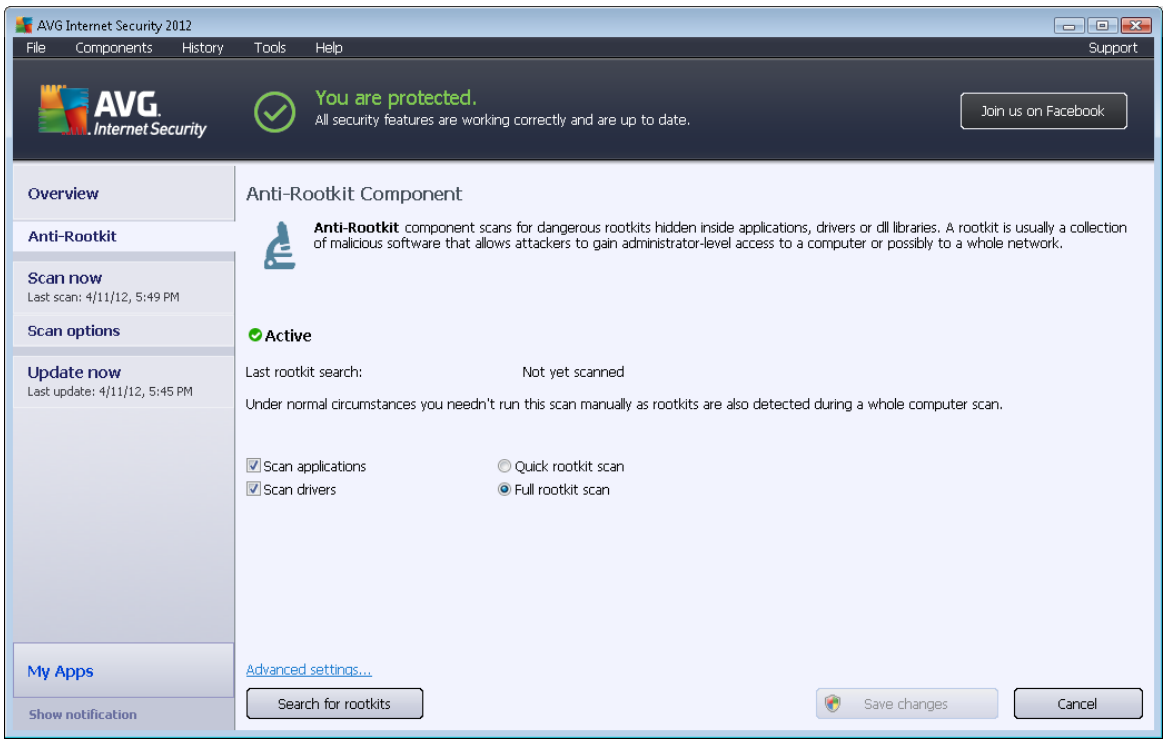
6.5. Anti-Rootkit

Anti-Rootkit is a specialized tool detecting and effectively removing dangerous rootkits, i.e. programs and technologies that can camouflage the presence of malicious software on your computer. ***Anti-Rootkit*** is able to detect rootkits based on a predefined set of rules. Please note, that all rootkits are detected *(not just the infected ones)*. If ***Anti-Rootkit*** finds a rootkit, it does not necessarily mean the rootkit is infected. Sometimes, rootkits are used as drivers or they are a part of correct applications.

What is a 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, 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.

6.5.1. Anti-Rootkit Interface



The ***Anti-Rootkit*** dialog provides a brief description of the component's functionality, provides information on the component's current status *(Active)*, and also gives information on the last time the ***Anti-Rootkit*** test was launched (*Last rootkit search; the rootkit test is a default process running within the Whole Computer Scan*). The ***Anti-Rootkit*** dialog also provides the Tools/Advanced Settings link. Use the link to get redirected to the environment for the advanced configuration of the ***Anti-Rootkit*** component.

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.

Basic Anti-Rootkit settings

In the bottom part of the dialog you can set up some elementary functions of the rootkit presence scanning. First, mark up the respective check-boxes to specify objects that should be scanned:

- ***Scan applications***
- ***Scan drivers***

You can also 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*).

Control buttons

- ***Search for rootkits*** - since the rootkit scan is not an implicit part of the Scan of the whole computer, you can run the rootkit scan directly from the ***Anti-Rootkit*** interface using this button.
- ***Save changes*** - press this button to save all changes made in this interface and to return to the default AVG main dialog (*components overview*).
- ***Cancel*** - press this button to return to the default AVG main dialog (*components overview*) without having saved any changes you made.

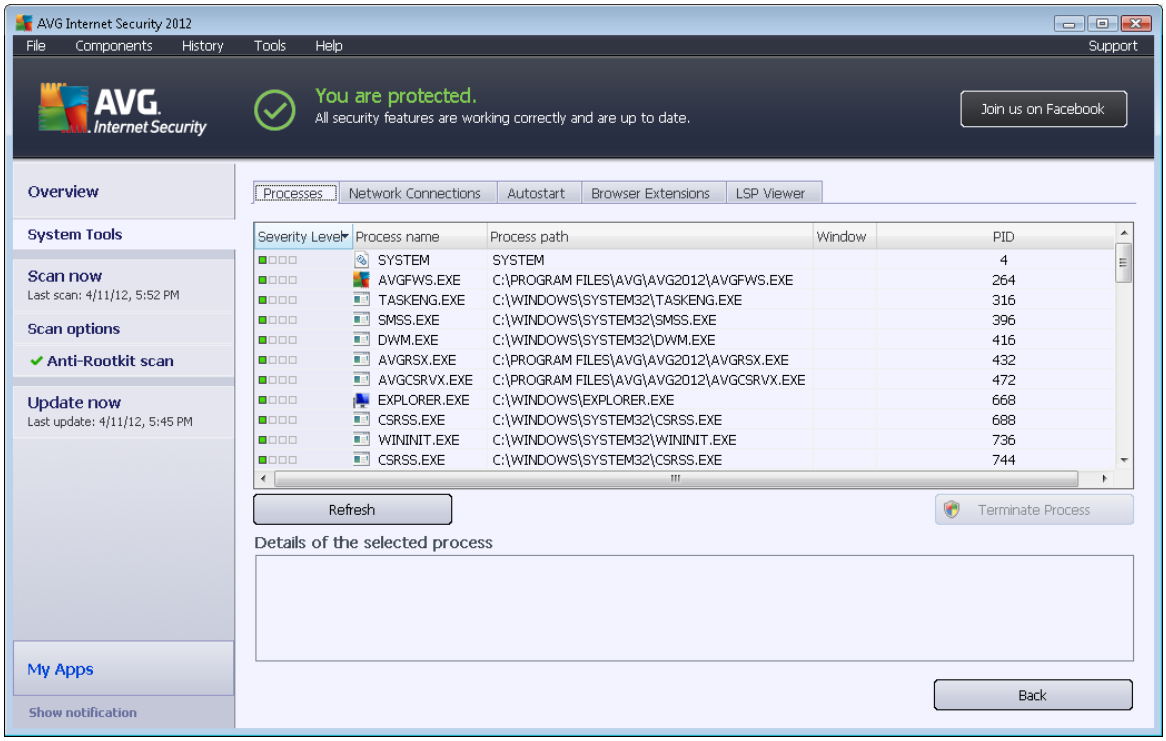
6.6. System Tools

System Tools refer to tools offering a detailed summary of the **AVG Internet Security 2012** environment and the operating system. The component displays an overview of:

- Processes - list of processes (*i.e. running applications*) that are currently active on your computer
- Network connections - list of currently active connections
- Autostart - list of all applications that are executed during Windows system start-up
- Browser Extensions - list of plug-ins (*i.e. applications*) that are installed inside your Internet browser
- LSP Viewer - list of Layered Service Providers (*LSP*)

Specific overviews can also be edited but this is only recommended for highly experienced users!

6.6.1. Processes



The ***Processes*** dialog contains a list of processes (*i.e. running applications*) that are currently active on your computer. The list is divided into several columns:

- ***Severity Level*** – graphical identification of the respective process severity on a four-levels scale from less important (■□□□) up to critical (■■■■)
- ***Process name*** - name of the running process
- ***Process path*** - physical path to the running process
- ***Window*** - if applicable, indicates application Window name
- ***PID*** - the process identification number is a unique Windows internal process identifier

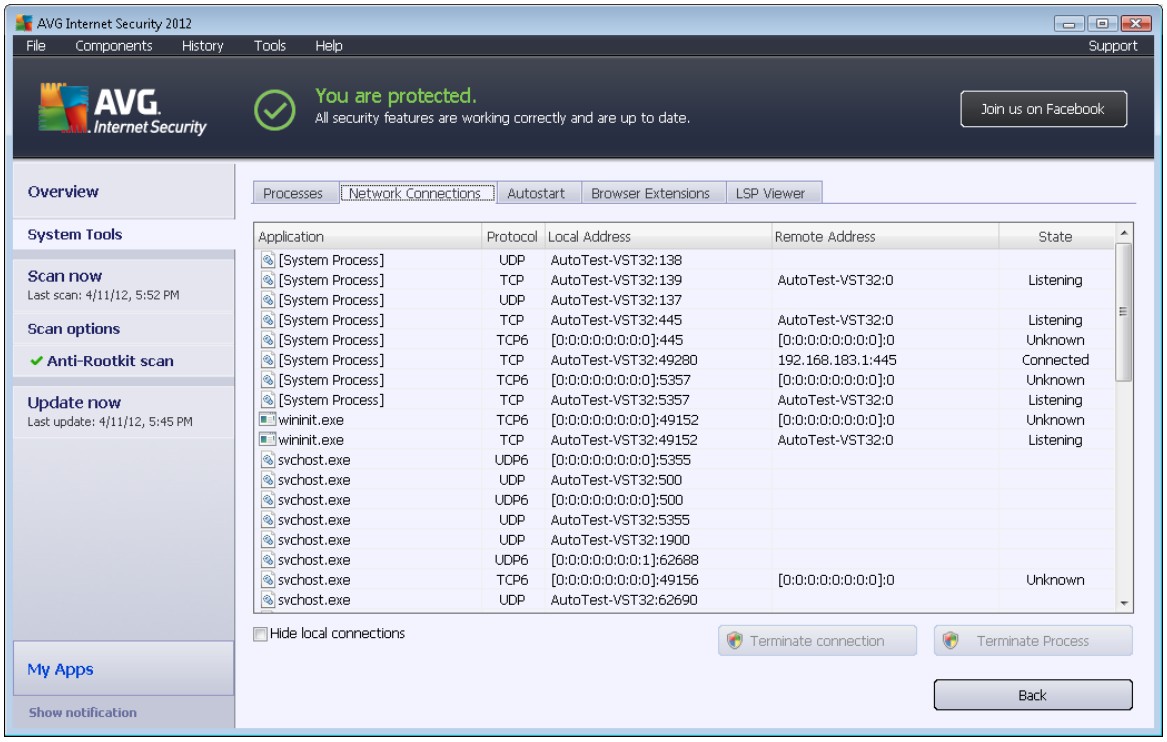
Control buttons

The control buttons available within the ***Processes*** tab are as follows:

- ***Refresh*** - updates the list of processes according to the current status
- ***Terminate Process*** - you can select one or more applications and then terminate them by pressing this button. ***We strongly suggest not terminating any applications, unless you are absolutely sure that they represent a real threat!***

- ***Back*** - switches you back to the default AVG main dialog (*components overview*)

6.6.2. Network Connections



The ***Network Connections*** dialog contains a list of currently active connections. The list is divided into the following columns:

- ***Application*** - name of the application related to the connection (*with the exception of Windows 2000 where the information is not available*)
- ***Protocol*** - transmission protocol type used for the connection:
  - TCP - protocol used in conjunction with Internet Protocol (IP) to transmit information over the Internet
  - UDP - alternative to TCP protocol
- ***Local address*** - IP address of the local computer and the port number used
- ***Remote address*** - IP address of the remote computer and the port number connected to. If possible, it will also look up the host name of the remote computer.
- ***State*** - indicates the most probable current state (*Connected, Server should close, Listen, Active close finished, Passive close, Active close*)

To list only external connections, tick the ***Hide local connections*** checkbox in the bottom section of the dialog under the list.

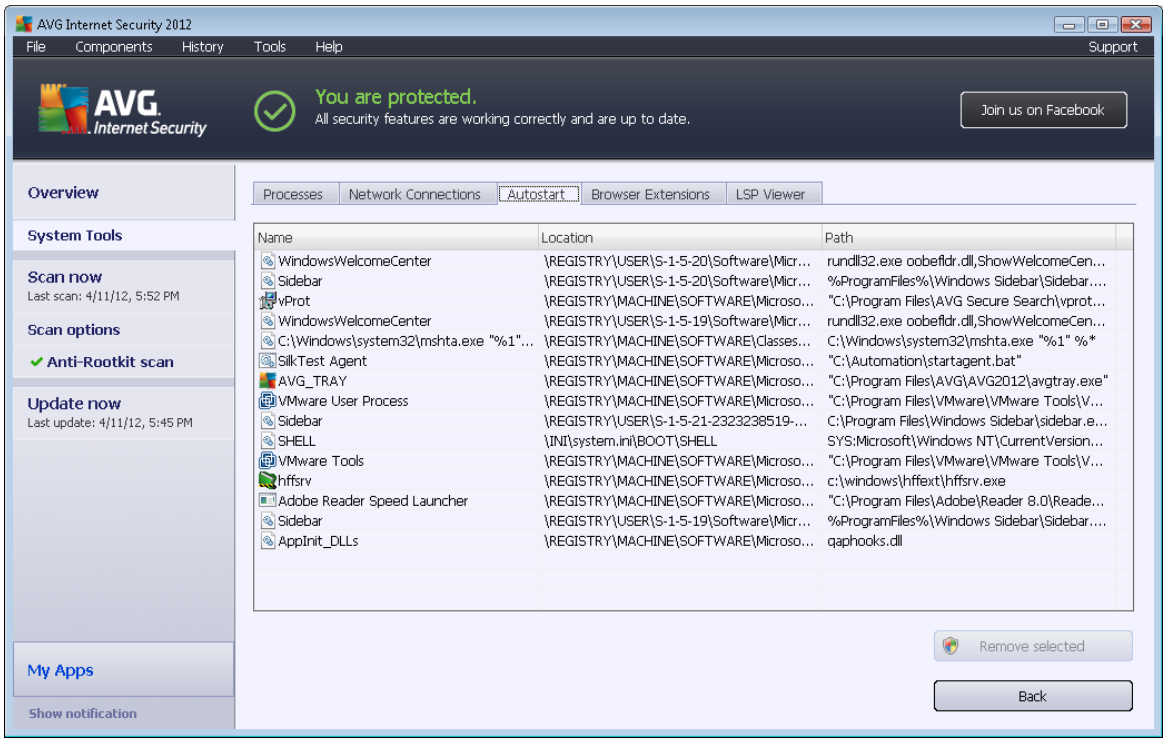
Control buttons

The control buttons available within the ***Network Connections*** tab are as follows:

- ***Terminate Connection*** - closes one or more connections selected in the list
- ***Terminate Process*** - closes one or more applications related to connections selected in the list
- ***Back*** - switches back to the default AVG main dialog (components overview).

Sometimes it is possible to terminate only applications that are currently in the connected state. We strongly suggest not terminating any connections, unless you are absolutely sure that they represent a real threat!

6.6.3. Autostart



The ***Autostart*** dialog shows a list of all applications that are executed during Windows system start-up. Very often, several malware applications add themselves automatically to the start-up registry entry.

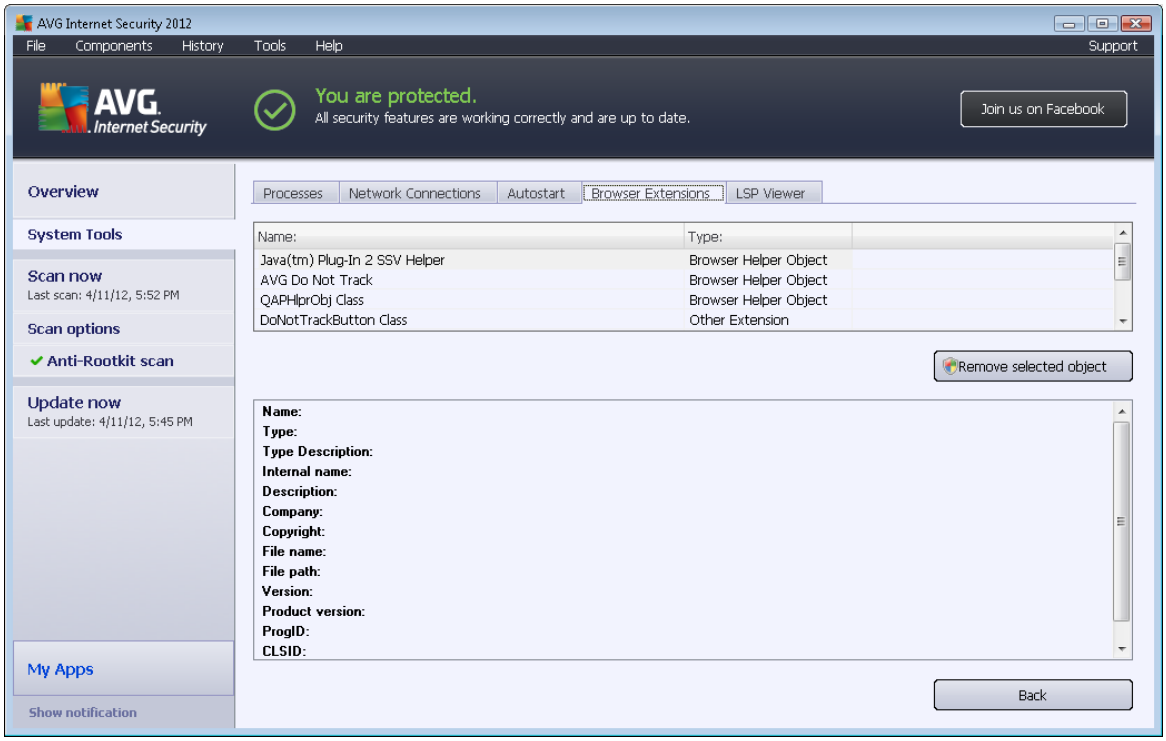
Control buttons

The control buttons available within the ***Autostart*** tab are as follows:

- ***Remove selected*** - press the button to delete one or more selected entries.
- ***Back*** - switches you back to the default AVG main dialog *(components overview).*

We strongly suggest not deleting any applications from the list, unless you are absolutely sure that they represent a real threat!

6.6.4. Browser Extensions



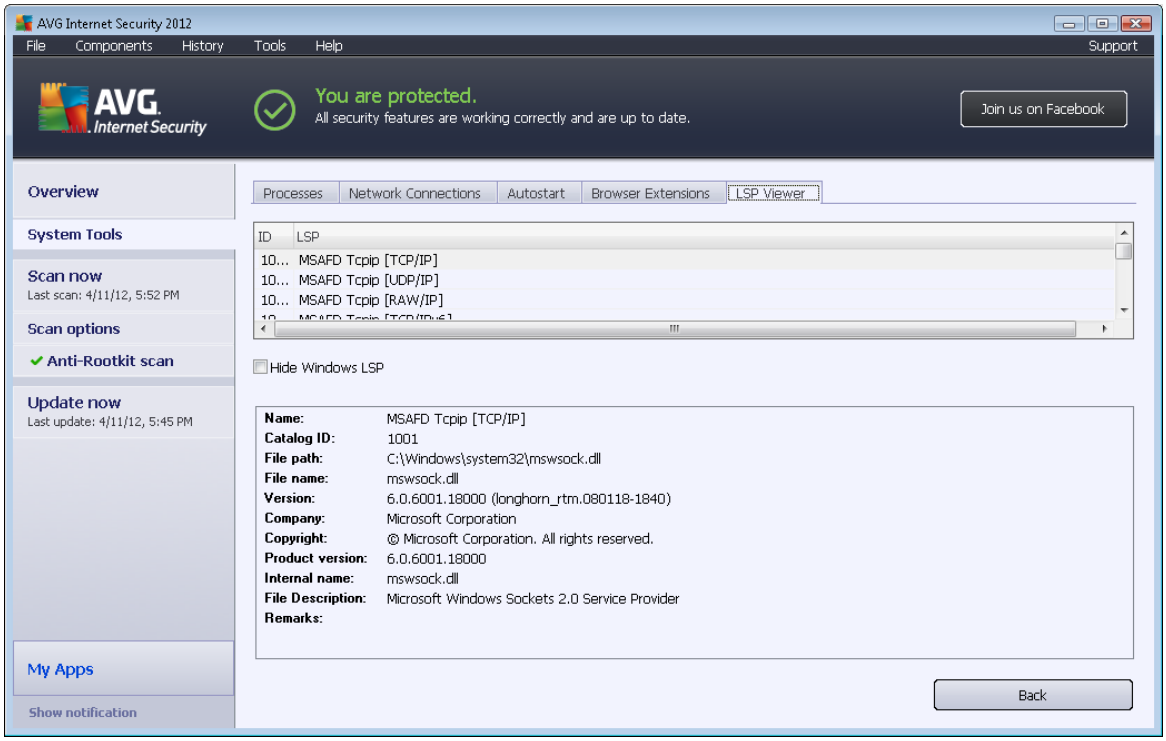
The ***Browser Extensions*** dialog contains a list of plug-ins (*i.e. applications*) that are installed inside your Internet browser. This list may contain regular application plug-ins as well as potential malware programs. Click on an object in the list to obtain detailed information on the selected plug-in that will be displayed in the bottom section of the dialog.

Control buttons

The control buttons available within the ***Browser Extensions*** tab are as follows:

- ***Remove selected object*** - removes the plug-in that is currently highlighted in the list. ***We strongly suggest not deleting any plug-ins from the list, unless you are absolutely sure that they represent a real threat!***
- ***Back*** - switches you back to the default AVG main dialog *(components overview).*

6.6.5. LSP Viewer



The ***LSP Viewer*** dialog shows a list of Layered Service Providers (LSP).

A ***Layered Service Provider*** (LSP) is a system driver linked into the networking services of the Windows operating system. It has access to all data entering and leaving the computer, including the ability to modify this data. Some LSPs are necessary to allow Windows to connect you to other computers, including the Internet. However, certain malware applications may also install themselves as an LSP, thus having access to all data your computer transmits. Therefore, this review may help you to check all possible LSP threats.

Under certain circumstances, it is also possible to repair broken LSPs (*for example when the file has been removed but the registry entries remain untouched*). A new button for fixing the issue is displayed once a repairable LSP is discovered.

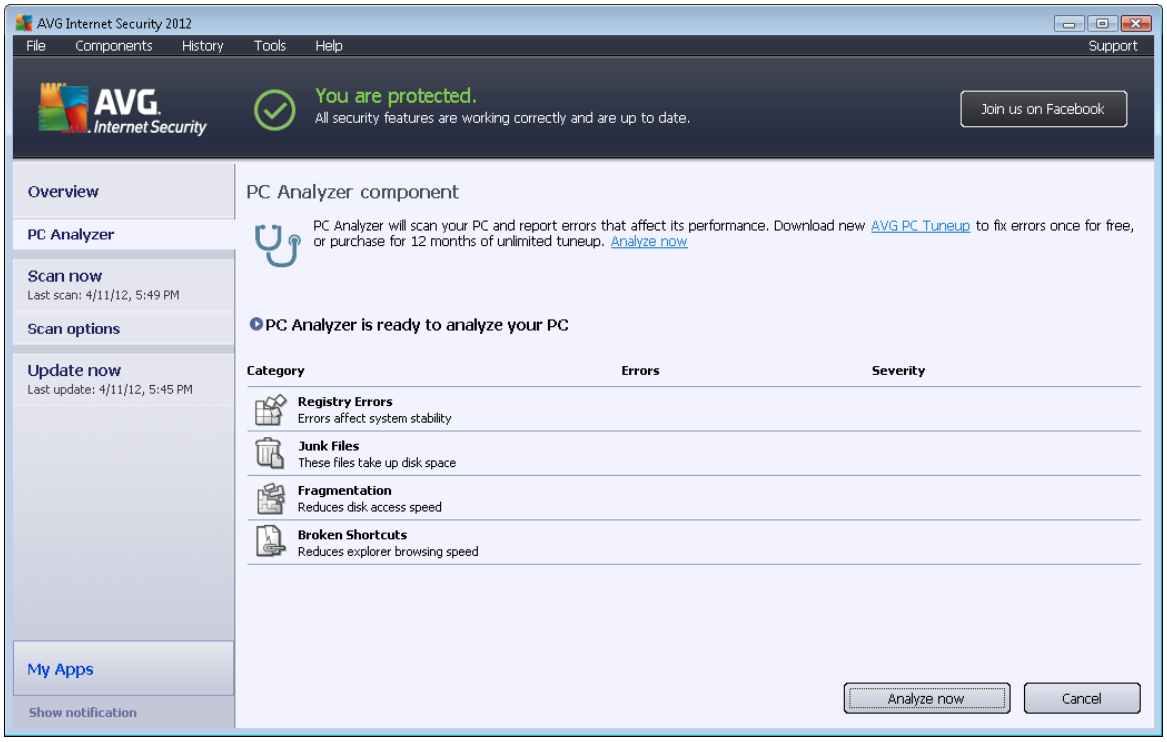
Control buttons

The control buttons available within the ***LSP Viewer*** tab are as follows:

- ***Hide Windows LSP*** - to include Windows LSP in the list, uncheck this item.
- ***Back*** - switches you back to the default AVG main dialog (*components overview*).

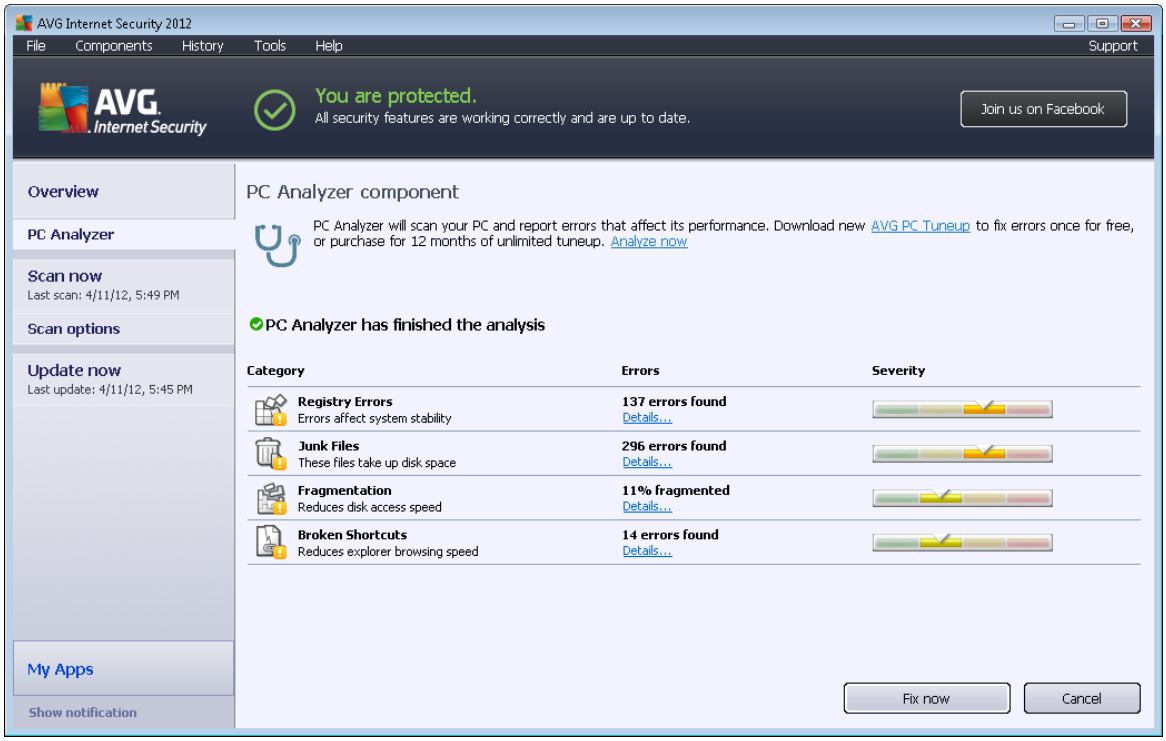
6.7. PC Analyzer

The ***PC Analyzer*** component is able to scan your computer for system problems, and give you a transparent overview of what might be aggravating your computer's overall performance. In the component's user interface you can see a chart divided into four lines referring to respective categories: registry errors, junk files, fragmentation, and broken shortcuts:



- ***Registry Errors*** will give you the number of errors in Windows Registry. As fixing the Registry requires quite advanced knowledge, we do not recommend that you try and fix it yourself.
- ***Junk Files*** will give you the number of files that can be most likely done without. Typically, these will be many kinds of temporary files, and files in the Recycle Bin.
- ***Fragmentation*** will calculate the percentage of your hard disk that is fragmented, i.e. used for a long time so that most files are now scattered on different parts of the physical disk. You can use some defragmentation tool to fix this.
- ***Broken Shortcuts*** will notify you of shortcuts that no longer work, lead to non-existing locations etc.

To start the analysis of your system, press the ***Analyze now*** button. You will then be able to watch the analysis progress and its results directly in the chart:



The results overview provides the number of detected system problems (***Errors***) divided according to the respective categories tested. The analysis results will also be displayed graphically on an axis in the ***Severity*** column.

Control buttons

- ***Analyze now*** (*displayed before the analysis stars*) - press this button to launch the immediate analysis of your computer
- ***Fix now*** (*displayed once the analysis is finished*) - press the button to get to the AVG website (http://www.avg.com/) at page providing detailed and up-to-date information related to ***PC Analyzer*** component
- ***Cancel*** - press this button to stop the running analysis, or to return to the default AVG main dialog (*components overview*) once the analysis is completed

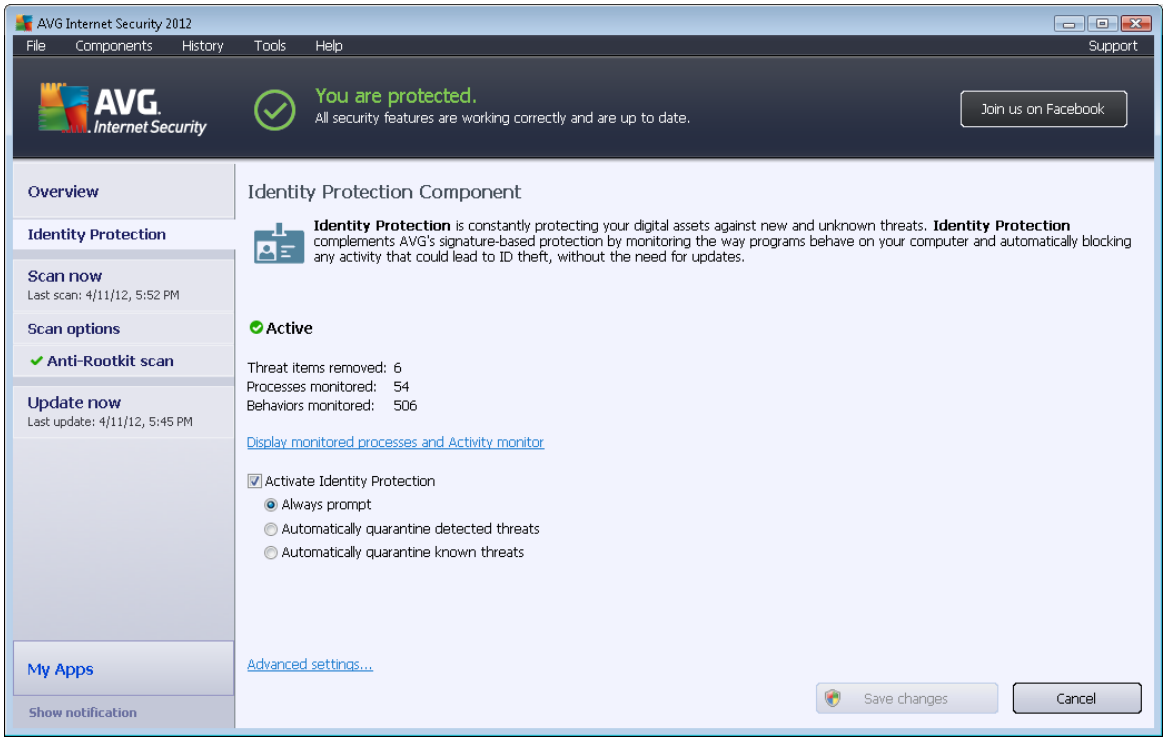
6.8. Identity Protection

Identity Protection is an anti-malware component that protects you from all kinds of malware (*spyware, bots, identity theft, ...*) using behavioral technologies and provide zero day protection for new viruses. ***Identity Protection*** is focused on preventing identity thieves from stealing your passwords, bank account details, credit card numbers and other personal digital valuables from all kinds of malicious software (*malware*) that target your PC. It makes sure that all programs running on your PC or in your shared network are operating correctly. ***Identity Protection*** spots and blocks suspicious behavior on a continuous basis and protects your computer from all new malware.

Identity Protection gives your computer a realtime protection against new and even unknown threats. It monitors all *(including hidden)* processes and over 285 different behaviour patterns, and can determine if something malicious is happening within your system. For this reason, it can reveal threats not even yet described in the virus database. Whenever an unknown piece of code comes onto your computer, it is immediately watched for malicious behaviour, and tracked. If the file is found to be malicious, ***Identity Protection*** will remove the code into the Virus Vault and undo any changes that have been made to the system *(code injections, registry changes, ports opening etc)*. You do not need to initiate a scan to be protected. The technology is very proactive, rarely needs updating, and is always on guard.

Identity Protection is a complimentary protection to Anti-Virus. We strongly recommend you have the both components installed, in order to have complete protection for your PC!

6.8.1. Identity Protection Interface



The ***Identity Protection*** dialog provides a brief description of the component's basic functionality, its status *(Active)*, and some statistical data:

- ***Threat items removed*** - gives the number of applications detected as malware, and removed
- ***Processes monitored*** - number of currently running applications that are being monitored by IDP
- ***Behaviors monitored*** - number of specific actions running within the monitored applications

Below you can find the Display monitored processes and Activity monitor link that will take you to

the user interface of the System tools component where you can find a detailed overview of all monitored processes.

Basic Identity Protection settings

In the bottom part of the dialog you can edit some elementary features of the component's functionality:

- ***Activate Identity Protection*** - (*on by default*): check to activate the IDP component, and to open further editing options.

  In some cases, ***Identity Protection*** may report that some legitimate file is suspicious or dangerous. Since ***Identity Protection*** detects threats based on their behavior, this usually occurs when some program tries to monitor key presses, install other programs or a new driver is installed on the computer. Therefore please select one of the following options specifying the ***Identity Protection*** component's behavior in case of detecting suspicious activity:

  - ***Always prompt*** - if an application is detected as malware, you will be asked whether it should be blocked (*this option is on by default and it is recommended not to change it unless you have a real reason to do so*)
  - ***Automatically quarantine detected threats*** - all applications detected as malware will be blocked automatically
  - ***Automatically quarantine known threats*** - only those applications that are with absolute certainty detected as malware will be blocked

- ***Advanced settings...*** - Click the link to get redirected to the respective dialog within the Advanced settings of **AVG Internet Security 2012**. There you can edit the component's configuration in detail. However, please note that the default configuration of all components is set up so that **AVG Internet Security 2012** provides optimum performance, and maximum security. Unless you have a real reason to do so, it is recommended that you keep the default configuration!

Control buttons

The control buttons available within the ***Identity Protection*** 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 main dialog (*components overview*)

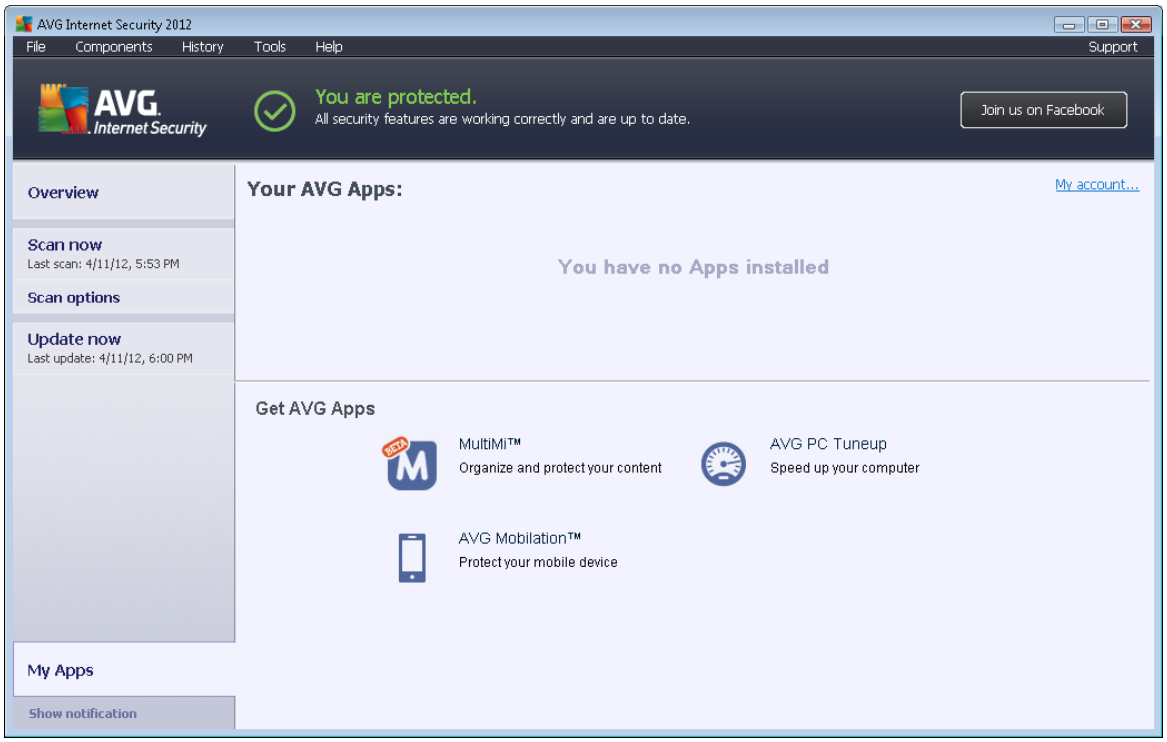
6.9. Remote Administration

The ***Remote Administration*** component only displays in the user interface of **AVG Internet Security 2012** in case you have installed the Business Edition of your product *(for information on the license used for installation please see the Version tab of the Information dialog that can be*

opened via the Support system menu item). For detailed description of the component's options and functionality within the AVG Remote Administration system please refer to the specific documentation dedicated to this topic exclusivity. This documentation is available for download at AVG website (http://www.avg.com/), in the ***Support center / Download / Documentation*** section.

7. My Apps

My Apps dialog *(accessible via the My Apps button directly from the AVG main dialog)* provides an overview of AVG standalone applications, both already installed on your computer, or ready to be installed, as options:



The dialog is divided into two sections:

- ***Your AVG Apps*** - provides an overview of all AVG standalone applications that are already installed on your computer;
- ***Get AVG Apps*** - offers an overview of AVG standalone applications, that you might be interested in. These applications are ready to be installed. The offer changes dynamically based on your license, location, and other criteria. For detailed information on these applications please consult AVG website (http://www.avg.com/).

Following please find a brief overview of all applications available, and a short explanation of their functionality:

7.1. AVG Family Safety

AVG Family Safety helps you protect your children from inappropriate websites, media content, and online searches, and provides you with reports regarding their online activity. ***AVG Family Safety*** uses key-stroke technology to monitor your child's activities in chat-rooms and on social networking sites. If it spots words, phrases or language that are known to be used to victimize children online, it will notify you immediately via SMS or e-mail. The application allows you to set the appropriate level of protection for each of your children, and monitor them separately via unique logins.

For detailed information please visit the dedicated AVG webpage, where you can also download the component immediately. To do so, you may use the AVG Family Safety link within the My Apps dialog.

7.2. AVG LiveKive

AVG LiveKive is dedicated to online data backup on secured servers. ***AVG LiveKive*** automatically backs up all your files, photos, and music to one safe place, allowing you to share them with family and friends and access them from any web-enabled device, including iPhones and Android devices. ***AVG LiveKive*** features include:

- Safety measure in case your computer and/or hard disk gets corrupted
- Access to your data from any device connected to the Internet
- Easy organization
- Sharing with anyone you authorize

For detailed information please visit the dedicated AVG webpage, where you can also download the component immediately. To do so, you may use the AVG LiveKive link within the My Apps dialog.

7.3. AVG Mobilation

AVG Mobilation protects your cell phone from viruses and malware, and also provides you with the ability of tracking your smart phone remotely if you should become separated from it. ***AVG Mobilation*** features include:

- *File Scanner* enables security scanning of files in different storage locations;
- *Task Killer* allows you to stop an application in case the device gets slow or stuck;
- *App Locker* allows you to lock and protect one or more applications by password against misuse;
- *Tuneup* collects various system parameters *(battery meter, storage use, applications installation size and location, etc.)* into a single centralize view to help you control the system performance;
- *App Backup* allows you to backup applications to the SD card, and restore them later;
- *Spam and Scam* feature allows you to mark SMS messages as spam, and report websites as scam;
- *Wipe personal data* remotely in case your phone gets stolen;

- *Safe Web Surfing* offers a real time monitoring of the web pages you visit.

For detailed information please visit the dedicated AVG webpage, where you can also

download the component immediately. To do so, you may use the AVG Mobilation link within the My Apps dialog.

7.4. AVG PC Tuneup

AVG PC Tuneup application is an advanced tool for detailed system analysis and correction, as to how the speed and overall performance of your computer might be improved. ***AVG PC Tuneup*** features include:

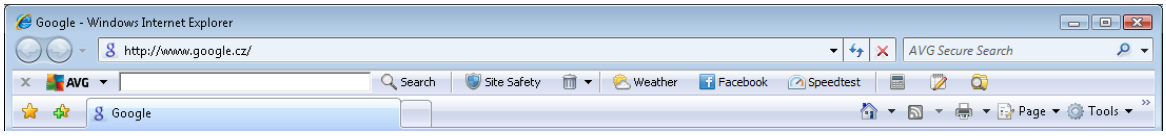
- *Disk Cleaner* - removes junk files that slow down a computer.
- *Disk Defrag* - defragments disk drives and optimizes system files placement.
- *Registry Cleaner* - repairs registry errors to increase PC stability.
- *Registry Defrag* - compacts the registry eliminating memory-consuming gaps.
- *Disk Doctor* - finds bad sectors, lost clusters, and directory errors and fixes them.
- *Internet Optimizer* - tailors the one-size-fits-all settings to a specific Internet connection.
- *Track Eraser* - removes the history of computer and Internet usage.
- *Disk Wiper* - wipes free space on disks to prevent the recovery of sensitive data.
- *File Shredder* - erases selected files beyond recovery on a disk or USB stick.
- *File Recovery* - recovers accidentally deleted files from disks, USB sticks, or cameras.
- *Duplicate File Finder* - helps to find and remove duplicate files that waste disk space.
- *Services Manager* - disables unnecessary services slowing down a computer.
- *Startup Manager* - allows a user to manage programs that start automatically on Windows boot.
- *Uninstall Manager* - completely uninstalls the software programs that you no longer need.
- *Tweak Manager* - allows a user to tune hundreds of hidden Windows settings.
- *Task Manager* - lists all running processes, services, and locked files.
- *Disk Explorer* - shows which files take up the most space on a computer.
- *System Information* - provides detailed information about installed hardware and software.

For detailed information please visit the dedicated AVG webpage, where you can also download the component immediately. To do so, you may use the AVG PC Tuneup link

within the My Apps dialog.

8. AVG Security Toolbar

AVG Security Toolbar is a tool that closely cooperates with the LinkScanner component, and guards your maximum security while browsing the Internet. Within **AVG Internet Security 2012**, the installation of ***AVG Security Toolbar*** is optional; during the installation process you were invited to decide whether the component should be installed. ***AVG Security Toolbar*** is available directly in your Internet browser. At the moment, the supported Internet browsers are Internet Explorer (*version 6.0 and higher*), and/or Mozilla Firefox (*version 3.0 and higher*). No other browsers are supported *(in case you are using some alternative Internet browser, e.g Avant Browser, you may encounter unexpected behavior)*.



AVG Security Toolbar consists of the following items:

- ***AVG logo*** with the drop-down menu:
  - ***Use AVG Secure Search*** - allows you to search directly from the ***AVG Security Toolbar*** using the ***AVG Secure Search*** engine. All search results are continuously checked by the Search-Shield service, and you can feel absolutely safe online.
  - ***Current Threat Level*** - opens the virus lab web page with a graphical display of the current threat level on the web.
  - ***AVG Threat Labs*** - opens the specific ***AVG Threat Lab*** website *(at http://www.avgthreatlabs.com)* where you can find information on various websites security and the current threat level online.
  - ***Toolbar Help*** - opens the online help covering all ***AVG Security Toolbar*** functionality.
  - ***Submit Product feedback*** - opens a web page with a form that you can fill in and tell us how you feel about the ***AVG Security Toolbar***.
  - ***About...*** - opens a new window with the information on the currently installed ***AVG Security Toolbar*** version.
- ***Search field*** - search the Internet using the ***AVG Security Toolbar*** to be absolutely secure and comfortable since all displayed search results are hundred percent safe. Fill in the keyword or a phrase into the search field, and press the ***Search*** button *(or Enter)*. All search results are continuously checked by the Search-Shield service *(within the LinkScanner component)*.
- ***Site Safety*** - this button opens a new dialog providing information on the current threat level (*Currently safe*) of the page you are just visiting. This brief overview can be expanded, and displayed with full details of all security activities related to the page right within the browser window (*View complete report*):

- ***Delete*** - the 'trash bin' button offers a roll down the menu where you can select whether you want to delete information on your browsing, downloads, online forms, or delete all of your search history at once.

- ***Weather*** - the button opens a new dialog providing information on the current weather in your location, and the weather forecast for the next two days. This information is updated regularly, every 3-6 hours. In the dialog, you can change the desired location manually, and to decide whether you want to see the temperature info in Celsius or Fahrenheit.

- ***Facebook*** - This buttons allows you connect to the Facebook social network directly from within the ***AVG Security Toolbar***.

- ***Speedtest*** - This button redirects you to an on-line application that can help you verify the quality of your internet connection *(ping)*, and your download and upload speed.

- Shortcut buttons for quick access to these applications: ***Calculator***, ***Notepad***, ***Windows Explorer***.

9. AVG Do Not Track

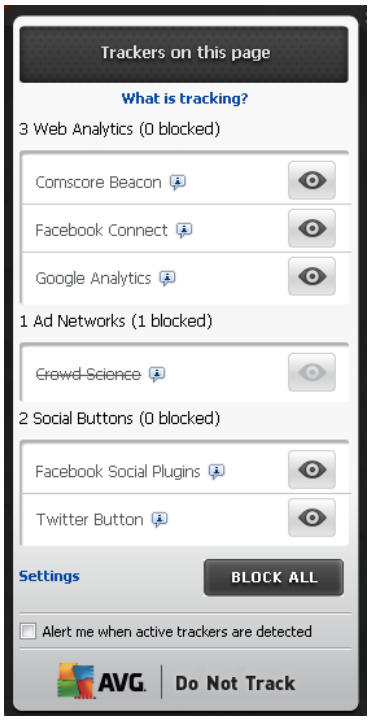
AVG Do Not Track helps you identify websites that are collecting data about your online activities. An icon in your browser shows the websites or advertisers collecting data about your activity and gives you the choice to allow or disallow it.

- ***AVG Do Not Track*** provides you with additional information about privacy policy of each respective service as well as a direct link to Opt-out from the service, if that is available.
- In addition, ***AVG Do Not Track*** supports the W3C DNT protocol to automatically notify sites that you don't want to be tracked. This notification is enabled by default, but can be changed at any time.
- ***AVG Do Not Track*** is provided under these terms and conditions.
- ***AVG Do Not Track*** is enabled by default, but can be easily disabled at any time. Instructions can be found in the FAQ article Disabling the AVG Do Not Track feature.
- For more information on ***AVG Do Not Track***, please visit our website.

Currently, the ***AVG Do Not Track*** functionality is supported in Mozilla Firefox, Chrome, and Internet Explorer browsers. *(In Internet Explorer, the AVG Do Not Track icon is located at the right hand side of the command bar. Should you experience problems seeing the AVG Do Not Track icon with the browser's default settings, please make sure that you have the command bar activated. If you still cannot see the icon, please drag the command bar to the left to reveal all icons and buttons available in this toolbar.)*

9.1. AVG Do Not Track interface

While online, ***AVG Do Not Track*** warns you as soon as any kind of data collection activity is detected. You will see the following dialog:



All detected data collection services are listed by name in the ***Trackers on this page*** overview. There are three types of data collection activities recognized by ***AVG Do Not Track***:

- ***Web Analytics*** *(allowed by default):* Services used to improve the performance and experience of the respective website. In this category you can find services as Google Analytics, Omniture, or Yahoo Analytics. We recommend not to block web analytics services, as the website might not work as intended.

- ***Social Buttons*** *(allowed by default):* Elements designed for improving the social-networking experience. Social buttons are served from the social networks to the site you are visiting. They can collect data about your online activity while you are logged-in. Examples of Social buttons include: Facebook Social Plugins, Twitter Button, Google +1.

- ***Ad Networks*** *(some blocked by default):* Services that collect or share data about your online activity on multiple sites, either directly or indirectly, to offer you personalized Ads unlike of content-based Ads. This is determined based on the privacy policy of each Ad network as available on their website. Some ad networks are blocked by default.

Note: *Depending on what services are running in the background of the website, some of the three above described sections might not appear in the AVG Do Not Track dialog.*

The dialog also contains two hyperlinks:

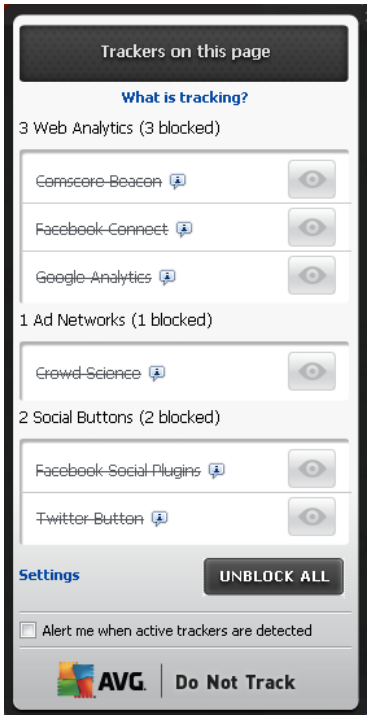
- ***What is tracking?*** - click this link in the upper section of the dialog to get redirected to the dedicated webpage providing detailed explanation on the tracking principles, and description of specific tracking types.

- ***Settings*** - click this link in the bottom section of the dialog to get redirected to the dedicated webpage where you can set the specific configuration of various ***AVG Do Not Track*** parameters *(see the AVG Do Not Track settings chapter for detailed information)*

9.2. Information on tracking processes

The list of detected data collection services provides just the name of the specific service. To make a conversant decision about whether the respective service should be blocked or allowed, you may need to know more. Move your mouse over the respective list item. An information bubble appears providing detailed data on the service. You will learn whether the service collects personal data, or other data available; whether the data are being shared with other third party subjects, and whether the collected data are being filed for possible further use.

In the lower section of the information bubble you can see the ***Privacy Policy*** hyperlink that redirects you to the website dedicated to privacy policy of the respective detected service.



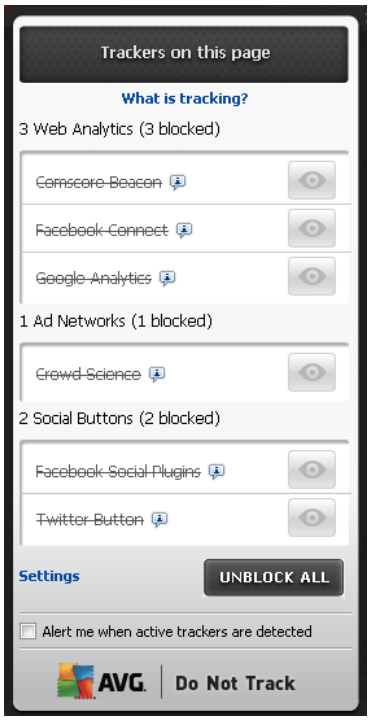
9.3. Blocking tracking processes

With the lists of all Ad Networks / Social Buttons / Web Analytics you have now the option to control which services should be blocked. You can go two ways:

- ***Block All*** - Click this button located in the bottom section of the dialog to to say you do not wish any data collection activity at all. *(However, please keep in mind that this action*

may break functionality in the respective webpage where the service is running!)

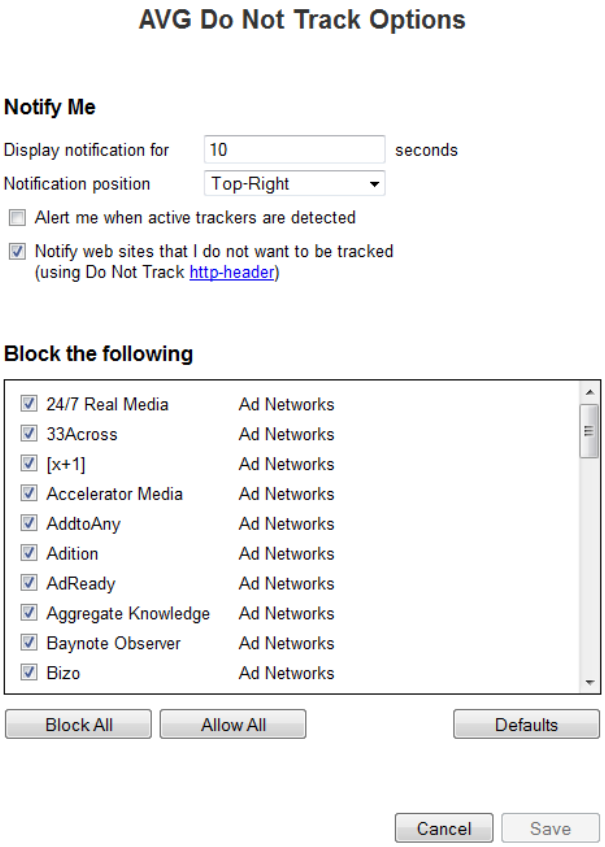
-  - If you do not want to block all the detected services at once, you can specify whether the service should be allowed or blocked individually. You may allow running of some of the detected systems *(e.g. Web Analytics):* these systems use the collected data for their own website optimization, and this way they help to improve the common Internet environment for all users. However, at the same time you may block the data collection activities of all processes classified as Ad Networks. Just click the  icon next to the respective service to block the data collection *(the process name will appear as crossed out)*, or to allow the data collection again.



9.4. AVG Do Not Track settings

Directly in the ***AVG Do Not Track*** dialog, there is only one configuration option: in the bottom part you can see the ***Alert me when active trackers are detected*** checkbox. By default, this item is opt out. Mark the checkbox to confirm you want to be notified each time you enter a webpage containing a new data collection service that has not been blocked yet. When marked, if ***AVG Do Not Track*** detects a new data collection service in the page you are currently visiting, the notification dialog appears on your screen. Otherwise, you will only be able to notice the newly detected service by ***AVG Do Not Track*** icon *(located in the command bar of your browser)* changing its color from green to yellow.

However, in the bottom part of the ***AVG Do Not Track*** dialog you can find the ***Settings*** link. Click the link to get redirected to a dedicated web page where you can specify your detailed ***AVG Do Not Track Options***:



- ***Notification position*** *(Top-Right by default)* - Open the roll-down menu to specify in which position you want the ***AVG Do Not Track*** dialog to appear on your monitor.

- ***Display notification for*** *(10 by default)* - In this field you should decide for how long *(in seconds)* you wish to see the ***AVG Do Not Track*** notification on your screen. You may specify a number ranging from 0 to 60 seconds *(for 0, the notification will not appear on your screen at all)*.

- ***Alert me when active trackers are detected*** *(off by default)* - Mark the checkbox to confirm you want to be notified each time you enter a webpage containing a new data collection service that has not been blocked yet. When marked, if ***AVG Do Not Track*** detects a new data collection service in the page you are currently visiting, the notification dialog appears on your screen. Otherwise, you will only be able to notice the newly detected service by ***AVG Do Not Track*** icon *(located in the command bar of your browser)* changing its color from green to yellow.

- ***Notify web sites that I do not want to be tracked*** *(on by default)* - Keep this option marked to confirm that you want ***AVG Do Not Track*** to inform the provider of a detected data collection service that you do not want to be tracked.

- ***Block the following*** *(all listed data collection services allowed by default)* - In this section you can see a box with a list of known data collection services that can be classified as Ad

Networks. By default, ***AVG Do Not Track*** blocks some of Ad Networks automatically and it remains up to your decision whether the rest should be blocked as well, or left allowed. To do so, just click the ***Block All*** button under the list.

The control buttons available within the ***AVG Do Not Track Options*** page are as follows:

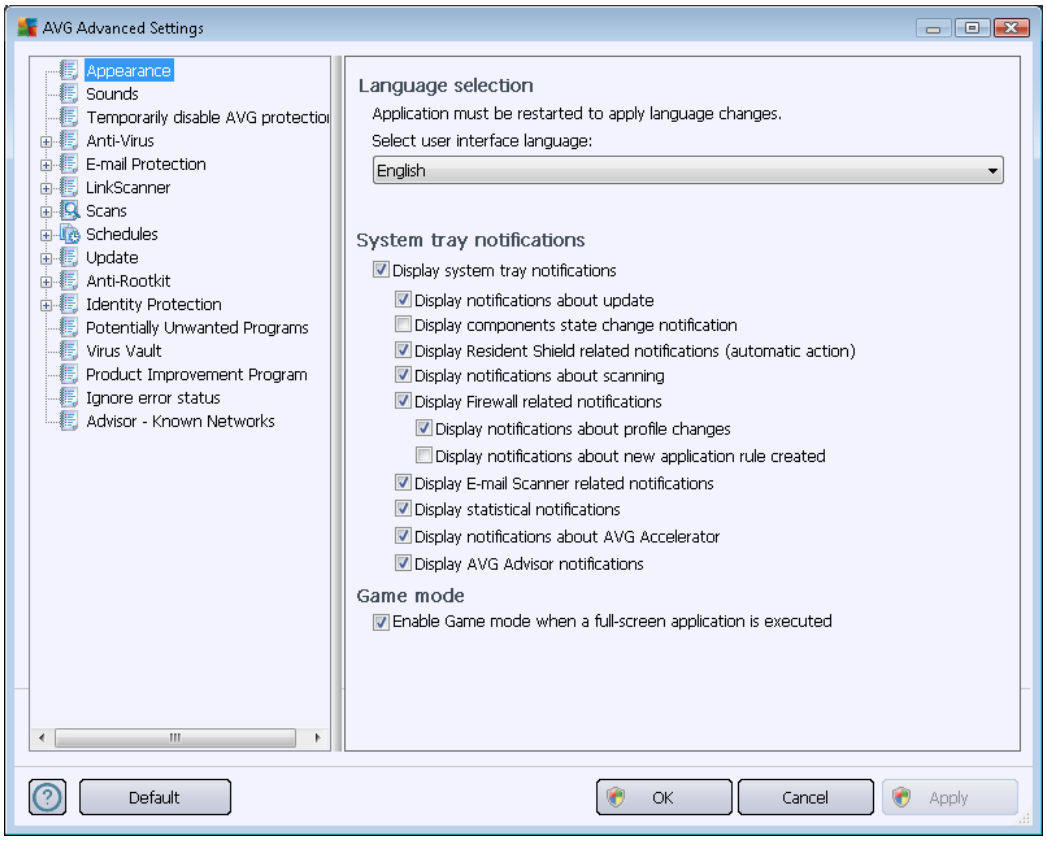
- ***Block All*** - click to block at once all the services listed in the above box that are classified as Ad Networks;
- ***Allow All*** - click to unblock at once all previously blocked services listed in the above box, and classified as Ad Networks;
- ***Defaults*** - click to discard all your customized settings, and to return to the default configuration;
- ***Save*** - click to apply and save all your specified configuration;
- ***Cancel*** - click to cancel all your previously specified settings.

10. AVG Advanced Settings

The advanced configuration dialog of **AVG Internet Security 2012** 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 for which you want to change the configuration (*or its specific part*) to open the editing dialog in the right-hand section of the window.

10.1. Appearance

The first item of the navigation tree, ***Appearance***, refers to the general settings of the **AVG Internet Security 2012** user interface, and provides a few elementary options of the application's behavior:

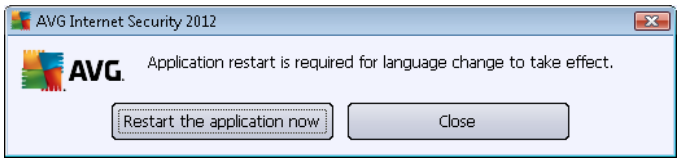


Language selection

In the ***Language selection*** section you can chose your desired language from the drop-down menu. The selected language will then be used for the entire **AVG Internet Security 2012** user interface. The drop-down menu only offers those languages you have previously selected to be installed during the installation process (*see chapter Custom options*) plus English (*English is always installed automatically, by default*). To finish switching your **AVG Internet Security 2012** to another language you have to restart the application. Please follow these steps:

- In the drop-down menu, select the desired language of the application

- Confirm your selection by pressing the ***Apply*** button *(right-hand bottom corner of the dialog)*
- Press the ***OK*** button confirm
- A new dialog pops-up informing you that in order to change the language of the application, you need to restart your **AVG Internet Security 2012**
- Press the ***Restart the application now*** button to agree with the program restart, and wait a second for the language change to take effect:



System tray notifications

Within this section you can suppress displaying system tray notifications on the status of the **AVG Internet Security 2012** application. By default, the system notifications are allowed to be displayed. It is highly recommended that you keep this configuration! System notifications provide information for example on launching the scanning or updating process, or on status changes of a **AVG Internet Security 2012** component. You should certainly pay attention to these notifications!

However, if for some reason you decide that you do not wish to be informed in this way, or that you would like only certain notifications *(related to a specific AVG Internet Security 2012 component)* to be displayed, you can define and specify your preferences by checking/unchecking the following options:

- ***Display system tray notifications*** *(on, by default)* - by default, all notifications are displayed. Uncheck this item to completely turn off the display of all system notifications. When turned on, you can further select what specific notifications should be displayed:
    - ***Display tray notifications about update*** *(on, by default)* - decide whether information regarding the **AVG Internet Security 2012** update process launch, progress, and finalization should be displayed.
    - ***Display components state change notifications*** *(off, by default)* - decide whether information regarding the component's activity/inactivity, or its potential problem should be displayed. When reporting a component's fault status, this option is equivalent to the informative function of the system tray icon reporting a problem in any **AVG Internet Security 2012** component.
    - ***Display Resident Shield related tray notifications (automatic action)*** *(on, by default)* - decide whether information regarding file saving, copying, and opening processes should be displayed or suppressed (*this configuration only appears if the Resident Shield Auto-heal option is on*).
    - ***Display tray notifications about scanning*** *(on, by default)* - decide whether

information upon automatic launch of the scheduled scan, its progress, and results should be displayed.

- ***Display Firewall related tray notifications*** *(on, by default)* - decide whether information concerning Firewall status and processes, e.g. component's activation/ deactivation warnings, possible traffic blocking etc. should be displayed. This item provides two more specific selection options *(for detailed explanations of each of them please consult the Firewall chapter of this document)*:

  - ***Display notifications about profile changes*** *(on, by default)* - notifies you about automatic changes of Firewall profiles.

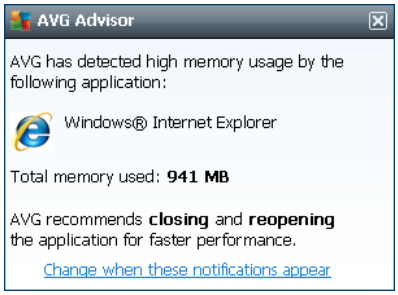
  - ***Display notifications about new application rule created*** *(off, by default)* - notifies you about the automatic creation of Firewall rules for new applications based on a safe list.

- ***Display E-mail Scanner related tray notifications*** *(on, by default)* - decide whether information on scanning of all incoming and outgoing e-mail messages should be displayed.

- ***Display statistical notifications*** *(on, by default)* - keep the option checked to allow regular statistical review notification to be displayed in the system tray.

- ***Display tray notification about AVG Accelerator*** *(on, by default)* - decide whether information on ***AVG Accelerator*** activities should be displayed. The ***AVG Accelerator*** service allows smoother online video playback and makes additional downloads easier.

- ***Display AVG Advisor notifications*** *(on, by default)* - decide whether information upon AVG Advisor activities should be displayed in the slide panel on the system tray.

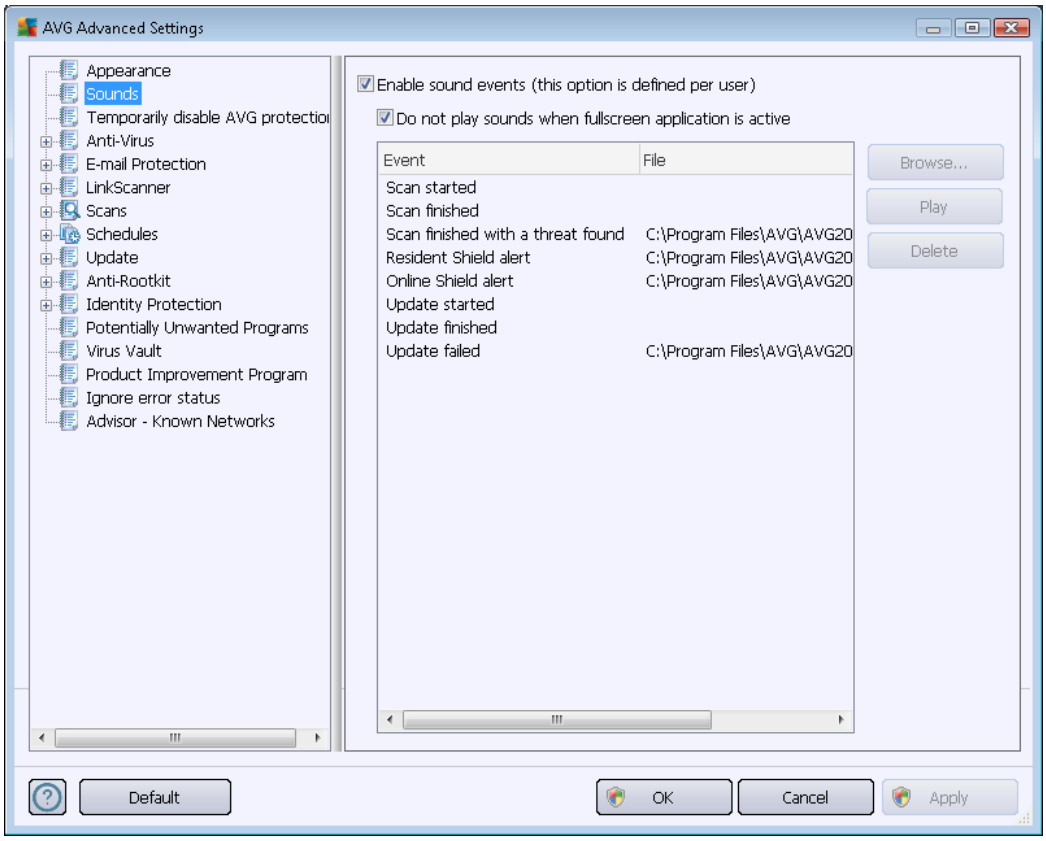


Gaming mode

This AVG function is designed for full-screen applications where any AVG information balloons (*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 checkbox for the ***Enable gaming mode when a full-screen application is executed*** option marked (*default setting*).

10.2. Sounds

Within the ***Sounds*** dialog you can specify whether you want to be informed about specific **AVG Internet Security 2012** actions by a sound notification:



The settings are only valid for the current user account. That means, each user on the computer can have their own sound settings. If you want to allow the sound notification, keep the ***Enable sound events*** option checked (*the option is on, by default*) to activate the list of all relevant actions. You may also want to check the ***Do not play sounds when fullscreen application is active*** option to suppress the sound notification in situations when it might be disturbing *(see also the Gaming mode section of the Advanced settings/Appearance chapter in this document)*.

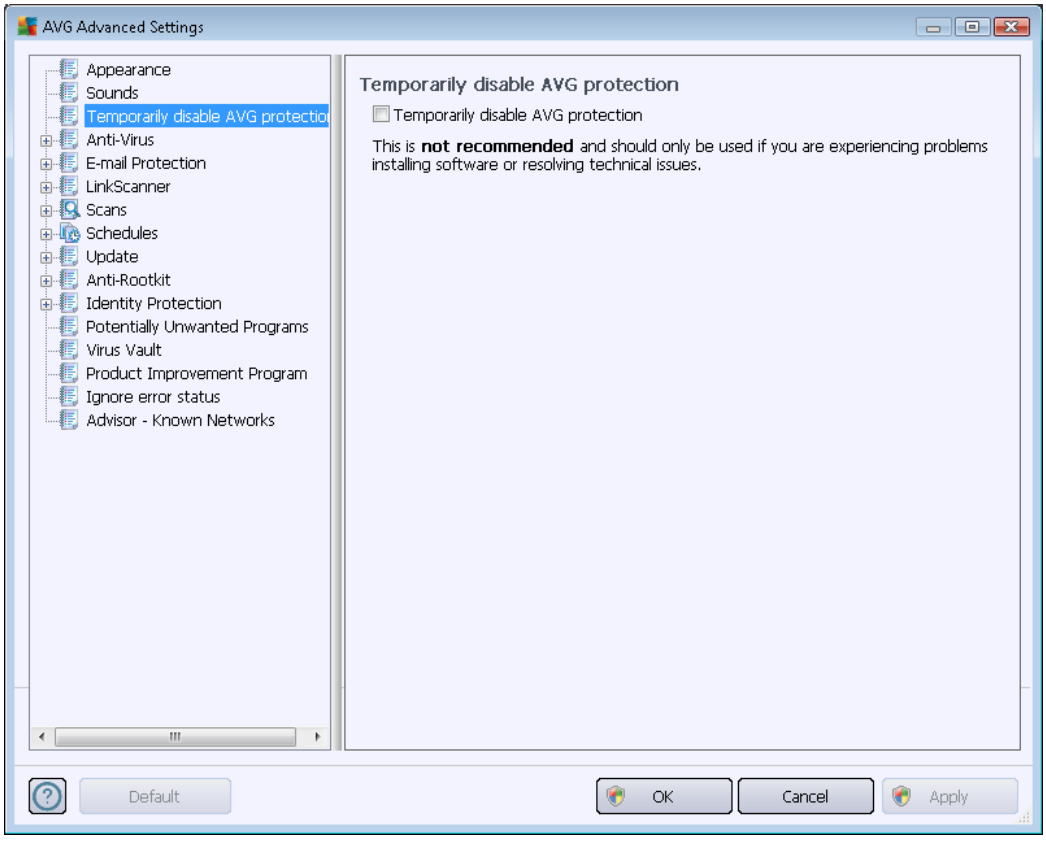
Control buttons

- ***Browse*** - having selected the respective event from the list, use the ***Browse*** button to search your disk for the desired sound file you want to assign to it. *(Please note that only *.wav sounds are supported at the moment!)*
- ***Play*** - to listen to the selected sound, highlight the event in the list and push the ***Play*** button.
- ***Delete*** - use the ***Delete*** button to remove the sound assigned to a specific event.

10.3. Temporarily disable AVG protection

In the ***Temporarily disable AVG protection*** dialog you have the option of switching off the entire protection secured by your **AVG Internet Security 2012** at once.

Please remember that you should not use this option unless it is absolutely necessary!

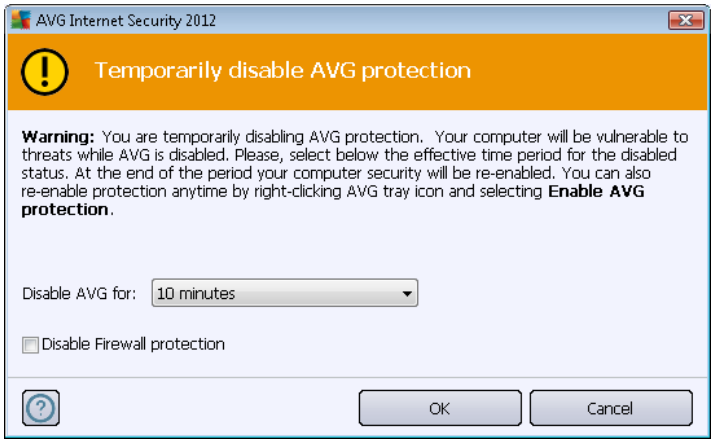


In most cases, it is ***not necessary*** to disable **AVG Internet Security 2012** before installing new software or drivers, not even if the installer or software wizard suggests that running programs and applications be shut down first to make sure there are no unwanted interruptions during the installation process. Should you really experience problems during installation, try to deactivate the resident protection (*Enable Resident Shield*) first. If you do have to temporarily disable **AVG Internet Security 2012**, you should re-enable it as soon as you're done. If you are connected to the Internet or a network when your antivirus software is disabled, your computer is vulnerable to attacks.

How to disable AVG protection

- Tick the ***Temporarily disable AVG protection*** checkbox, and confirm your choice by pressing the ***Apply*** button
- In the newly open ***Temporarily disable AVG protection*** dialog specify for how long you wish to disable your **AVG Internet Security 2012**. By default, the protection will be turned off for 10 minutes which should be sufficient for any common task such as installing new

software etc. You can decide for a longer time period, however this option is not recommended if not absolutely necessary. Afterwards, all deactivated components will be automatically activated again. At most, you can disable the AVG protection till the next computer restart.

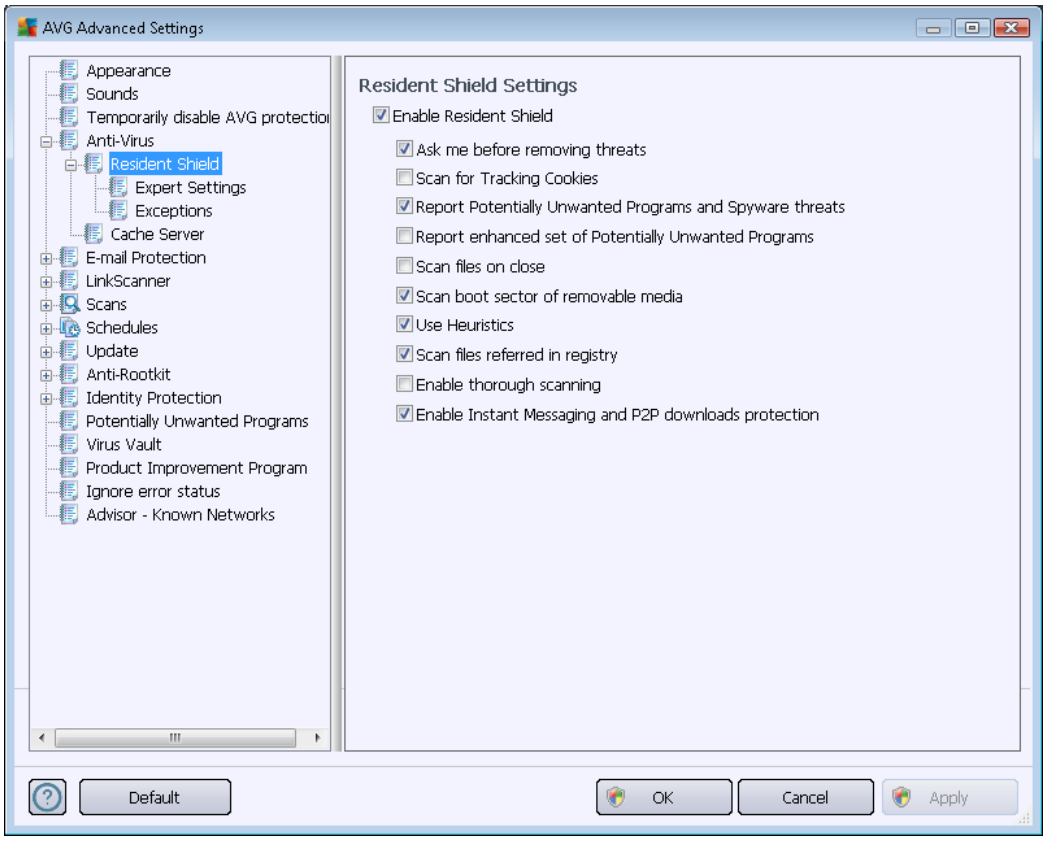


10.4. Anti-Virus

The ***Anti-Virus*** component protects your computer continuously from all known types of viruses and spyware *(including so-called sleeping and non-active malware, i.e. malware that has been downloaded but not yet activated)*.

10.4.1. Resident Shield

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

- ***Ask me before removing threats*** (*on by default*) - check to ensure that the Resident Shield will not perform any action automatically; instead it will display a dialog describing the detected threat, allowing you to decide what should be done. If you leave the box unchecked, **AVG Internet Security 2012** will automatically heal the infection, and if this is not possible, the object will be moved into the Virus Vault.

- ***Scan for Tracking cookies*** (*off by default*) - 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*** (*on by default*) - check to activate the Anti-Spyware engine, and scan for spyware as well as for viruses. Spyware represents a questionable malware category: even though it usually represents a security risk, some of these programs can be installed intentionally. We recommend that you keep this feature activated as it increases your computer's security.

- ***Report enhanced set of Potentially Unwanted Programs*** (*off by default*) - mark to detect extended packages of spyware: programs that are perfectly ok and harmless when acquired from the manufacturer directly, but can be misused for malicious purposes later. This is an additional measure that increases your computer's security even more, however it can possibly block legal programs, and is therefore switched off by default.

- ***Scan files on close*** (*off by default*) - 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 to protect your computer against some types of sophisticated virus.

- ***Scan boot sector of removable media*** (*on by default*)

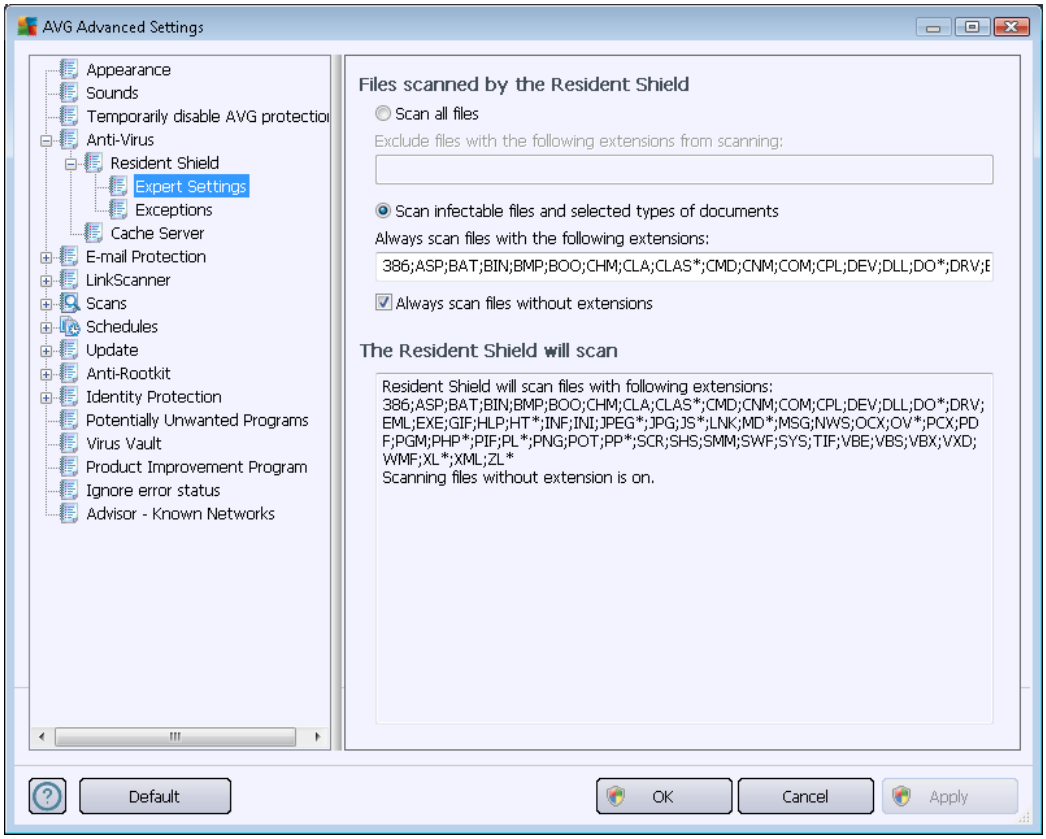
- ***Use Heuristics*** (*on by default*) - heuristic analysis will be used for detection (*dynamic emulation of the scanned object's instructions in a virtual computer environment*).

- ***Scan files referred in registry*** (*on by default*) - this parameter defines that AVG will scan all executable files added to the startup registry to avoid a known infection being executed upon next computer startup.

- ***Enable thorough scanning*** (*off by default*) - in specific situations (*in a state of extreme emergency*) you may check this option to activate the most thorough algorithms that will check all possibly threatening objects in-depth. Remember though that this method is rather time consuming.

- ***Enable Instant Messaging protection and P2P download protection*** (*on by default*) - check this item if you wish to verify that the instant messaging communication (*e.g. AIM, Yahoo!, ICQ, Skype, MSN Messenger, ...*) and data downloaded within Peer-to-Peer networks *(networks allowing direct connection between clients, without a server, which is potentially dangerous; typically used to share music files)* are virus free.

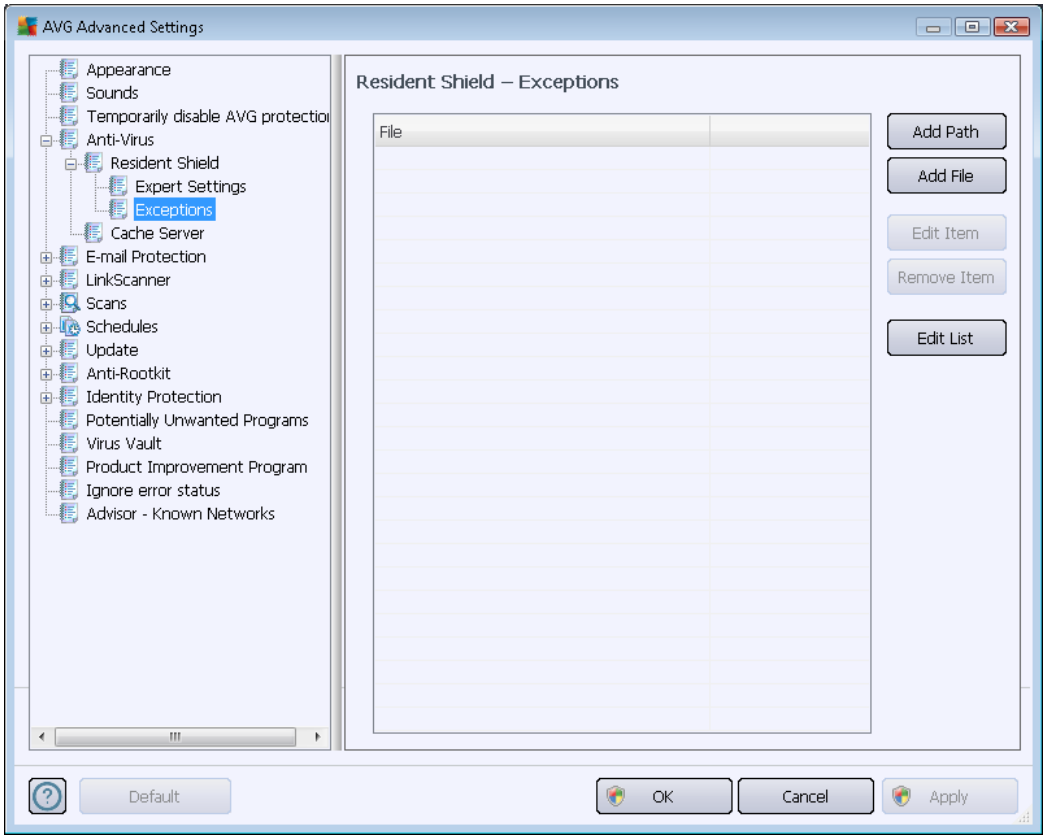
In the ***Files scanned by the Resident Shield*** dialog it is possible to configure which files will be scanned (*by specific extensions*):



Mark the respective checkbox to decide whether you want to ***Scan all files*** or ***Scan infectable files and selected types of documents*** only. If you have chosen the latter option, 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.

Check the ***Always scan files without extensions*** (*on by default*) to ensure that even files with no extension and unknown format should be scanned by the Resident Shield. We recommend that you keep this feature switched on, as files without extensions are suspicious.

The section below called ***The Resident Shield will scan*** further summarizes the current settings, displaying a detailed overview of what the ***Resident Shield*** will actually scan.



The ***Resident Shield - Exceptions*** dialog offers the option of defining files and/or folders that should be excluded from the ***Resident Shield*** scanning.

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

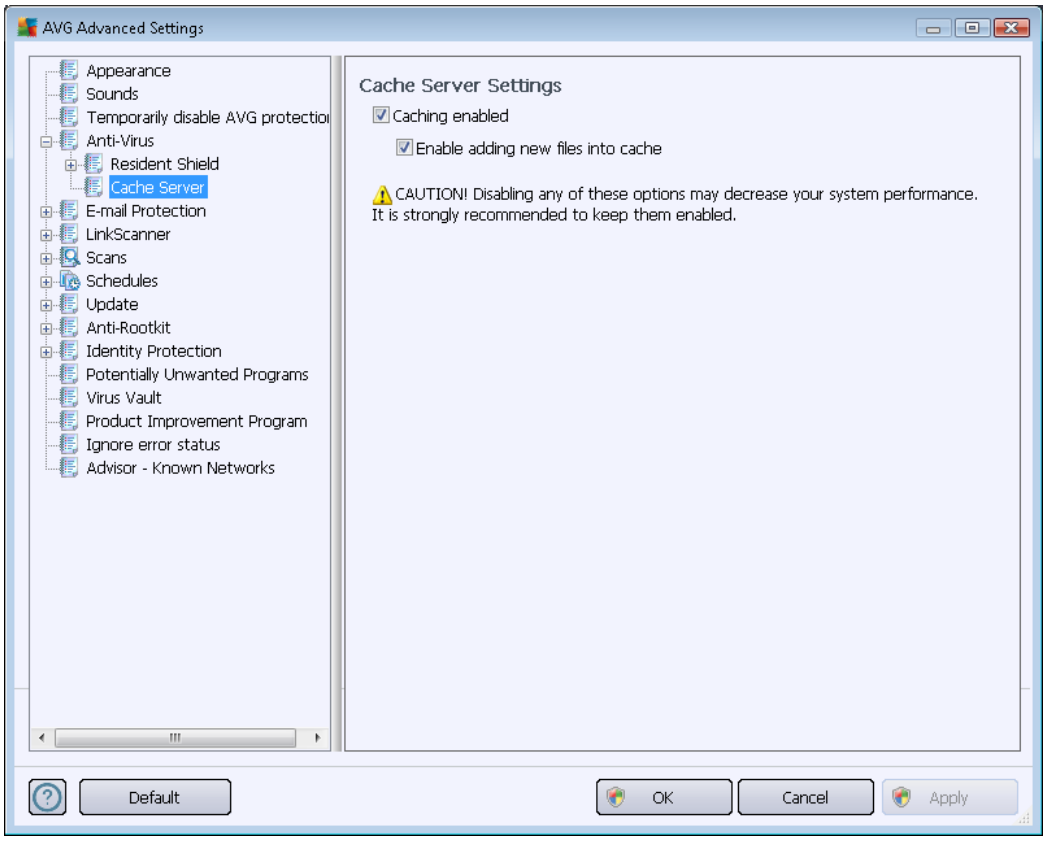
Control buttons

The dialog provides the following control buttons:

- ***Add Path*** – specify a directory (directories) to be excluded from the scanning by selecting them one by one from the local disk navigation tree
- ***Add File*** – specify files to be excluded from the scanning by selecting them one by one from the local disk navigation tree
- ***Edit Item*** – allows you to edit the specified path to a selected file or folder
- ***Remove Item*** – allows you to delete the path to a selected item from the list
- ***Edit List*** - allows you to edit the entire list of defined exceptions in a new dialog that behaves like a standard text editor

10.4.2. Cache Server

The ***Cache Server Settings*** dialog refers to the cache server process designed to speed up all types of **AVG Internet Security 2012** scans:



The cache server gathers and keeps information on trustworthy files (*a files is considered trustworthy if signed with digital signature on a trustworthy source*). These files are then automatically considered to be safe, and do not need to be re-scanned; therefore these files are skipped during scanning.

The ***Cache Server Settings*** dialog offers the following options for configuration:

- ***Caching enabled*** (*on by default*) - uncheck the box to switch off the ***Cache Server***, and empty the cache memory. Please note that scanning might slow down, and overall performance of your computer decrease, as every single file in use will be scanned for viruses and spyware first.
- ***Enable adding new files into cache*** (*on by default*) - uncheck the box to stop adding more files into the cache memory. Any already cached files will be kept and used until caching is turned off completely, or until the next update of the virus database.

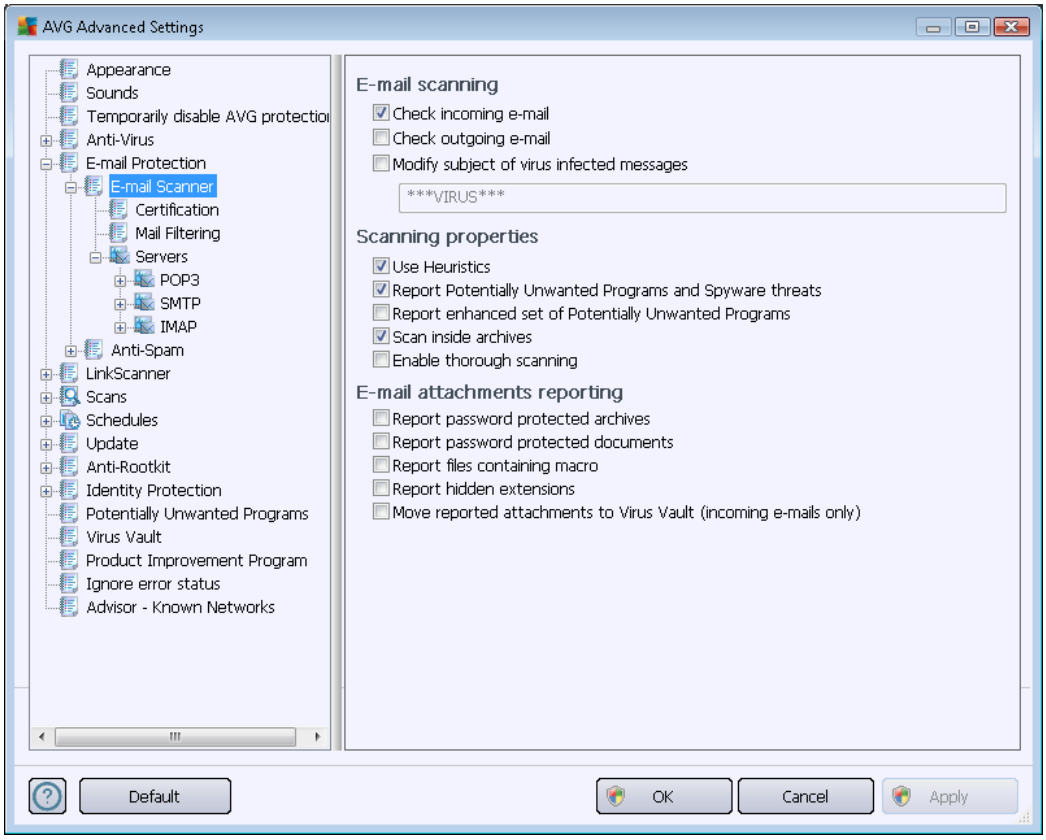
Unless you have a good reason to switch the cache server off, we strongly recommend that you keep the default settings and leave both the options on! Otherwise you may experience a significant decrease in your system speed and performance.

10.5. E-mail protection

In the ***E-mail protection*** section you can edit the detailed configuration of E-mail Scanner and Anti-Spam:

10.5.1. E-mail Scanner

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



E-mail scanning

In this section, you can set these basics for incoming and/or outgoing e-mail messages:

- ***Check incoming e-mail*** (*on by default*) - mark to switch on/off the option of scanning of all e-mail messages delivered to your e-mail client
- ***Check outgoing e-mail*** (*off by default*) - mark to switch on/off the option of scanning of all e-mails sent from your account
- ***Modify subject of virus infected messages*** (*off by default*) - if you want to be warned that the scanned e-mail message was detected as infected, mark this item and fill in the desired text into the text field. This text will then be added to the "Subject" field for each detected e-mail message for easier identification and filtering. The default value is ***VIRUS*** which we recommend that you keep.

Scanning properties

In this section, you can specify how the e-mail messages will be scanned:

- ***Use Heuristics*** (*on by default*) - check to use the heuristics detection method when scanning e-mail messages. When this option is on, you can filter e-mail attachments not only by the extension but the actual contents of the attachment will also be considered. The filtering can be set in the Mail Filtering dialog.

- ***Report Potentially Unwanted Programs and Spyware threats*** (*on by default*) - check to activate the Anti-Spyware engine, and scan for spyware as well as for viruses. Spyware represents a questionable malware category: even though it usually represents a security risk, some of these programs can be installed intentionally. We recommend that you keep this feature activated as it increases your computer security.

- ***Report enhanced set of Potentially Unwanted Programs*** (*off by default*) - mark to detect extended packages of spyware: programs that are perfectly ok and harmless when acquired from the manufacturer directly, but can be misused for malicious purposes later. This is an additional measure that increases your computer security even more, however it may block legal programs, and is therefore switched off by default.

- ***Scan inside archives*** (*on by default*) - check to scan contents of archives attached to e-mail messages.

- ***Enable thorough scanning*** (*off by default*) - in specific situations (*e.g. suspicions of your computer being infected by an virus or attack*) you may check this option to activate the most thorough scanning algorithms that will scan even those areas of your computer that hardly ever get infected, just to be absolutely sure. Remember though that this method is rather time-consuming.

E-mail attachments reporting

In this section, you can set additional reports about potentially dangerous or suspicious files. Please note that no warning dialog will be displayed; a certification text will only be added to the end of the e-mail message, and all such reports will be listed in the E-mail Scanner detection dialog:

- ***Report password protected archives*** – archives (*ZIP, RAR etc.*) that are protected by password cannot be scanned for viruses; check the box to report these as potentially dangerous.

- ***Report password protected documents*** – documents protected by password cannot be scanned for viruses; check the box to report these as potentially dangerous.

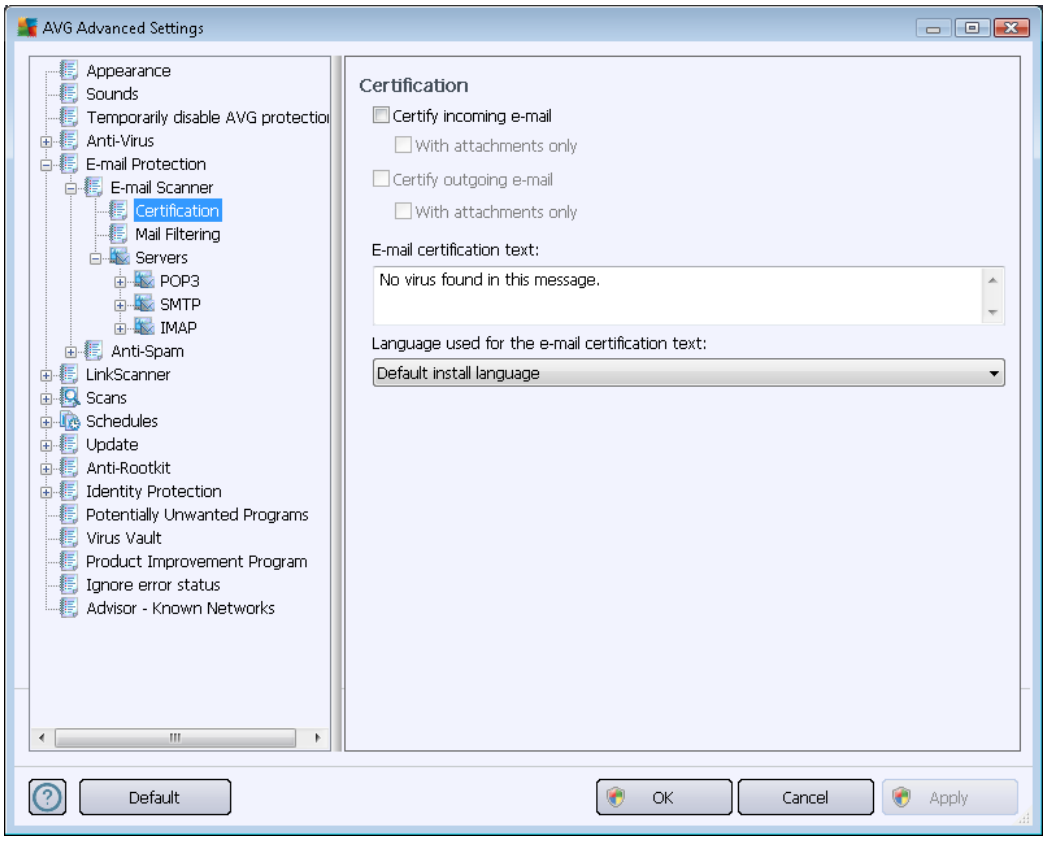
- ***Report files containing macro*** – a macro is a predefined sequence of steps aimed to make certain tasks easier for a user (*MS Word macros are widely known*). As such, a macro can contain potentially dangerous instructions, and you might like to check the box to ensure that files with macros will be reported as suspicious.

- ***Report hidden extensions*** – a hidden extension can make e.g. a suspicious executable

file "something.txt.exe" appear as harmless plain text file "something.txt"; check the box to report these as potentially dangerous.

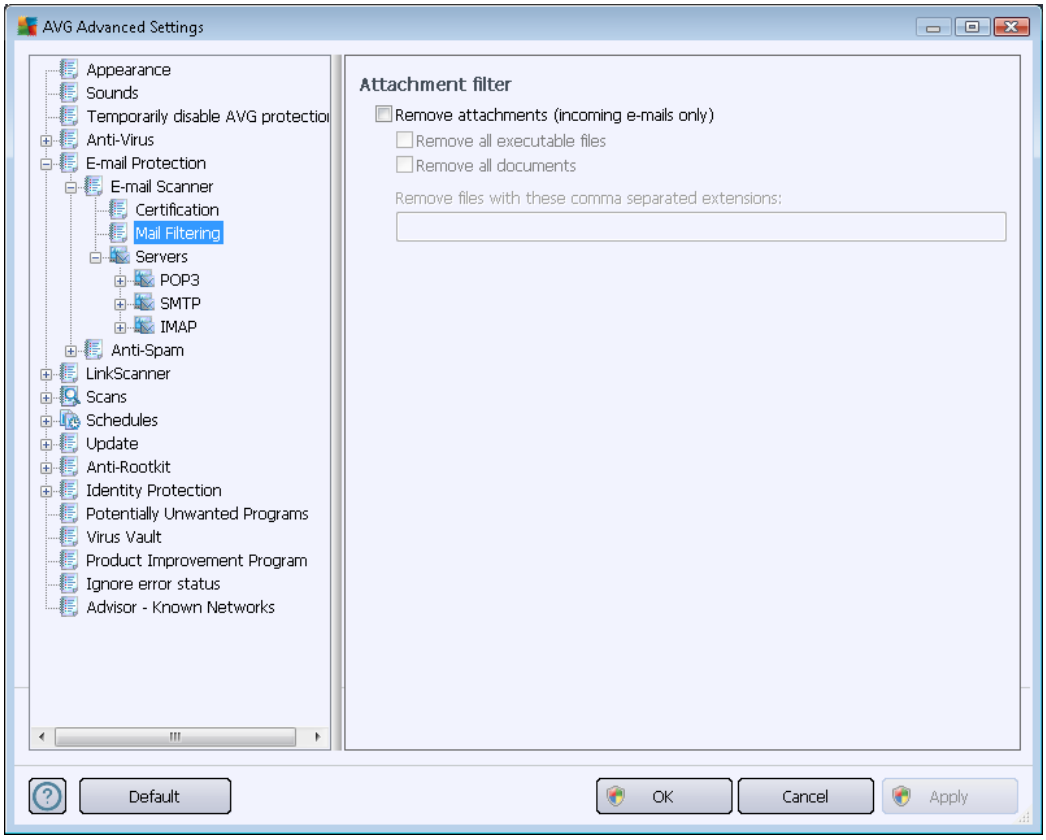
- ***Move reported attachments to Virus Vault*** - specify whether you wish to be notified via e-mail about password protected archives, password protected documents, files containing macros, and/or files with hidden extensions detected as an attachment to the scanned e-mail message. If such a message is identified during scanning, define whether the detected infectious object should be moved to the Virus Vault.

In the ***Certification*** dialog you can mark the specific checkboxes to decide whether you want to certify your incoming mail (***Certify incoming e-mail***) and/or outgoing mail (***Certify outgoing e-mail***). For each of these options you can further specify the ***With attachments only*** parameter so that the certification is only added to e-mail messages with attachments:



By default, the certification text consists of just a basic information that states *No virus found in this message.* However, this information can be extended or changed according to your needs: write the desired text of certification into the ***E-mail certification text*** field. In the ***Language used for the e-mail certification text*** section you can further define in which language the automatically generated part of the certification (*No virus found in this message*) should be displayed.

Note: *Please bear in mind that only the default text will be displayed in the requested language, and your customized text will not be translated automatically!*



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

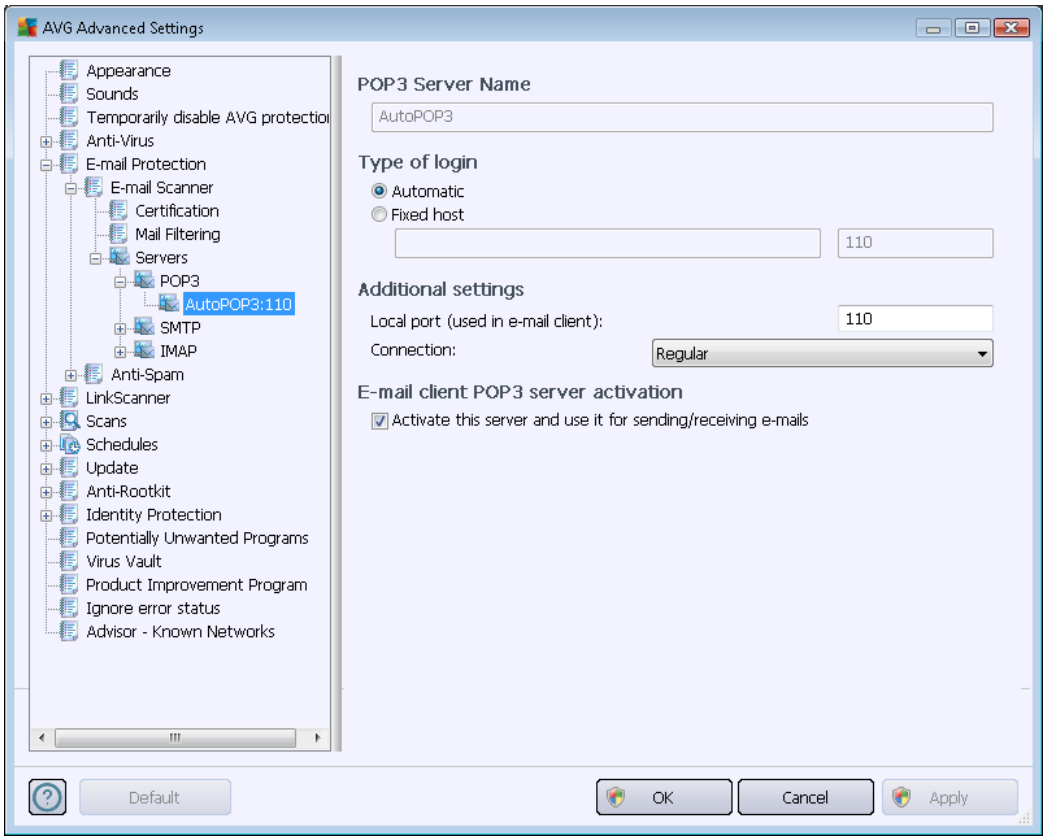
- ***Remove all executable files*** - all *.exe files will be deleted
- ***Remove all documents*** - all *.doc, *.docx, *.xls, *.xlsx files will be deleted
- ***Remove files with these comma separated extensions*** - will remove all files with the defined extensions

In the ***Servers*** section you can edit parameters for the E-mail Scanner servers:

- POP3 server
- SMTP server
- IMAP server

You can also define new servers for incoming or outgoing mail, using the ***Add new server*** button.

POP3



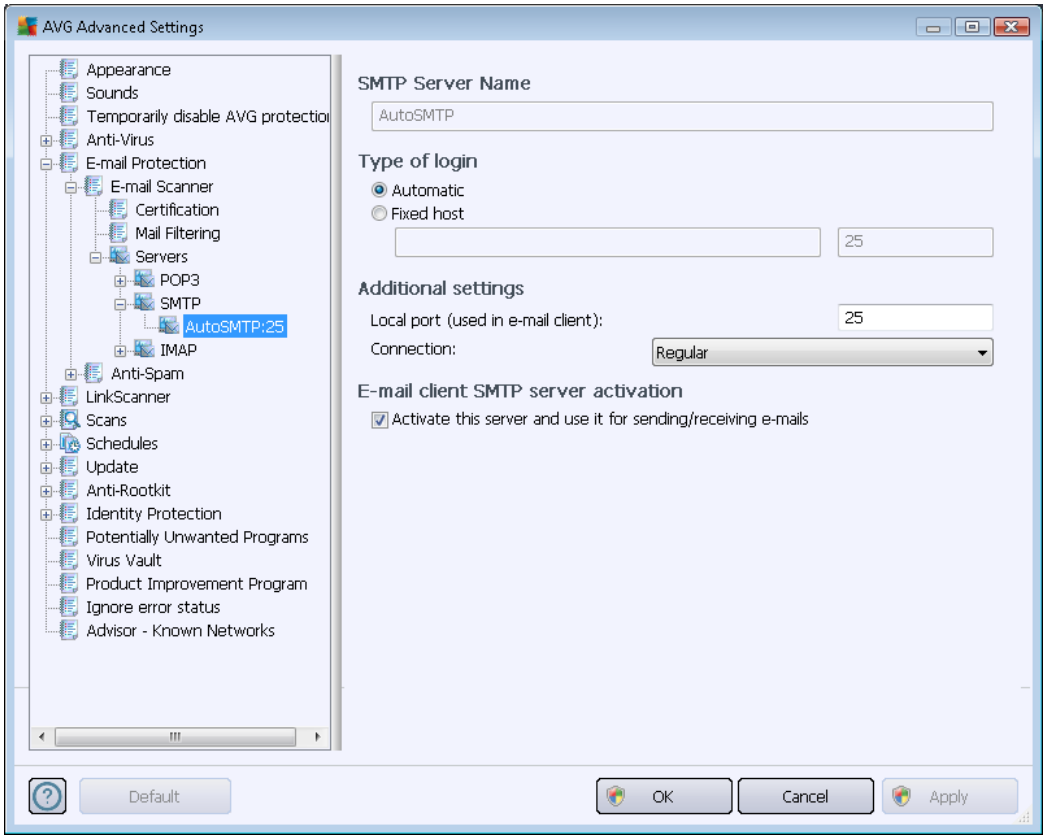
In this dialog (*opened via **Servers / POP3***) you can set up a new E-mail Scanner server using the POP3 protocol for incoming mail:

- ***POP3 Server Name*** - in this field you can specify the name of newly added servers (*to add a POP3 server, click the right mouse button over the POP3 item of the left navigation menu*). For automatically created "AutoPOP3" servers this field is deactivated.
- ***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.
  - ***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 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.
  - ***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 activation*** - check/uncheck this item to activate or deactivate the specified POP3 server

SMTP



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*** - in this field you can specify the name of newly added servers (*to add a SMTP server, click the right mouse button over the SMTP item of the left navigation menu*). For automatically created "AutoSMTP" servers this field is deactivated.

- ***Type of login*** - 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.

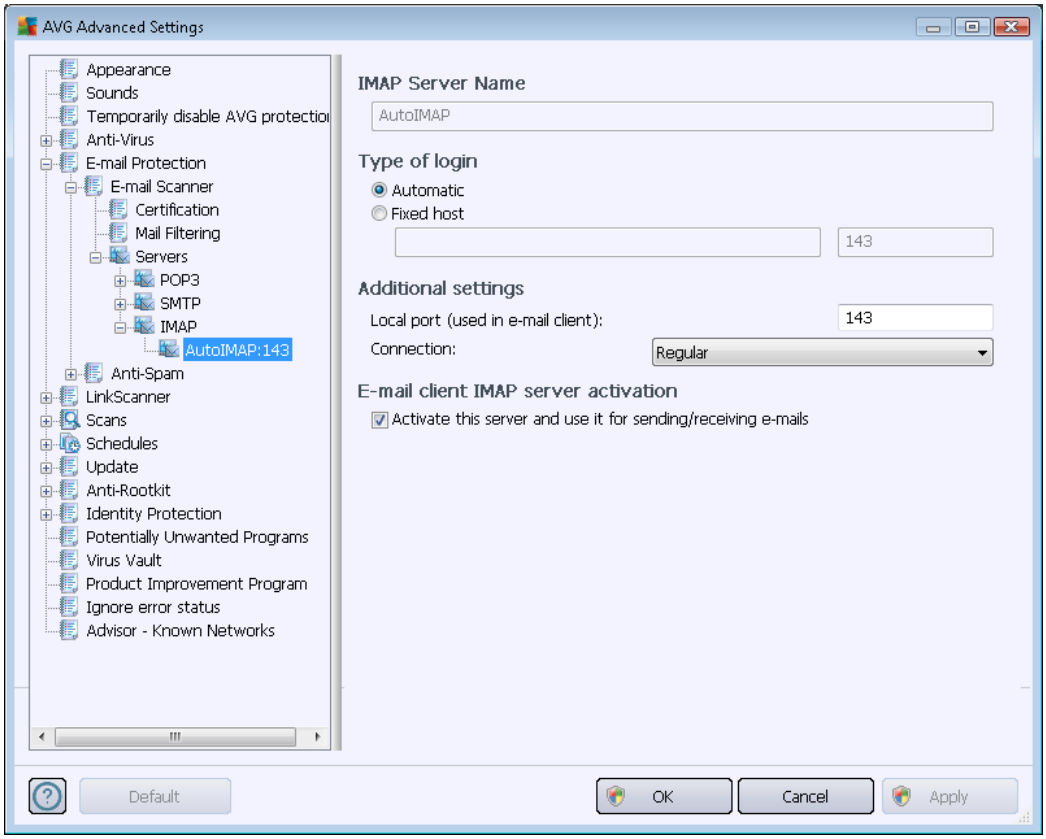
- ***Additional settings*** - specifies more detailed parameters:

    - ***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.

    - ***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.

- ***E-mail client SMTP server activation*** - check/uncheck this box to activate/deactivate the SMTP server specified above

IMAP



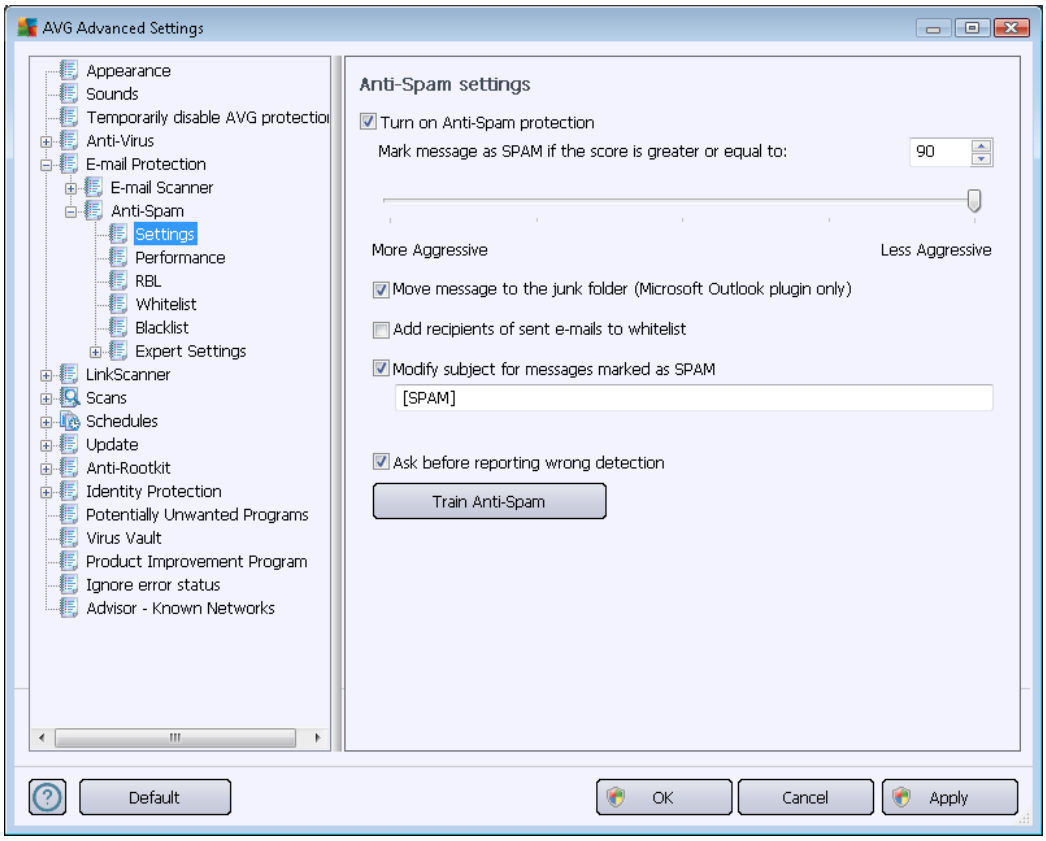
In this dialog (opened via ***Servers / IMAP***) you can set up a new E-mail Scanner server using the IMAP protocol for outgoing mail:

- ***IMAP Server Name*** - in this field you can specify the name of newly added servers (*to add a IMAP server, click the right mouse button over the IMAP item of the left navigation menu*). For automatically created "AutoIMAP" servers this field is deactivated.
- ***Type of login*** - 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, imap.acme.com:8200*). The standard port for IMAP communication is 143.
- ***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 IMAP communication.

- **Connection** - in this drop-down menu, you can specify which kind of connection to use (*regular/SSL/SSL default*). If you choose a 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.

- ***E-mail client IMAP server activation*** - check/uncheck this box to activate/deactivate the IMAP server specified above

10.5.2. Anti-Spam



In the ***Anti-Spam settings*** dialog you can check/uncheck the ***Turn on Anti-Spam protection*** checkbox to allow/prohibit the anti-spam scanning of e-mail communication. This option is on by default, and as always, it is recommended that you keep this configuration unless you have a real reason to change it.

Next, you can also select more or less aggressive scoring measures. The ***Anti-Spam*** filter assigns each message a score (*i.e. how similar the message content is to SPAM*) based on several dynamic scanning techniques. You can adjust the ***Mark message as spam if score is greater than*** setting by either typing the value or by moving the slider left or right (*the range of values is limited to 50-90*).

Generally we recommended setting the threshold between 50-90, or if you are really unsure, to 90. Here is a general review of the scoring threshold:

- ***Value 80-90*** - e-mail messages likely to be spam will be filtered out. Some non-spam messages may be incorrectly filtered as well.
- ***Value 60-79*** - considered as a quite aggressive configuration. E-mail messages that are possibly spam will be filtered out. Non-spam messages are likely to be caught as well.
- ***Value 50-59*** - very aggressive configuration. Non-spam e-mail messages are as likely to be caught as real spam messages. This threshold range is not recommended for normal use.

In the ***Anti-Spam settings*** dialog you can further define how the detected spam e-mail messages should be treated:

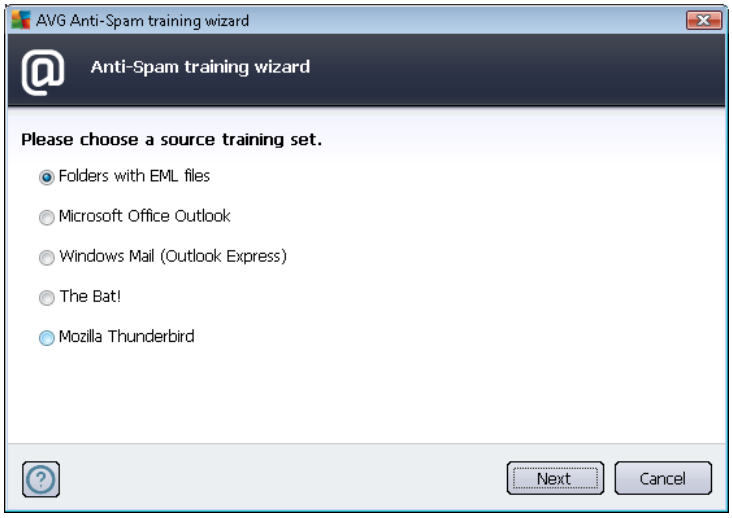
- ***Move message to the junk folder*** *(Microsoft Outlook plugin only)* - mark this checkbox to specify that each detected spam message should be automatically moved to the specific junk folder within your MS Outlook e-mail client. At the moment, the feature is not supported in other mail clients.
- ***Add recipients of sent e-mails to whitelist*** - tick this checkbox to confirm that all recipients of sent e-mails can be trusted, and all e-mail messages coming from their e-mail accounts can be delivered.
- ***Modify subject for messages marked as SPAM*** - tick this checkbox if you would like all messages detected as spam to be marked with a specific word or character in the e-mail subject field; the desired text can be typed in the activated text field.
- ***Ask before reporting wrong detection*** - provided that during the installation process you agreed to participate in the Product Improvement Program. If so, you allowed reporting of detected threats to AVG. The report is made automatically. However, you may tick this checkbox to confirm you want to be asked before any detected spam gets reported to AVG to make sure the message should really be classified as spam.

Control buttons

The ***Train Anti-Spam*** button opens the Anti-Spam training wizard described in details in the next chapter.

Anti-Spam Training Wizard

The first dialog of the ***Anti-Spam Training Wizard*** asks you to select the source of e-mail messages you want to use for training. Usually, you will want to use either e-mails that have been incorrectly marked as SPAM, or spam messages that have not been recognized.



There are the following options to choose from:

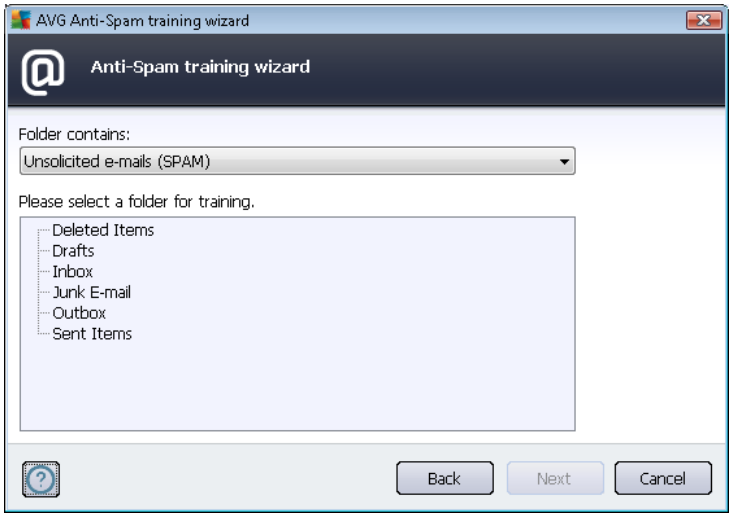
- ***A specific e-mail client*** - if you use one of the listed e-mail clients (*MS Outlook, Outlook Express, The Bat!*), simply select the respective option
- ***Folder with EML files*** - if you use any other e-mail program, you should first save the messages to a specific folder (*in .eml format*), or make sure that you know the location of your e-mail client message folders. Then select ***Folder with EML files***, which will enable you to locate the desired folder in the next step

For a faster and easier training process, it is a good idea to sort the e-mails in the folders beforehand, so that the folder you will use for training contains only the training messages (either wanted, or unwanted). However, this is not necessary, as you will be able to filter the e-mails later on.

Select the appropriate option and click ***Next*** to continue the wizard.

Folders with EML files

Dialog displayed in this step depends on your previous selection.



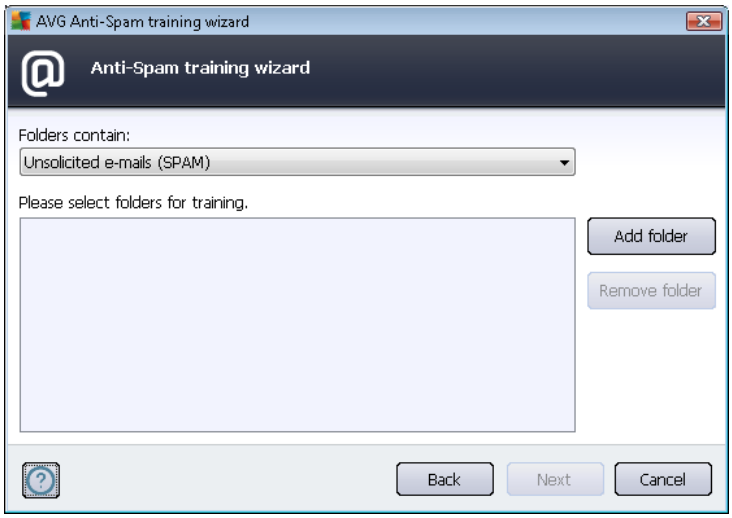
In this dialog, please select the folder with the messages you want to use for training. Press the ***Add folder*** button to locate the folder with the .eml files (*saved e-mail messages*). The selected folder will then be displayed in the dialog.

In the ***Folders contain*** drop-down menu, set one of the two options - whether the selected folder contains wanted (*HAM*), or unsolicited (*SPAM*) messages. Please note that you will be able to filter the messages in the next step, so the folder does not have to contain only training e-mails. You can also remove unwanted selected folders from the list by clicking the ***Remove folder*** button.

When done, click ***Next*** and proceed to Message filtering options.

Specific e-mail client

Once you confirm one of the options, a new dialog will appear.



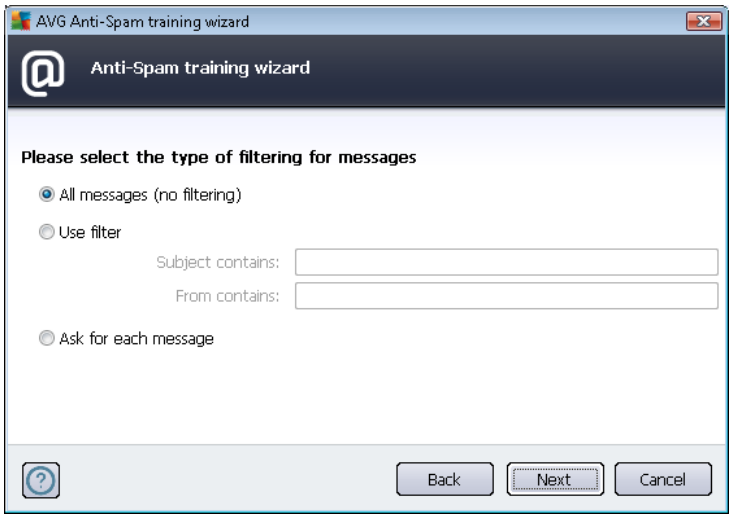
Note: *In case of Microsoft Office Outlook, you will be prompted to select the MS Office Outlook*

profile first.

In the ***Folders contain*** drop-down menu, set one of the two options - whether the selected folder contains wanted (*HAM*), or unsolicited (*SPAM*) messages. Please note that you will be able to filter the messages in the next step, so the folder does not have to contain only training e-mails. A navigation tree of the selected e-mail client is already displayed in the main section of the dialog. Please locate the desired folder in the tree and highlight it with your mouse.

When done, click ***Next*** and proceed to Message filtering options.

Message filtering options



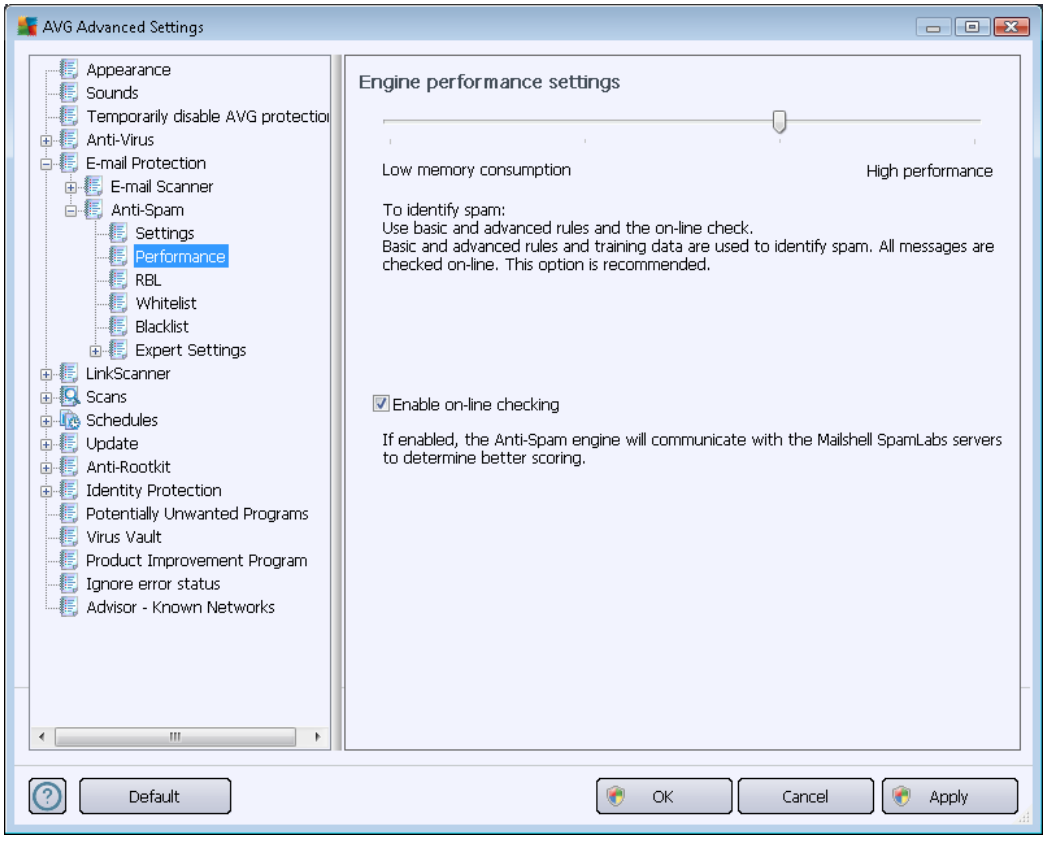
In this dialog, you can set filtering of the e-mail messages.

- ***All messages (no filtering)*** - If you are sure that the selected folder contains only messages you want to use for training, select the ***All messages (no filtering)*** option.
- ***Use filter*** - For more advanced filtering, select the ***Use filter*** option. You can fill in a word (*name*), part of a word, or phrase to be searched for in the e-mail subject and/or the sender's field. All messages matching exactly the entered criteria will be used for the training, without further prompting. When you fill in both text fields, addresses that match just one of the two conditions will also be used!
- ***Ask for each message*** - If you are unsure about the messages contained in the folder, and you want the wizard to ask you about every single message *(so that you can determine whether to use it for training or not)*, select the ***Ask for each message*** option.

When the appropriate option has been selected, click ***Next***. The following dialog will be informative only, telling you that the wizard is ready to process the messages. To start training, click the ***Next*** button again. Training will then start according to the previously selected conditions.

Performance

The ***Engine performance settings*** dialog (*linked to via the **Performance** item of the left navigation*) offers the ***Anti-Spam*** component performance settings:



Move the slider left or right to change the level of scanning performance ranging between ***Low memory*** / ***High performance*** modes.

- ***Low memory*** - during the scanning process to identify spam, no rules will be used. Only training data will be used for identification. This mode is not recommended for common use, unless the computer hardware is really poor.

- ***High performance*** - this mode will consume a large amount of memory. During the scanning process to identify spam, the following features will be used: rules and spam database cache, basic and advanced rules, spammer IP addresses, and spammer databases.

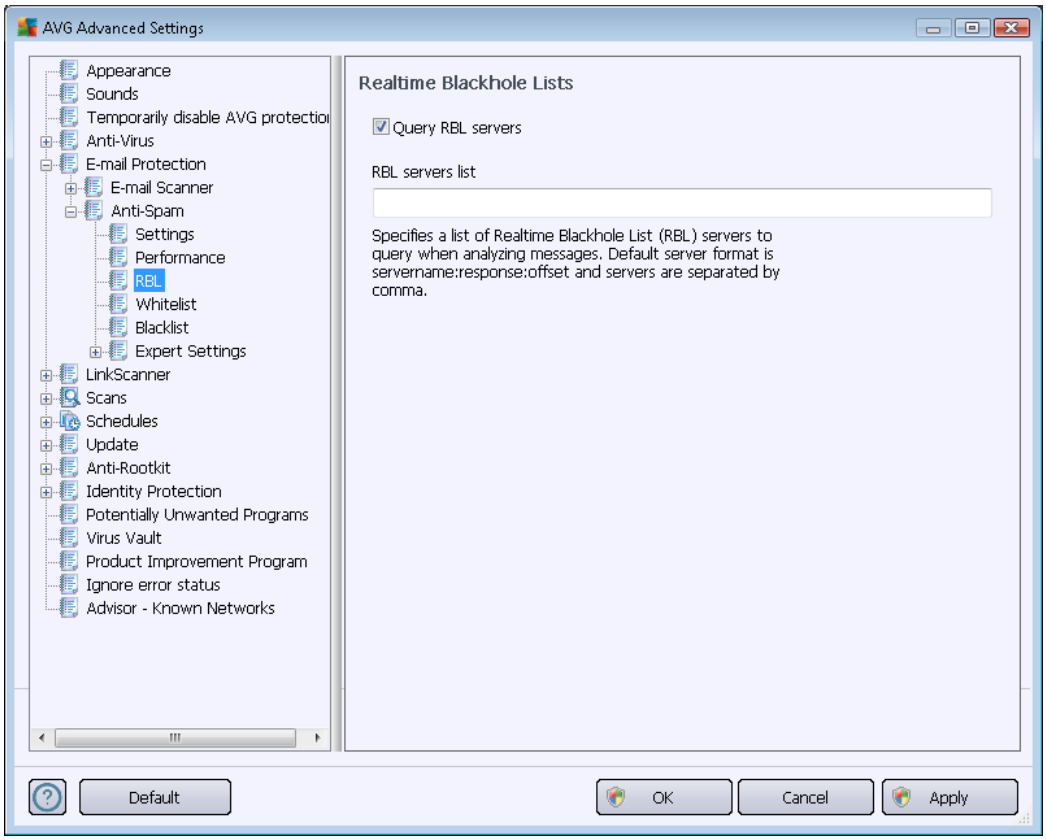
The ***Enable on-line checking*** item is on by default. It results in more precise spam detection via communication with the Mailshell servers, i.e. the scanned data will be compared with Mailshell databases online.

Generally it is recommended that you keep the default settings and only change them if you

have a valid reason to do so. Any changes to this configuration should only be made by expert users!

RBL

The ***RBL*** item opens an editing dialog called ***Realtime Blackhole Lists*** where you can switch the ***Query RBL servers*** functions:



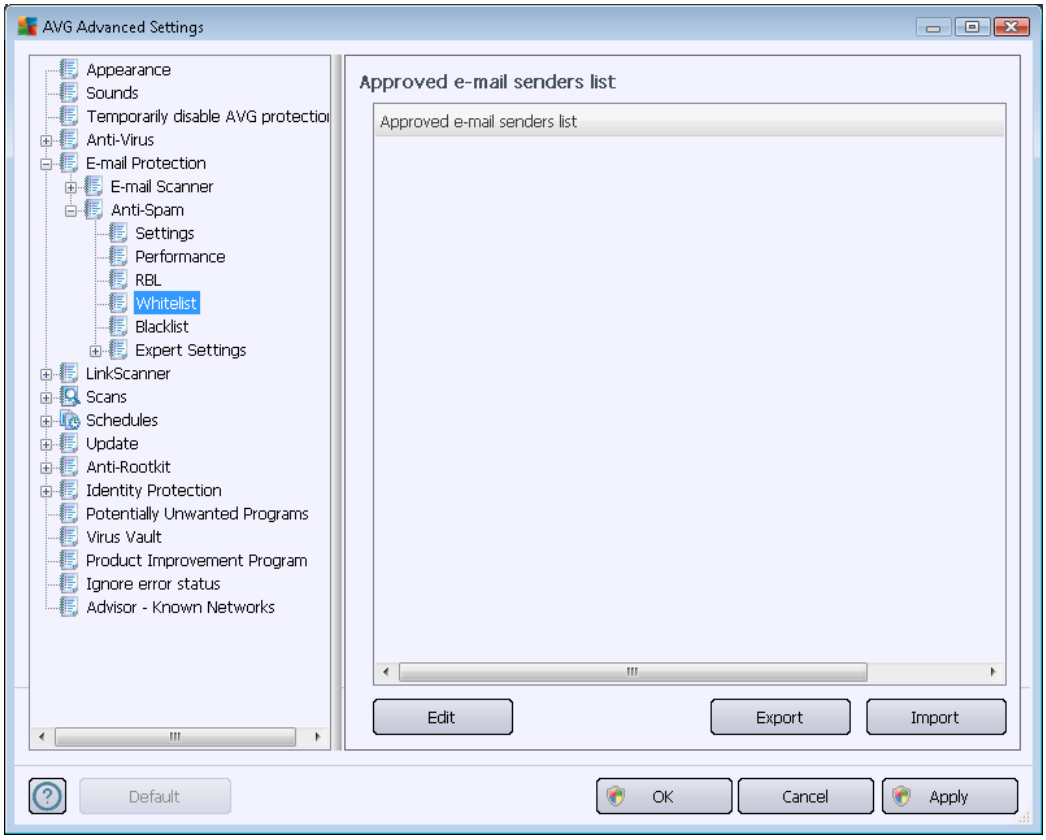
The RBL (*Realtime Blackhole List*) server is a DNS server with an extensive database of known spam senders. When this feature is switched on, all e-mail messages will be verified against the RBL server database and marked as spam if identical to any of the database entries. The RBL servers databases contain the latest up-to-the-minute spam fingerprints to provide the very best and most accurate spam detection. This feature is especially useful for users who receive large amounts of spam that is not normally detected by the Anti-Spam engine.

The ***RBL servers list*** allows you to define specific RBL server locations (*please note, that enabling this feature may, on some systems and configurations, slow down the e-mail receiving process, as every single message must be verified against the RBL server database).*

No personal data is sent to the server!

Whitelist

The ***Whitelist*** item opens a dialog named ***Approved e-mail senders list*** with a global list of approved sender e-mail addresses and domain names whose messages will never be marked as spam.



In the editing interface you can compile a list of senders that you are sure will never send you unwanted messages (spam). You can also compile a list of full domain names (*e.g. avg.com*), that you know do not generate spam messages. Once you have such a list of senders and/or domain names prepared, you can enter them by either of the following methods: by directly entering each e-mail address or by importing the whole list of addresses at once.

Control buttons

The following control buttons are available:

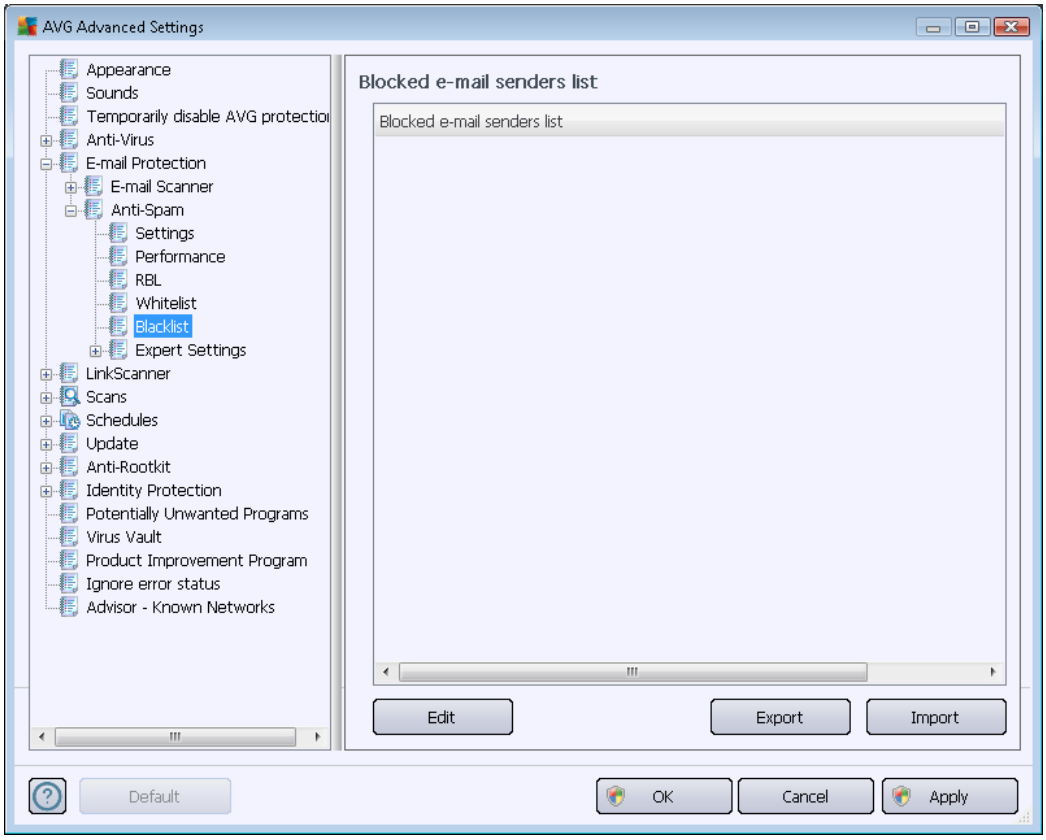
- ***Edit*** - press this button to open a dialog, where you can manually enter a list of addresses (*you can also use copy and paste*). Insert one item (*sender, domain name*) per line.
- ***Export*** - if you decide to export the records for some purpose, you can do so by pressing

this button. All records will be saved to a plain text file.

- ***Import*** - if you already have a text file of email addresses/domain names prepared, you can simply import it by selecting this button. The content of the file must contain only one item (*address, domain name*) per line.

Blacklist

The ***Blacklist*** item opens a dialog with a global list of blocked sender e-mail addresses and domain names whose messages will always be marked as spam.



In the editing interface you can compile a list of senders that you expect to send you unwanted messages *(spam)*. You can also compile a list of full domain names (*e.g. spammingcompany.com*), that you expect or receive spam messages from. All e-mail from the listed addresses/domains will be identified as spam. Once you have such a list of senders and/or domain names prepared, you can enter them by either of the following methods: by directly entering each e-mail address or by importing the whole list of addresses at once.

Control buttons

The following control buttons are available:

- ***Edit*** - press this button to open a dialog, where you can manually enter a list of addresses (*you can also use copy and paste*). Insert one item (*sender, domain name*) per line.
- ***Export*** - if you decide to export the records for some purpose, you can do so by pressing this button. All records will be saved to a plain text file.
- ***Import*** - if you already have a text file of email addresses/domain names prepared, you can simply import it by selecting this button.

Expert settings

The Advanced Settings branch contains extensive setting options for the Anti-Spam component. These settings are intended exclusively for experienced users, typically network administrators who need to configure the antispam protection in full detail for the best protection of e-mail servers. For this reason, there is no extra help available for the individual dialogs; however, there is a brief description of each respective option directly in the user interface.

We strongly recommend not changing any settings unless you are fully familiar with the advanced settings for Spamcatcher (MailShell Inc.). Any inappropriate changes may result in bad performance or incorrect component functionality.

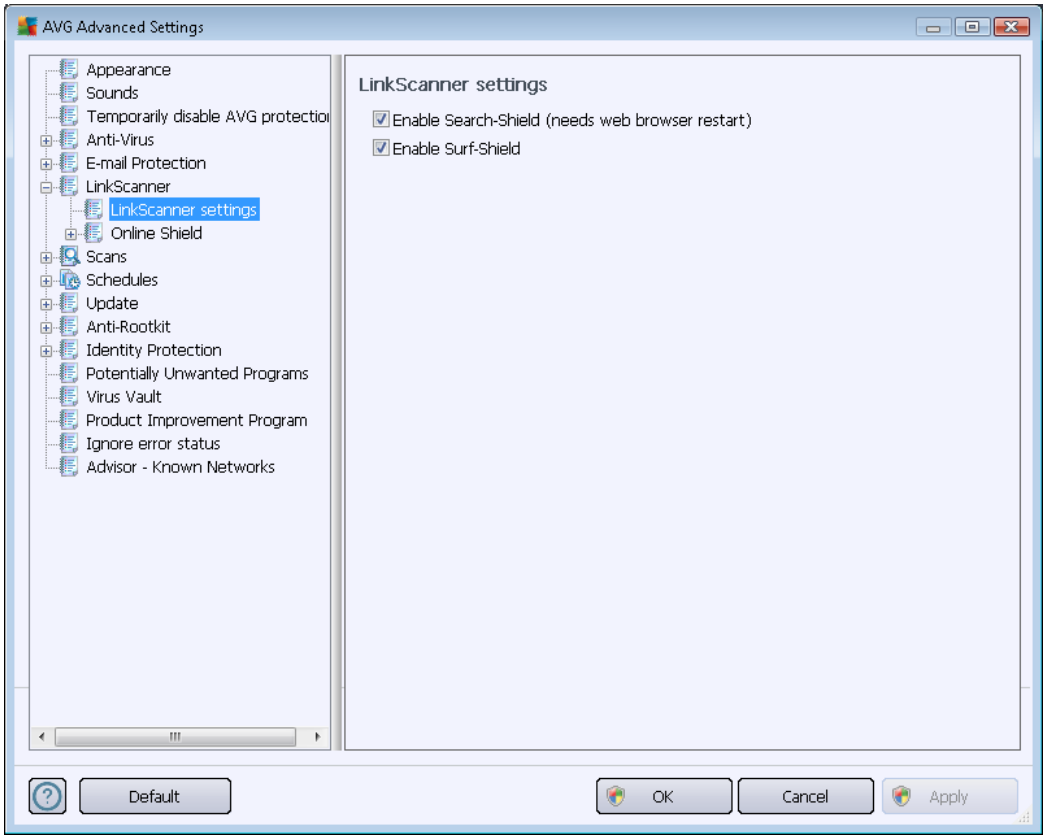
If you still believe you need to change the Anti-Spam configuration at the very advanced level, please follow the instructions provided directly in the user interface. Generally, in each dialog you will find one single specific feature that you can edit - its description is always included in the dialog itself:

- ***Cache*** - fingerprint, domain reputation, LegitRepute
- ***Training*** - maximum word entries, auto training threshold, weight
- ***Filtering*** - language list, country list, approved IPs, blocked IPs, blocked countries, blocked charsets, spoofed senders
- ***RBL*** - RBL servers, multihit, threshold, timeout, maximum IPs
- ***Internet connection*** - timeout, proxy server, proxy authentication

10.6. Link Scanner

10.6.1. Link Scanner settings

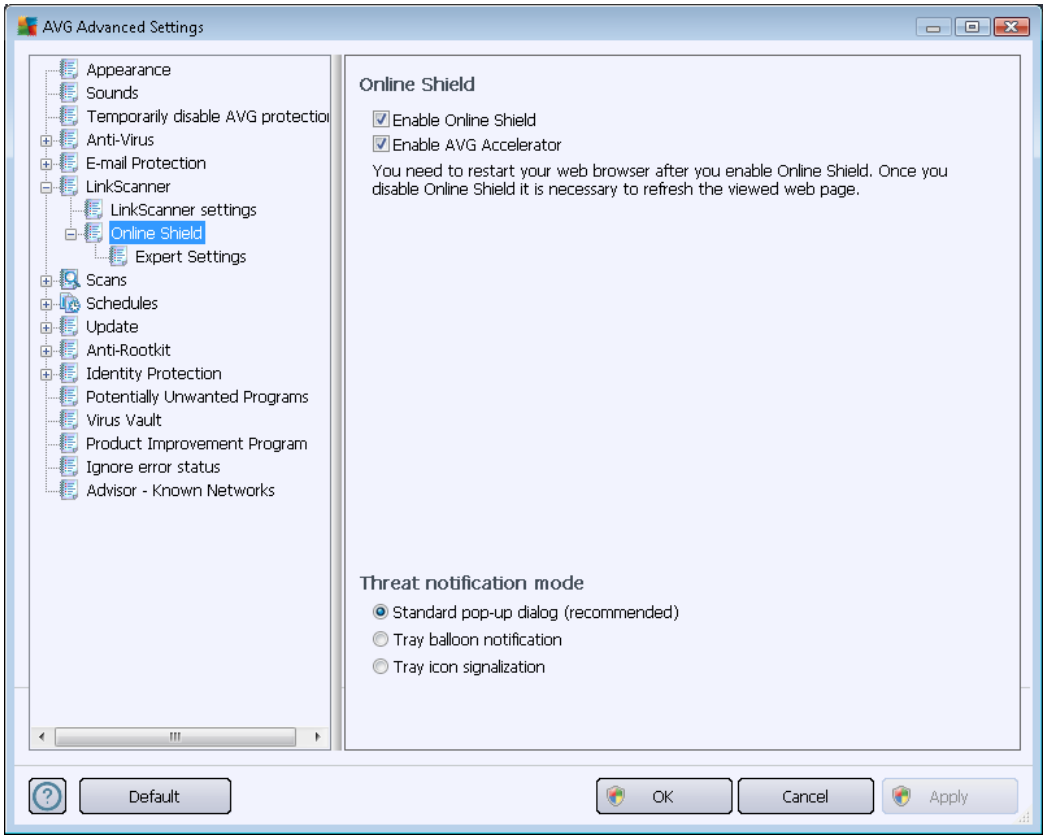
The ***LinkScanner settings*** dialog allows you to switch the elementary features of the LinkScanner:



- ***Enable Search-Shield*** - (*on by default*): advisory notifying icons on searches performed with Google, Yahoo! JP, AVG Secure Search, Yandex, Baidu, Bing, AOL, AltaVista, EarthLink, Ask, Seznam, eBay, Twitter, Digg, or SlashDot having checked the content of sites returned by the search engine.

- ***Enable Surf-Shield*** - (*on by default*): active (*real-time*) protection against exploitative sites as they are accessed. Known malicious site connections and their exploitative content are blocked as they are accessed by the user via a web browser (*or any other application that uses HTTP*).

10.6.2. Online Shield



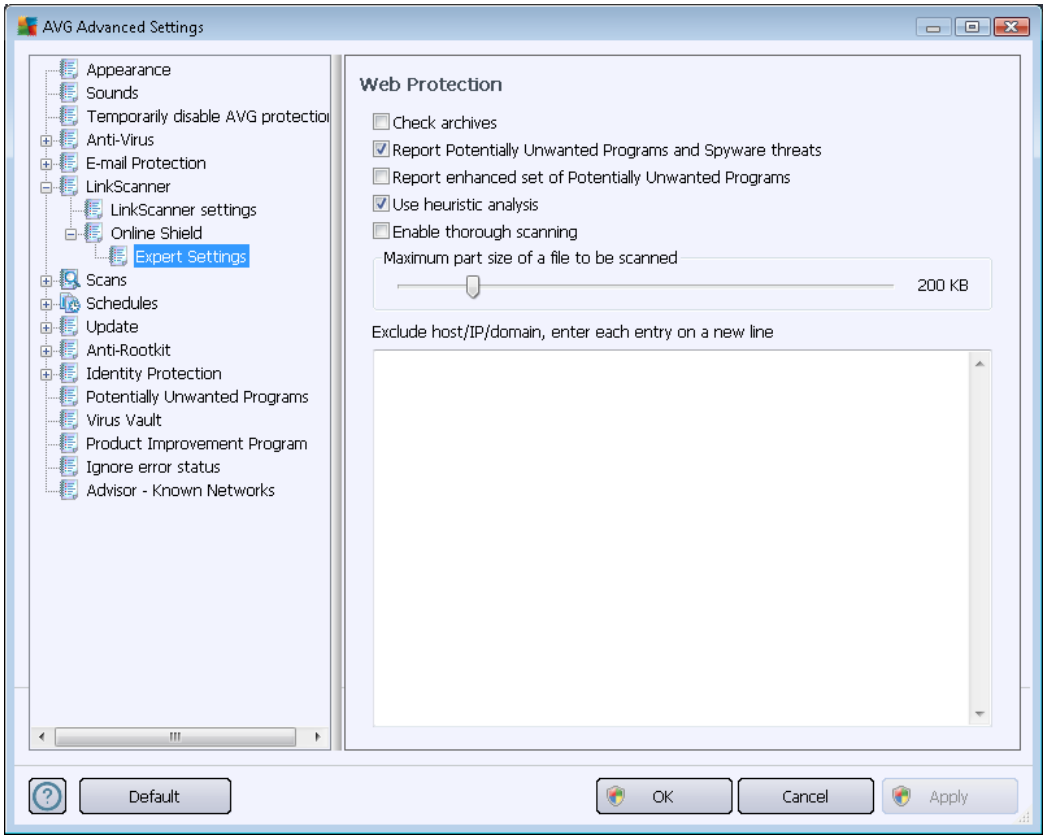
The ***Online Shield*** dialog offers the following options:

- ***Enable Online Shield*** *(on, by default)* - activate/deactivate the entire ***Online Shield*** service. For further advanced settings of ***Online Shield*** please continue to the subsequent dialog called Web Protection.

- ***Enable AVG Accelerator*** *(on, by default)* - activate/deactivate the ***AVG Accelerator*** service that allows smoother online video playback and makes additional downloads easier.

Threat notification mode

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



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 ***Online Shield*** should perform a scan o the www page content. Provided this option is on (*by default*), you can also switch these items in/off:
    - ***Check archives*** - (*off by default*): scan the content of archives possibly included in the www page to be displayed.
    - ***Report Potentially Unwanted Programs and Spyware threats*** - (*on by default*): check to activate the Anti-Spyware engine, and scan for spyware as well as for viruses. Spyware represents a questionable malware category: even though it usually represents a security risk, some of these programs can be installed intentionally. We recommend that you keep this feature activated as it increases your computer security.
    - ***Report enhanced set of Potentially Unwanted Programs*** - (*off by default*): mark to detect extended package of spyware: programs that are perfectly ok and harmless when acquired from the manufacturer directly, but can be misused for malicious purposes later. This is an additional measure that increases your computer security even more, however it may block legal programs, and is therefore switched off by default.

- ***Use heuristic analysis*** - (*on by default*): 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*).

- ***Enable thorough scanning*** (*off by default*) - in specific situations (*suspicions about your computer being infected*) you may check this option to activate the most thorough scanning algorithms that will scan even those areas of your computer that rarely get infected, just to be absolutely sure. Remember though that this method is rather time-consuming.

- ***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 ***Online Shield***. Even if the downloaded file is bigger than specified, and therefore will not be scanned with Online Shield, you are still protected: if the file is infected, the ***Resident Shield*** will detect it immediately.

- ***Exclude host/IP/domain*** - 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 ***Online Shield*** into the text field. Therefore only exclude hosts that you can be absolutely sure would never provide dangerous website content.

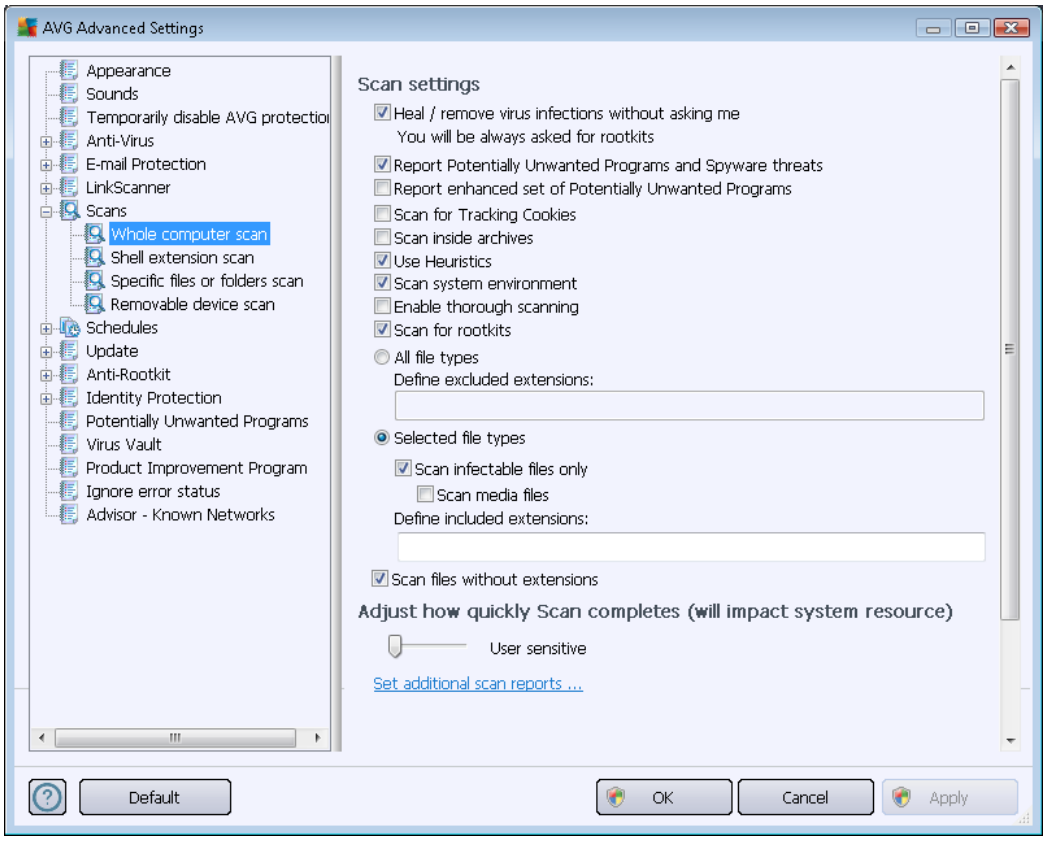
10.7. Scans

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

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

10.7.1. Whole computer scan

The ***Whole Computer scan*** option allows you to edit parameters of one of the scans predefined by the software vendor, Whole computer scan:



Scan settings

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

- ***Heal / remove virus infection without asking me*** (*on by default*) - 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*** (*on by default*) - check to activate the Anti-Spyware engine, and scan for spyware as well as for viruses. Spyware represents a questionable malware category: even though it usually represents a security risk, some of these programs can be installed intentionally. We recommend that you keep this feature activated as it increases your computer security.
- ***Report enhanced set of Potentially Unwanted Programs*** (*off by default*) - mark to detect extended packages of spyware: programs that are perfectly ok and harmless when acquired from the manufacturer directly, but can be misused for malicious purposes later. This is an

additional measure that increases your computer security even more, however it may block legal programs, and is therefore switched off by default.

- ***Scan for Tracking Cookies*** (*off by default*) - this parameter of the Anti-Spyware component stipulates 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*** (*off by default*) - this parameter stipulates that scanning should check all files stored inside archives, e.g. ZIP, RAR, ...
- ***Use Heuristics*** (*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*** (*on by default*) - scanning will also check the system areas of your computer.
- ***Enable thorough scanning*** (*off by default*) - in specific situations (*suspicions about your computer being infected*) you may check this option to activate the most thorough scanning algorithms that will scan even those areas of your computer that rarely get infected, just to be absolutely sure. Remember though that this method is rather time-consuming.
- ***Scan for rootkits*** (*on by default*) - Anti-Rootkit scan searches your computer for possible rootkits, i.e. programs and technologies that can cover malware activity in your computer. If a rootkit is detected, this does not necessarily mean your computer is infected. In some cases, specific drivers or sections of regular applications may be misleadingly detected as rootkits.

You should also decide whether you want to scan

- ***All file types*** with the option of defining exceptions from scanning by providing a list of comma separated (*after being 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 can be infected (*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 likely to be infected by a virus*). Again, you can specify by extensions which files 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 extensions are rather suspicious and should be scanned at all times.

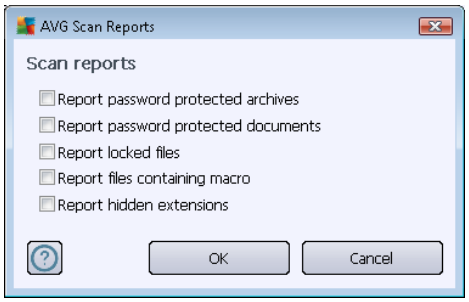
Adjust how quickly scan completes

Within the ***Adjust how quickly scan completes*** section you can further specify the desired

scanning speed dependent on system resource usage. By default, this option value is set to *user sensitive* level of automatic resource usage. If you want the scanning to run faster, it will take less time but the system resources used 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 used by extending the scanning duration.

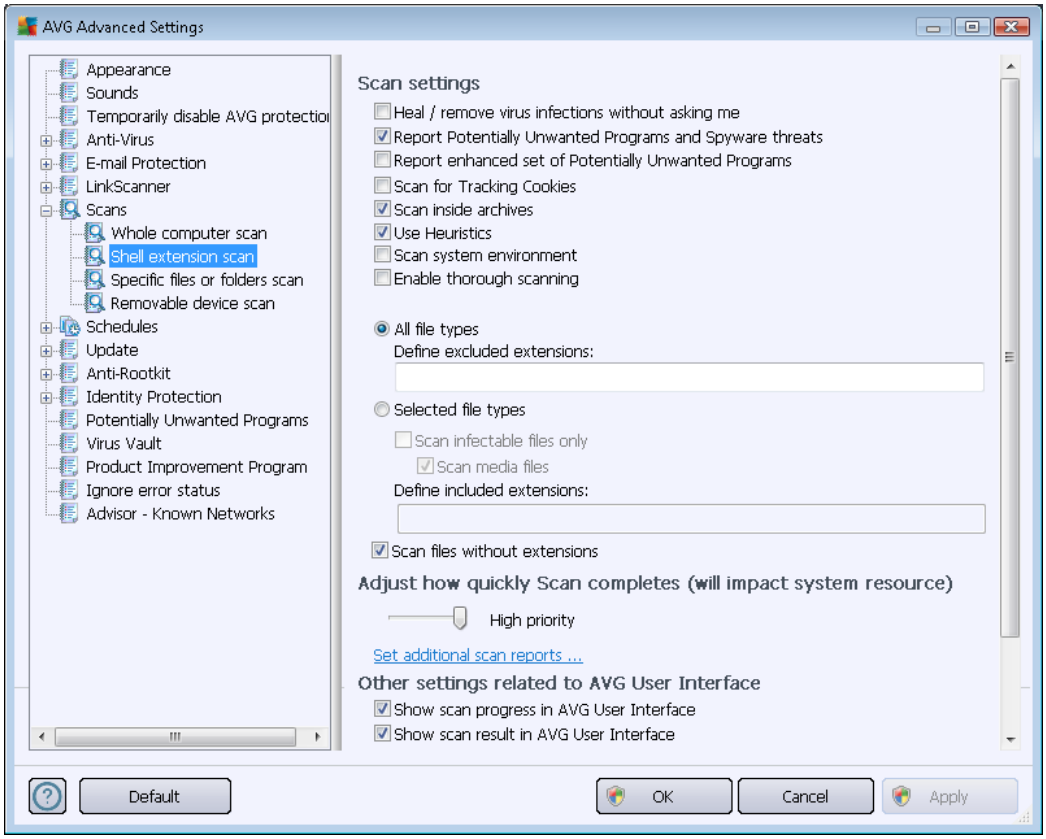
Set additional scan reports ...

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:



10.7.2. Shell extension Scan

Similar to the previous Whole Computer scan 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 Scanning in Windows Explorer chapter:



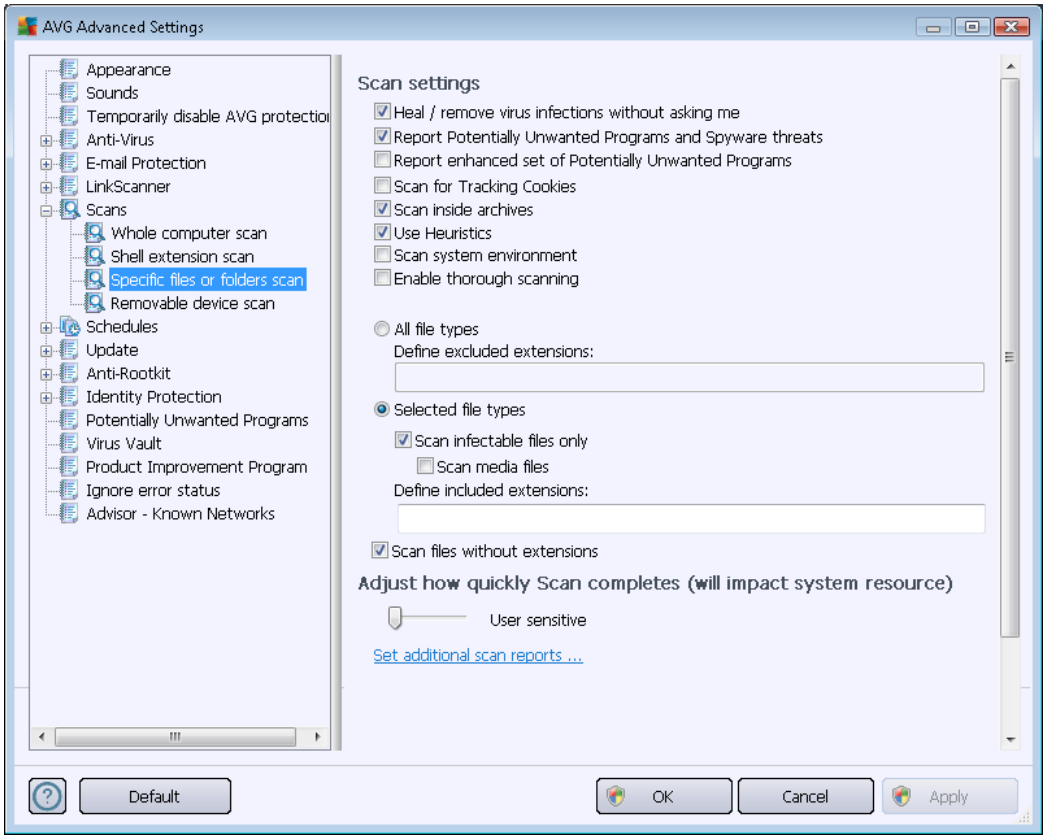
The list of parameters is identical to those available for the Scan of the whole computer. However, the default settings differ (*for instance, Whole Computer scan by default does not check the archives but it does scan the system environment; vice versa with the Shell Extension Scan*).

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

Compared to the Whole Computer scan dialog, the ***Shell extension scan*** dialog also includes the section named ***Other settings related to AVG User Interface***, where you can specify whether you want the scan progress and scan results to be accessible from the AVG user interface. You can also specify that the scan result should only be displayed in case an infection is detected during scanning.

10.7.3. Specific files or folders scan

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

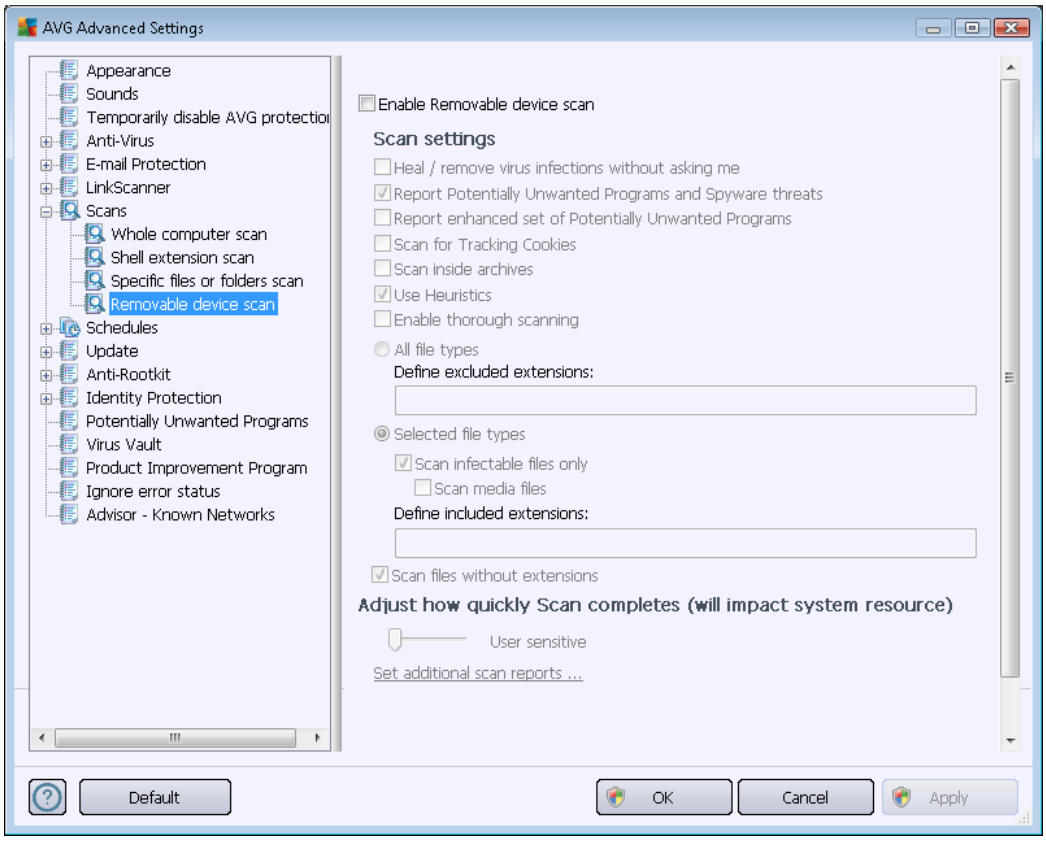


All parameters set up in this configuration dialog apply only to the areas selected for scanning with Scan of specific files or folders!

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

10.7.4. Removable device scan

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



The ***Removable device scan*** is launched automatically once you attach any removable device to your computer. By default, this scan 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 scan ready and launched automatically when needed, mark the ***Enable Removable device scan*** option.

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

10.8. Schedules

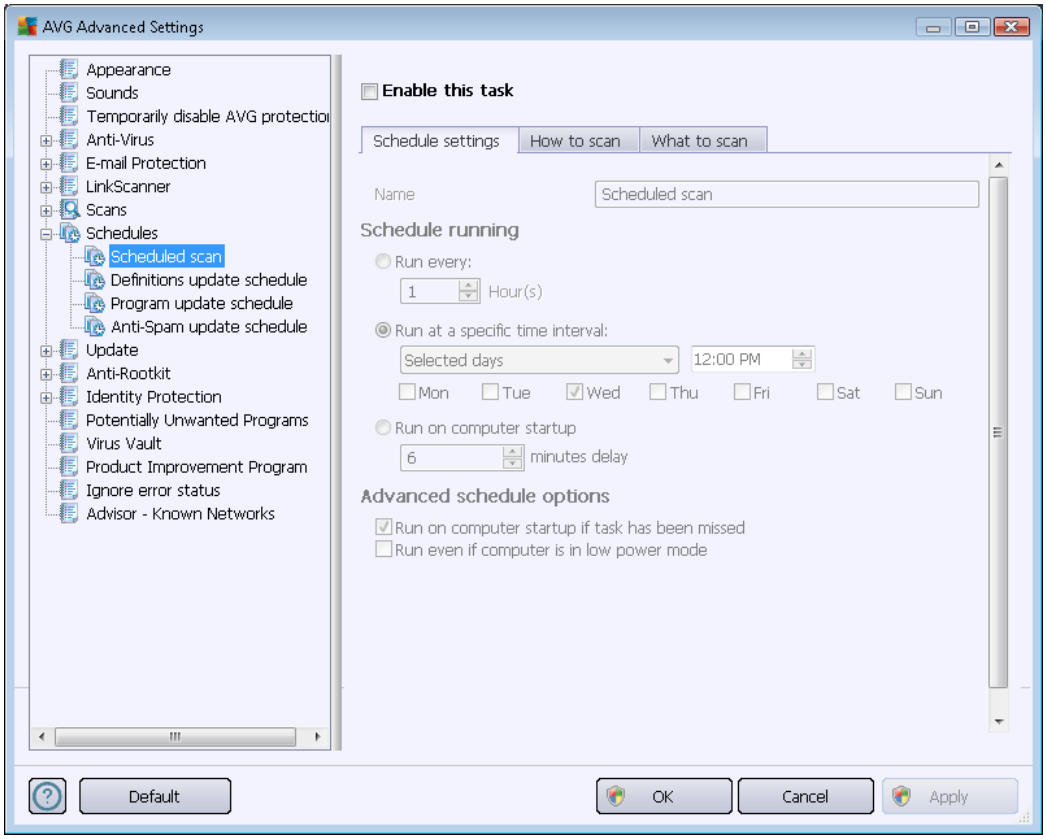
In the ***Schedules*** section you can edit the default settings of:

- Scheduled scan
- Definitions update schedule
- Program update schedule
- Anti-Spam update schedule

10.8.1. Scheduled Scan

The parameters of the scheduled scan can be edited (*or a new schedule set up*) on three tabs. On each 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:

Schedule settings



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

Example: *It is not appropriate to call the scan by the name "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 area scan" etc. It is also not necessary to specify in the scan's name whether it is the scan of the whole 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.*

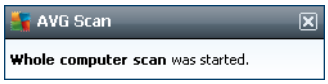
In this dialog you can further define the following parameters of the scan:

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 (***Run on computer startup***).

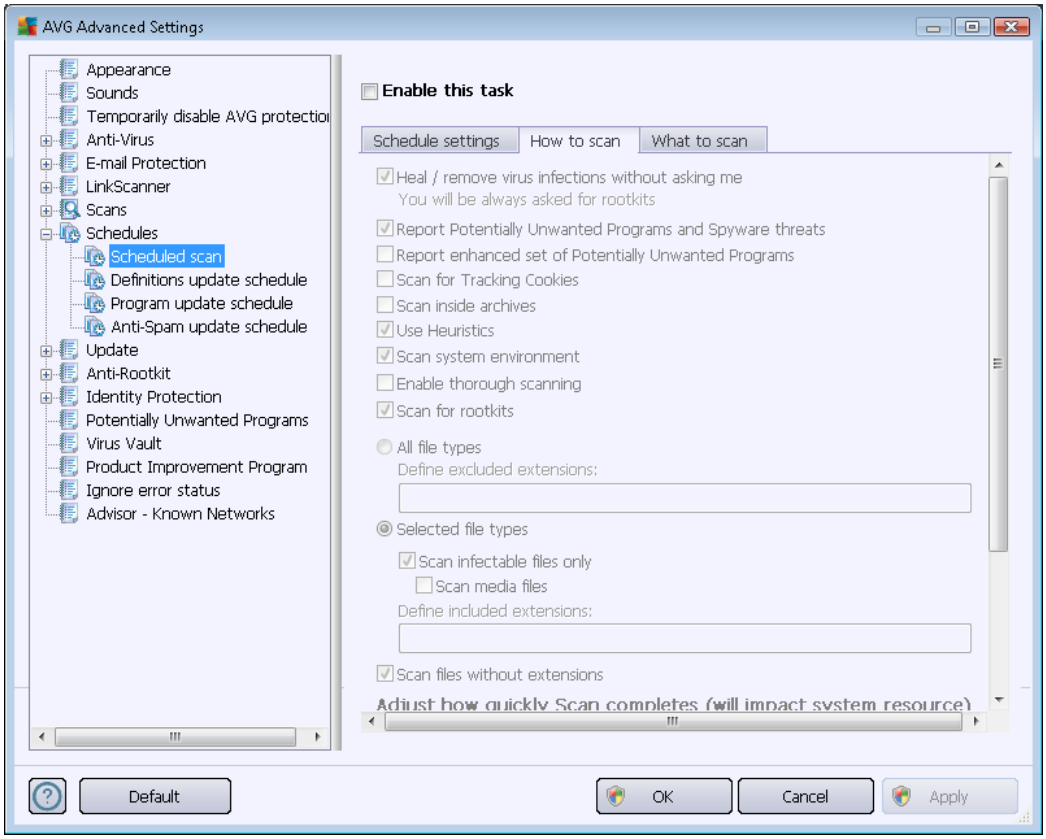
Advanced schedule options

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 flash light*) 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, and also change the priority of the currently running scan.

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 that you keep the predefined configuration***:

- ***Heal / remove virus infection without asking me*** *(on by default):* 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*** *(on by default):* check to activate the Anti-Spyware engine, and scan for spyware as well as for viruses. Spyware represents a questionable malware category: even though it usually represents a security risk, some of these programs can be installed intentionally. We recommend that you keep this feature activated as it increases your computer security.
- ***Report enhanced set of Potentially Unwanted Programs*** (*off by default*): mark to detect extended packages of spyware: programs that are perfectly ok and harmless when acquired from the manufacturer directly, but can be misused for malicious purposes later. This is an additional measure that increases your computer security even more, however it may block legal programs, and is therefore switched off by default.
- ***Scan for Tracking Cookies*** (*off by default*): this parameter of the Anti-Spyware component specifies 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*** (*off by default*): this parameter specifies that the scanning should check all files even if they are stored inside an archive, e.g. ZIP, RAR, ...
- ***Use Heuristics*** (*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*** (*on by default*): scanning will also check the system areas of your computer;
- ***Enable thorough scanning*** (*off by default):* in specific situations (*suspicious of your computer being infected*) you may check this option to activate the most thorough scanning algorithms that will scan even those areas of your computer that rarely get infected, just to be absolutely sure. Remember though that this method is rather time-consuming.
- ***Scan for rootkits*** *(on by default):* Anti-Rootkit scan searches your computer for possible rootkits, i.e. programs and technologies that can cover malware activity in your computer. If a rootkit is detected, this does not necessarily mean your computer is infected. In some cases, specific drivers or sections of regular applications may be misleadingly detected as rootkits.

You should also decide whether you want to scan

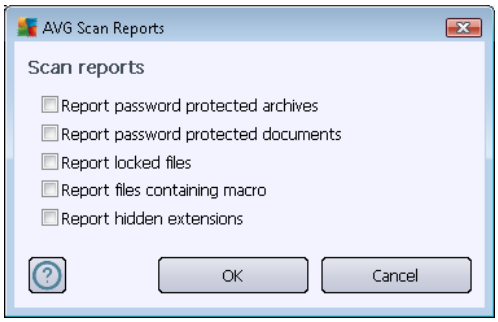
- ***All file types*** with the option of defining exceptions from scanning by providing a list of comma separated (*after being saved, the commas change into semicolons*) file extensions that should not be scanned;
- ***Selected file types*** - you can specify that you want to scan only files that can get infected (*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 likely to be infected by a virus*). Again, you can specify by extensions which files 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 extensions are rather suspicious and should be scanned at all times.

Adjust how quickly scan completes

Within the ***Adjust how quickly scan completes*** section you can further specify the desired scanning speed dependent on system resource usage. By default, this option value is set to the *user sensitive* level of automatic resource usage. If you want the scan to run faster, it will take less time but the system resources used 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 used by extending the scanning duration.

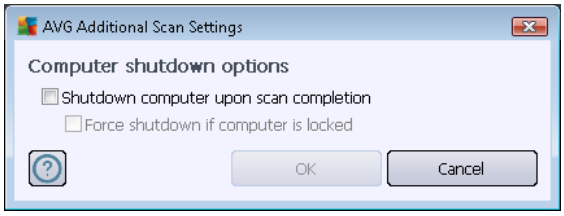
Set additional scan reports

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:

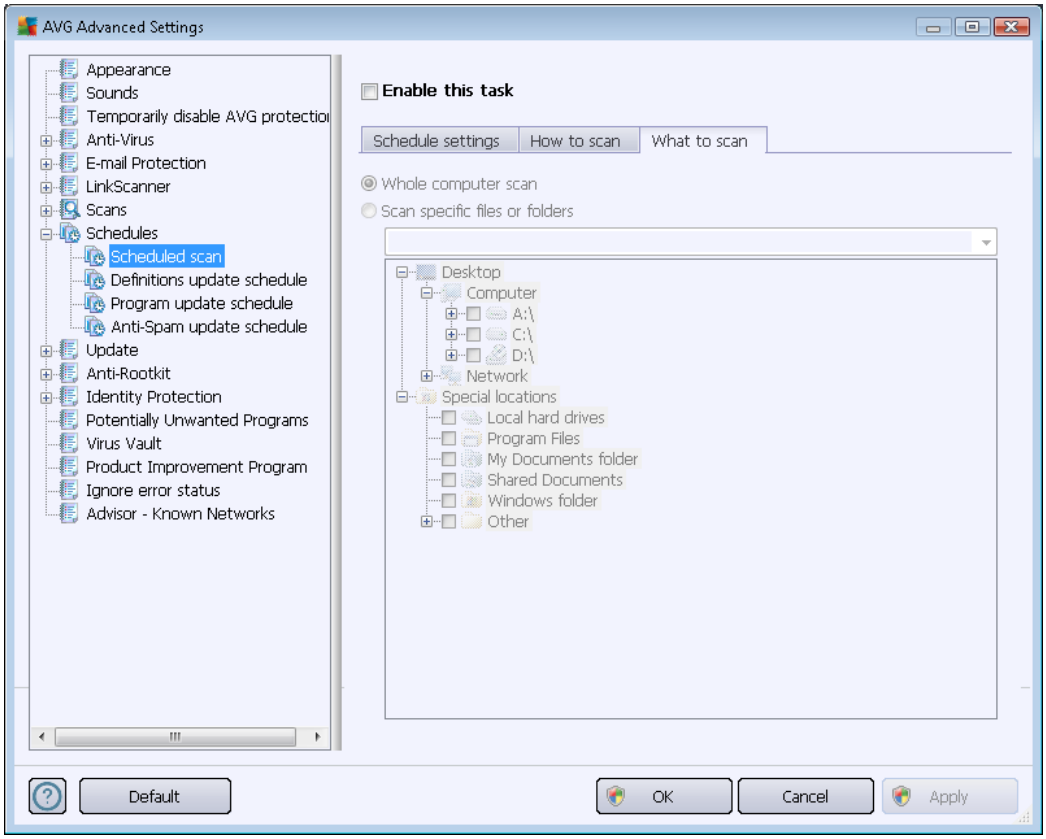


Additional scan settings

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***).



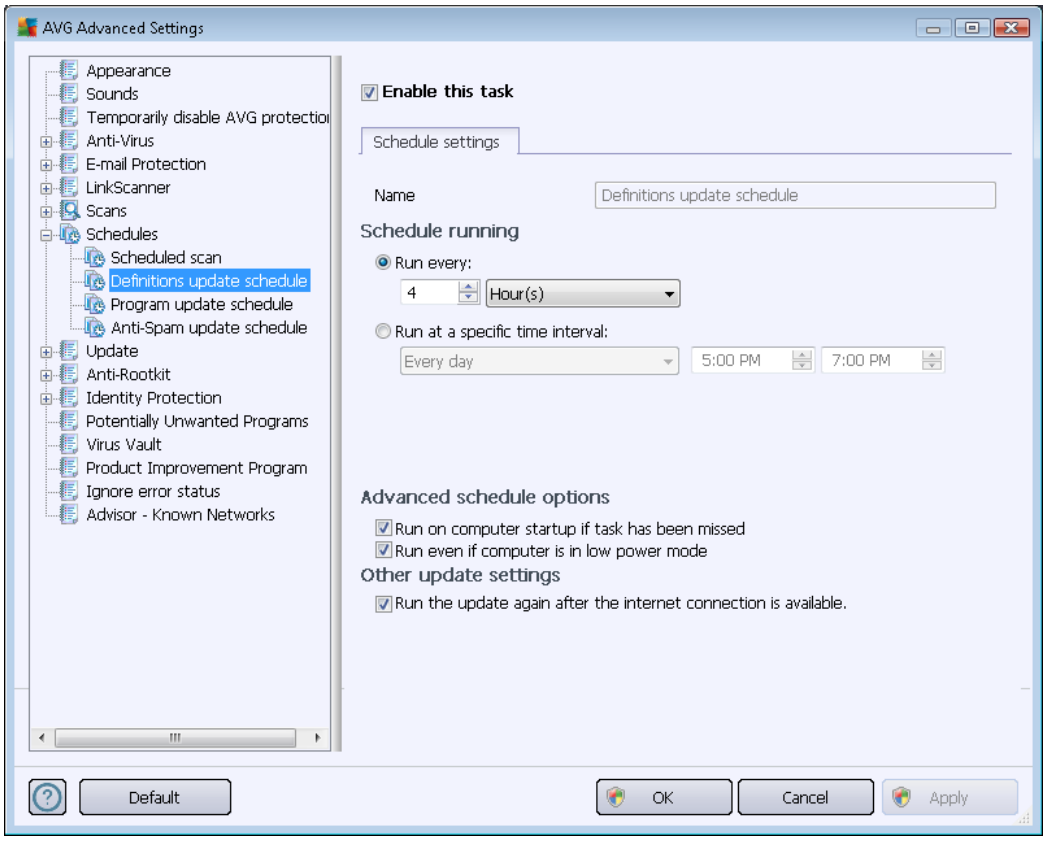
What to scan



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. 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.

10.8.2. Definitions Update Schedule

If ***really necessary***, you can uncheck the ***Enable this task*** item to simply deactivate the scheduled definitions update temporarily, and switch it on again later:



Within this dialog you can set up some detailed parameters for the definition update schedule. The text field called ***Name*** (*deactivated for all default schedules*) shows the name assigned to this very schedule by the program vendor.

Schedule running

In this section, specify the time intervals for the newly scheduled definitions 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

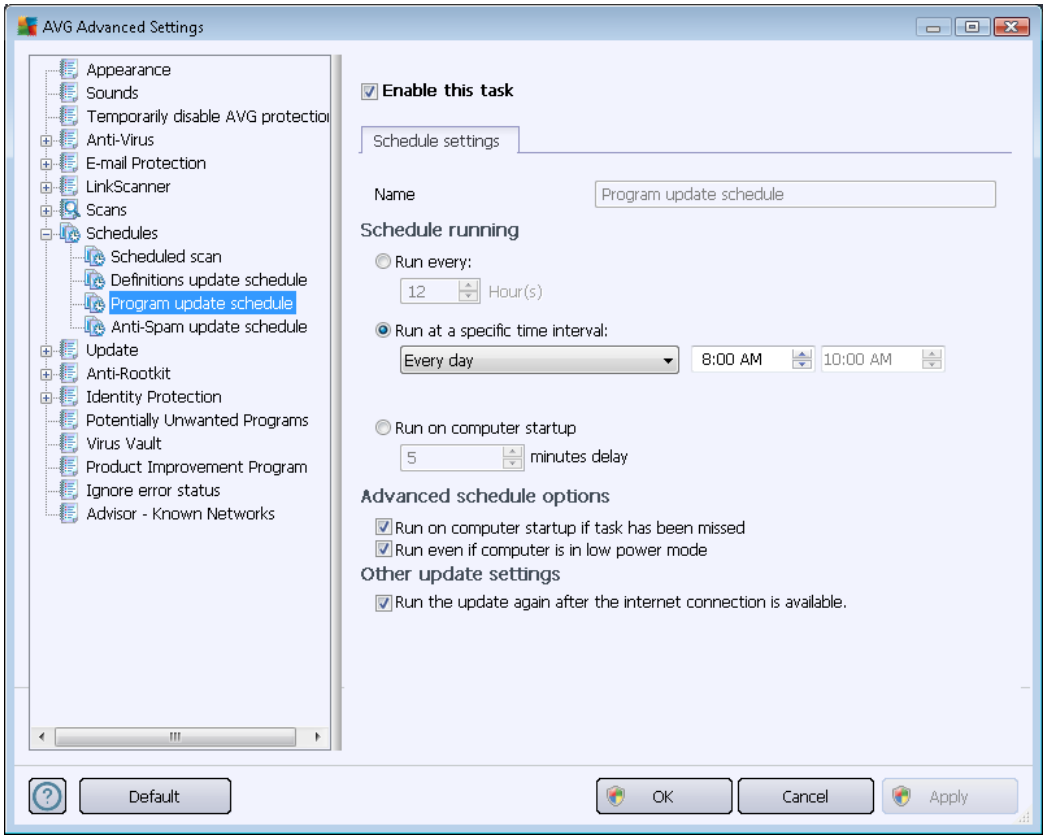
This section allows you to define under which conditions the definition update should/should not be launched if the computer is in low power mode or switched off completely.

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 is interrupted and the update process fails, it will be launched again immediately after the Internet connection is restored. Once the scheduled update is launched at the time you have specified, you will be informed of 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*).

10.8.3. Program Update Schedule

If ***really necessary***, you can uncheck the ***Enable this task*** item to simply deactivate the scheduled program update temporarily, and switch it on again later:



The text field called ***Name*** (*deactivated for all default schedules*) shows the name assigned to this very schedule by the program vendor.

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.

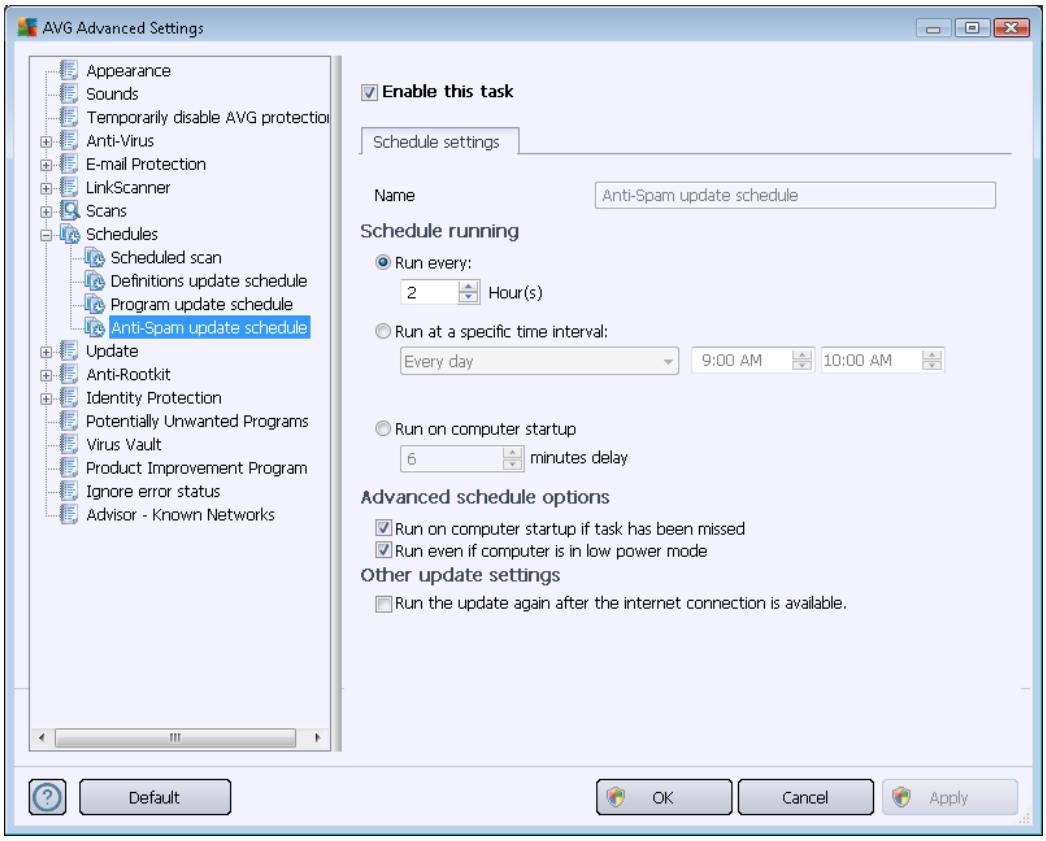
Other update settings

Check the ***Run the update again as soon as the Internet connection is available*** option to make sure that if the Internet connection is interrupted and the update process fails, it will be launched again immediately after the Internet connection is restored. Once the scheduled update is launched at the time you have specified, you will be informed of 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 the timings of a scheduled program update and scheduled scan coincide, the update process is of higher priority and the scan will be interrupted.*

10.8.4. Anti-Spam Update Schedule

If really necessary, you can uncheck the ***Enable this task*** item to simply deactivate the scheduled Anti-Spam update temporarily, and switch it on again later:



Within this dialog you can set up some detailed parameters for the update schedule. The text field called ***Name*** (*deactivated for all default schedules*) states the name assigned to this very schedule by the program vendor.

Schedule running

Here, specify the time intervals for the newly scheduled Anti-Spam update launch. The timing can either be defined by the repeated Anti-Spam update 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 update launch should be associated with (***Action based on computer startup***).

Advanced schedule options

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

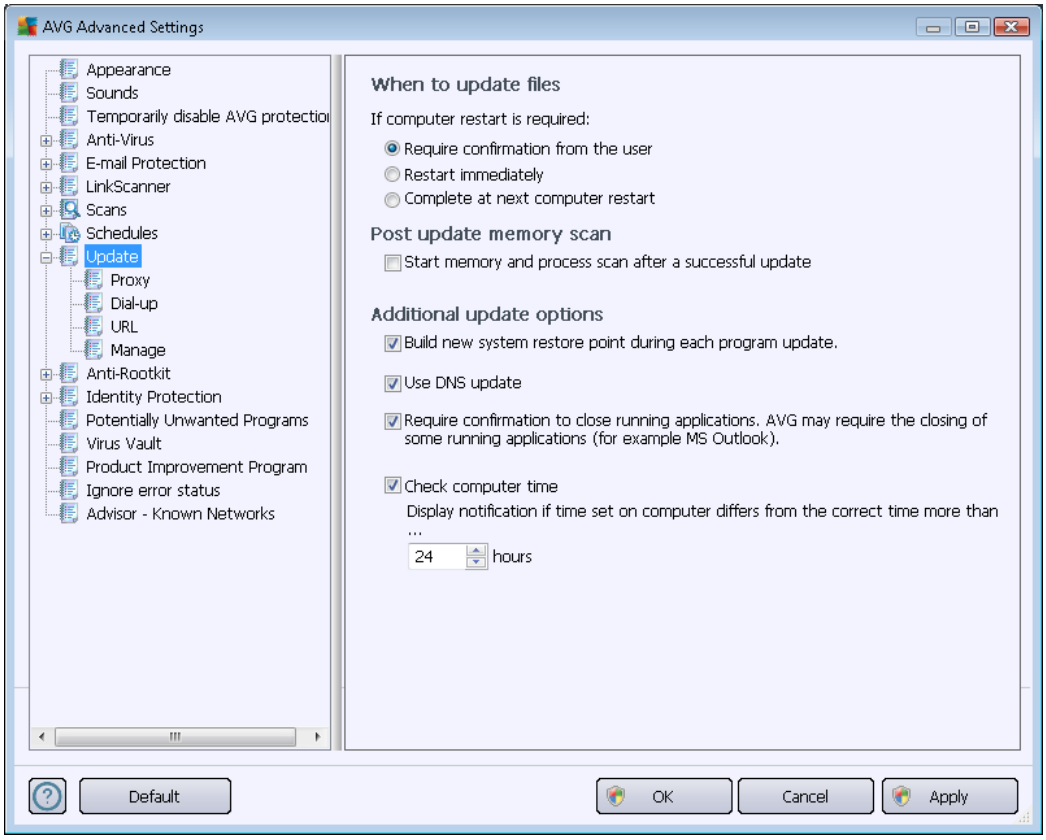
Other update settings

Check the ***Run the update again as soon as the Internet connection is available*** option to make sure that if the Internet connection is interrupted and the Anti-Spam update process fails, it will be launched again immediately after the Internet connection is restored.

Once the scheduled scan is launched in the time you have specified, you will be informed of 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).*

10.9. 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 three alternative options to be used in case the update process requires your PC to restart. The update finalization can be scheduled for the next PC restart, or you can launch the restart immediately:

- ***Require confirmation from the user*** *(by default)* - 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. Please keep in mind that this option is only recommended if you are sure to restart the computer regularly, at least once a day!

Post update memory scan

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

Additional update options

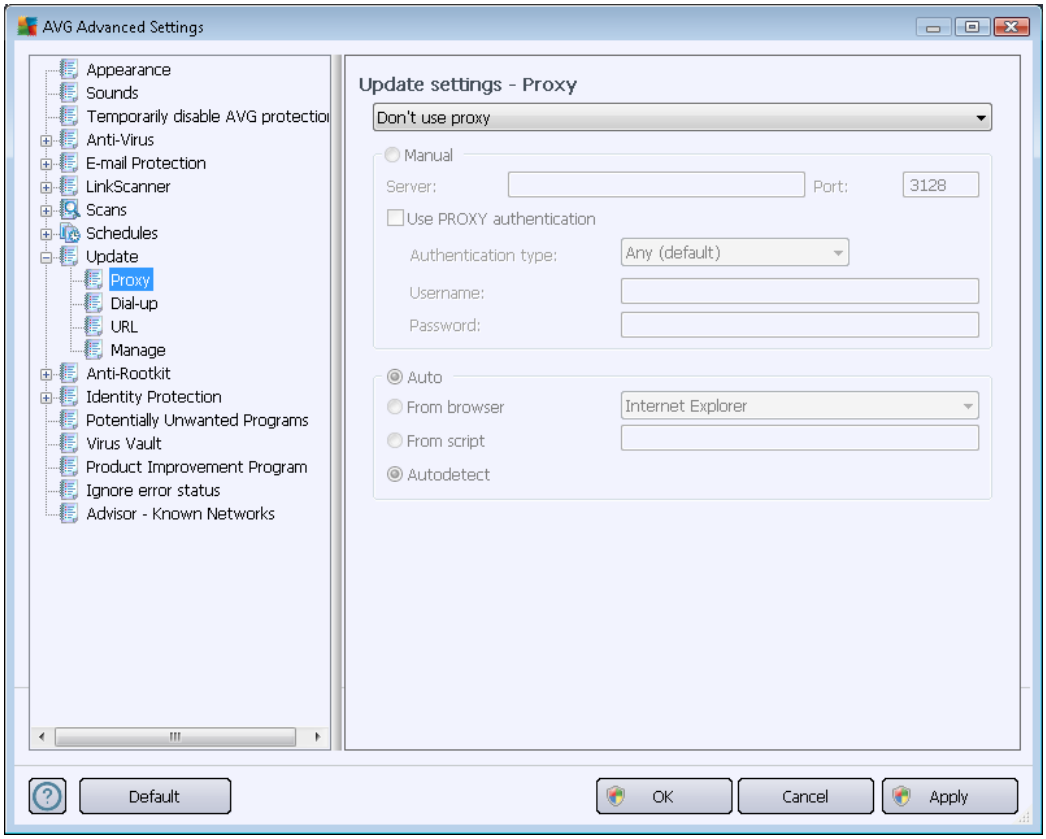
- ***Build new system restore point during each program update*** - before each AVG program update launch, a system restore point is created. In case the update process fails and your operating system crashes you can always restore your OS to its original configuration from this point. This option is 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*** (*on by default*) - with this item marked, once the update is launched, your **AVG Internet Security 2012** looks for information about the latest virus database version and the latest program version on the DNS server. Then only the smallest indispensably required update files are downloaded, and applied. This way the total amount of data downloaded is minimized, and the update process runs faster.

- ***Require confirmation to close running applications*** (*switched on by default*) - this 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 notifications displayed in case the computer time differs from the correct time more than by a specified number of hours.

10.9.1. 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***
- ***Don't use proxy*** - default settings
- ***Try connection using proxy and if it fails, connect directly***

If you select any option using a 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 specific rules configured 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.

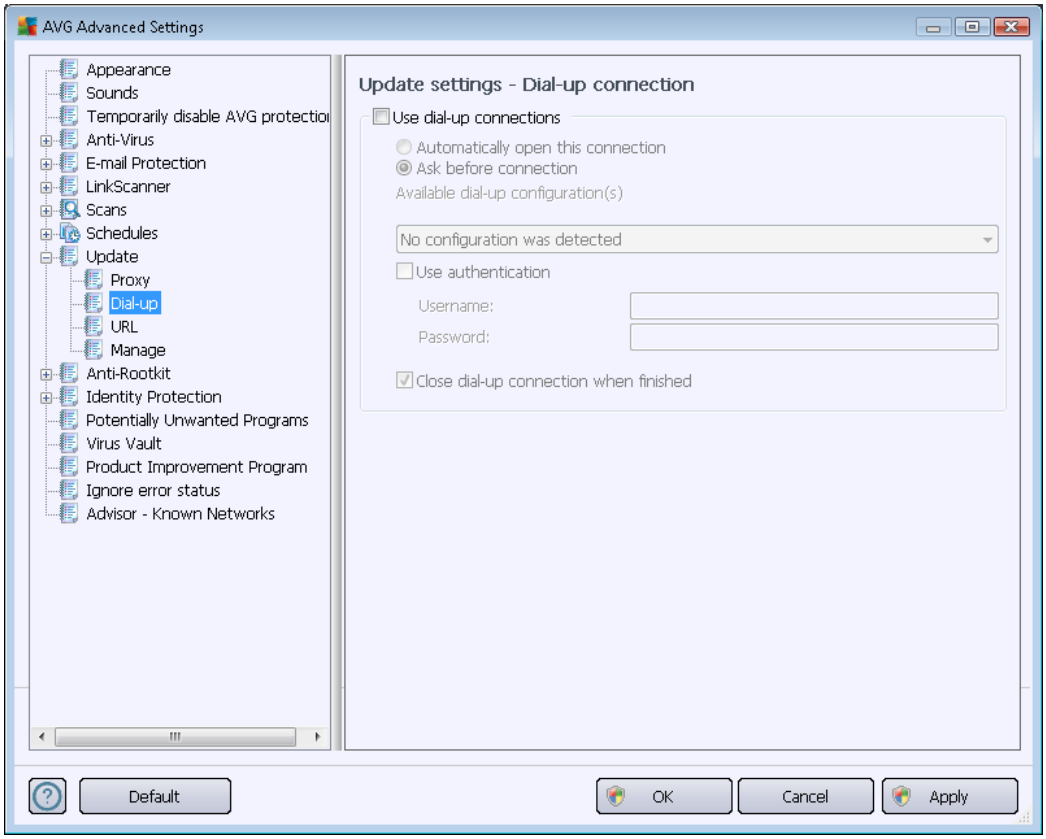
Automatic configuration

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

10.9.2. Dial-up

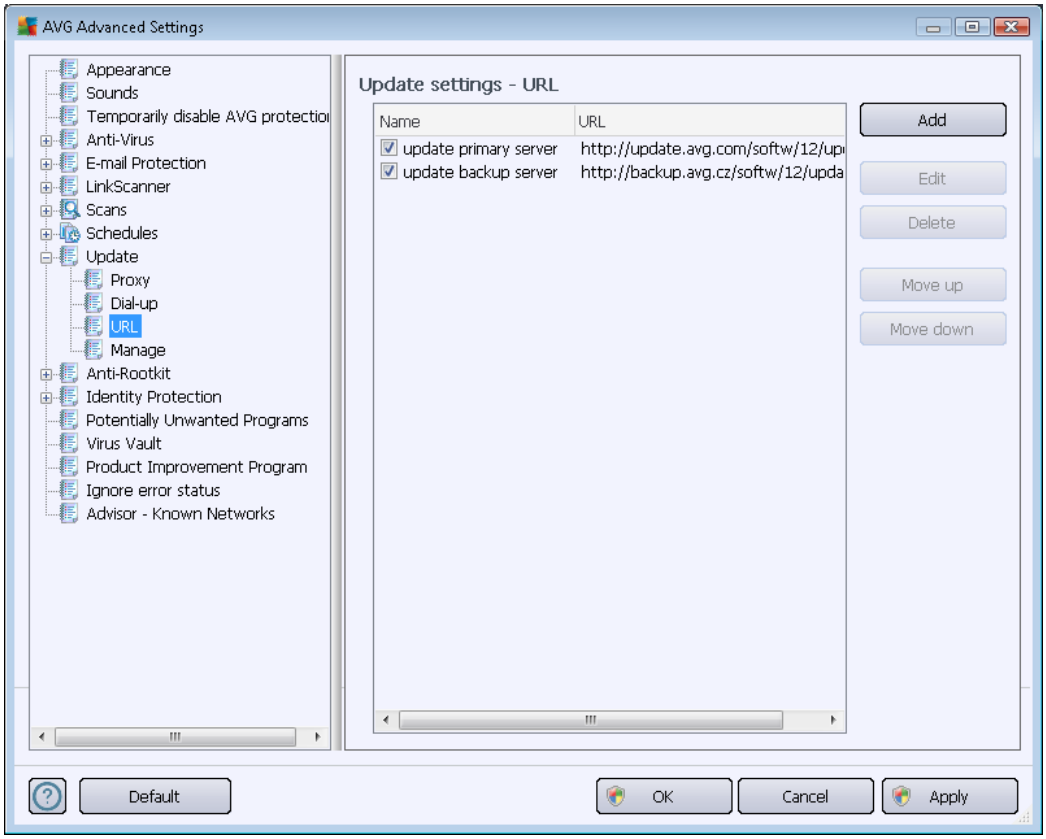
All parameters optionally defined in the ***Update settings - Dial-Up connection*** dialog refer to the dial-up connection to the Internet. The dialog's fields are inactive until you check the ***Use dial-up connections*** option that activates the fields:



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***).

10.9.3. URL

The ***URL*** dialog offers a list of Internet addresses from which the update files can be downloaded:



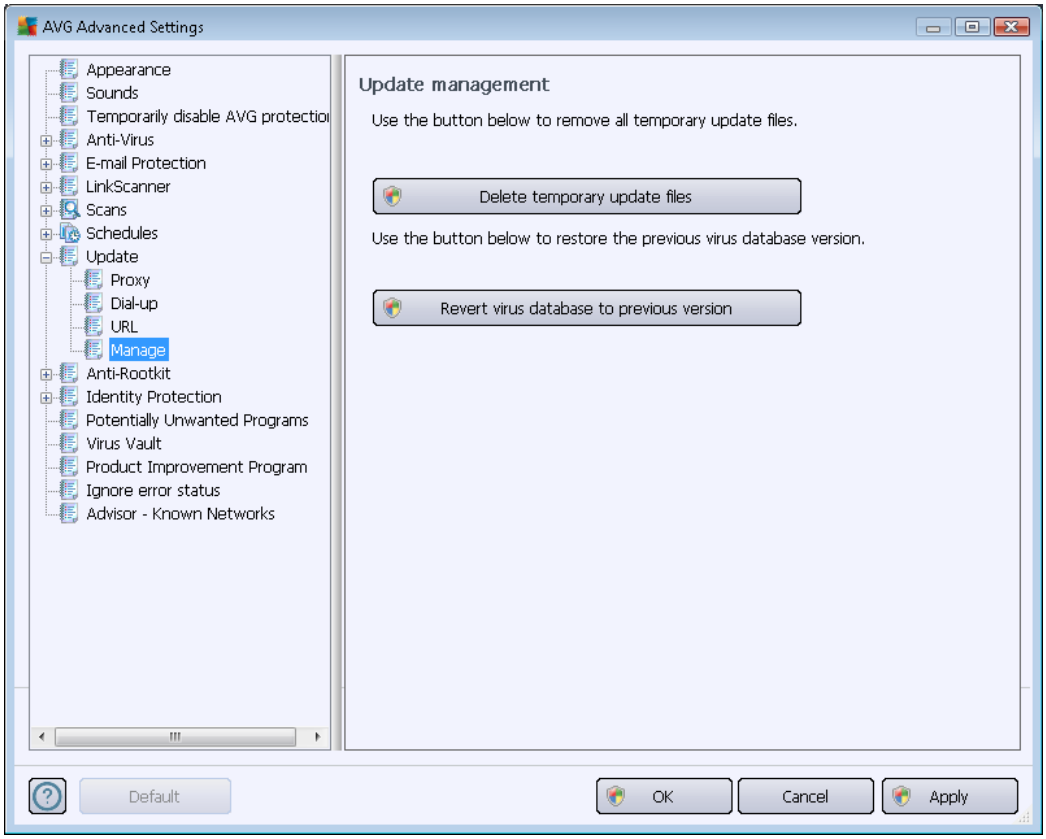
Control buttons

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

10.9.4. Manage

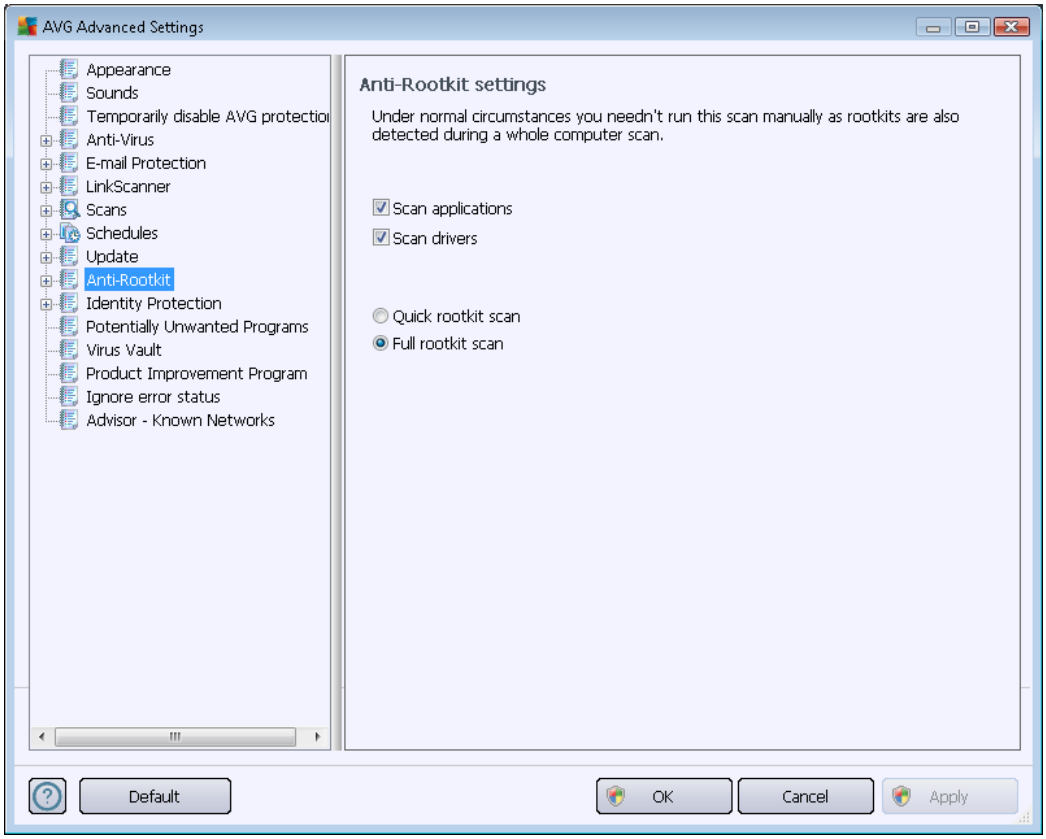
The ***Update management*** dialog offers two options accessible via two buttons:



- ***Delete temporary update files*** - press this button to delete all redundant update files from your hard disk (*by default, these files are 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 return to the previously saved version (*new virus base version will be a part of the following update*)

10.10. Anti-Rootkit

In the ***Anti-Rootkit settings*** dialog you can edit the Anti-Rootkit component's configuration and specific parameters of anti-rootkit scanning. The anti-rootkit scanning is a default process included in the Whole Computer Scan:



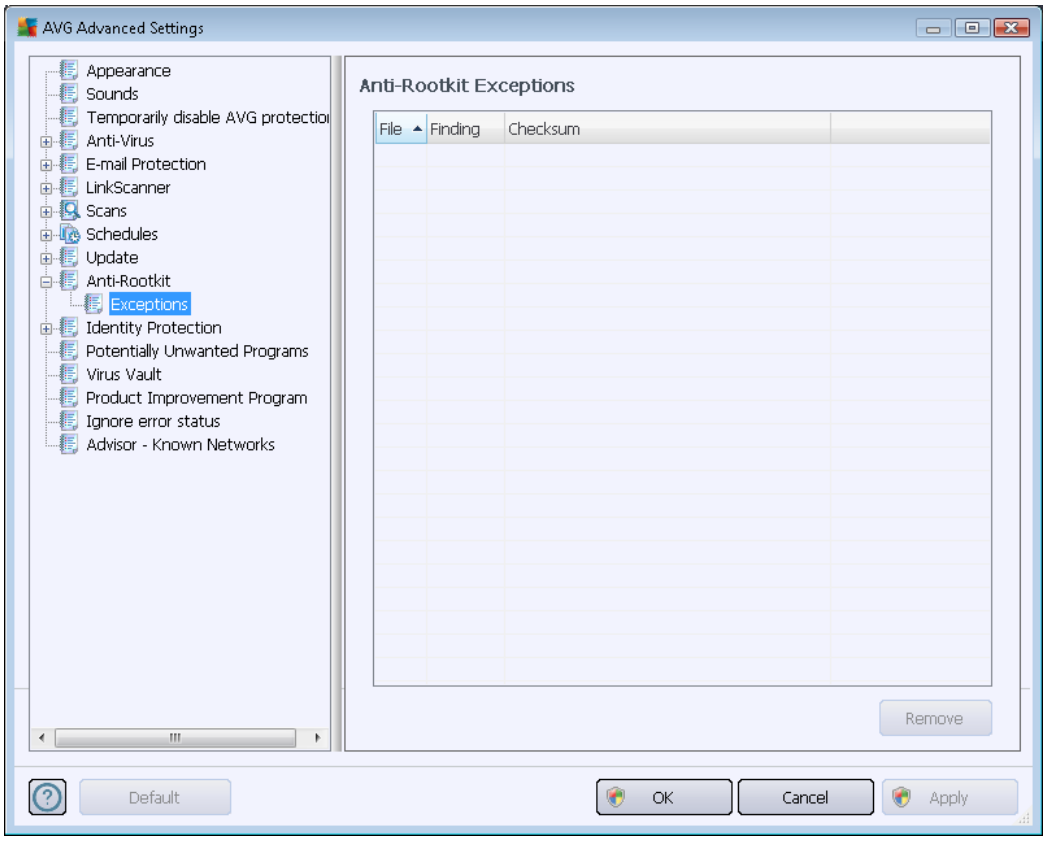
Editing all functions of the Anti-Rootkit component as provided within this dialog is also accessible directly from the Anti-Rootkit component's interface.

Scan applications and ***Scan drivers*** enable you to specify in detail what should be included in anti-rootkit scanning. These settings are intended for advanced users; we recommend that you keep all options switched on. You can also 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*)

10.10.1. Exceptions

Within the ***Anti-Rootkit Exceptions*** dialog you can define specific files *(for instance some drivers that might be incorrectly detected as rootkit)* that should be excluded from this scan:

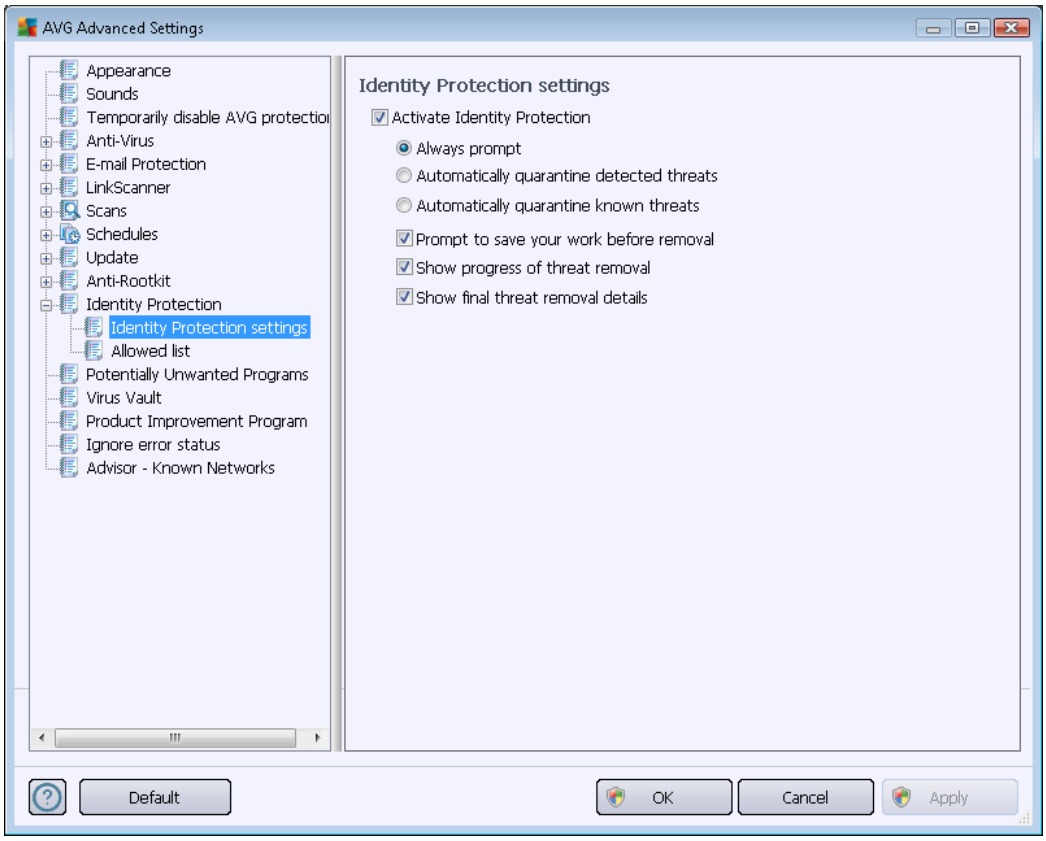


10.11. Identity Protection

Identity Protection is an anti-malware component that protects you from all kinds of malware (*spyware, bots, identity theft, ...*) using behavioral technologies and provides zero day protection for new viruses *(for a detailed description of the component's functionality please consult the Identity Protection chapter*).

10.11.1. Identity Protection Settings

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



Activate Identity Protection (*on by default*) – uncheck to turn off the Identity Protection component.

We strongly recommend not doing this unless you have to!

When the Identity Protection is activated, you can specify what to do when a threat is detected:

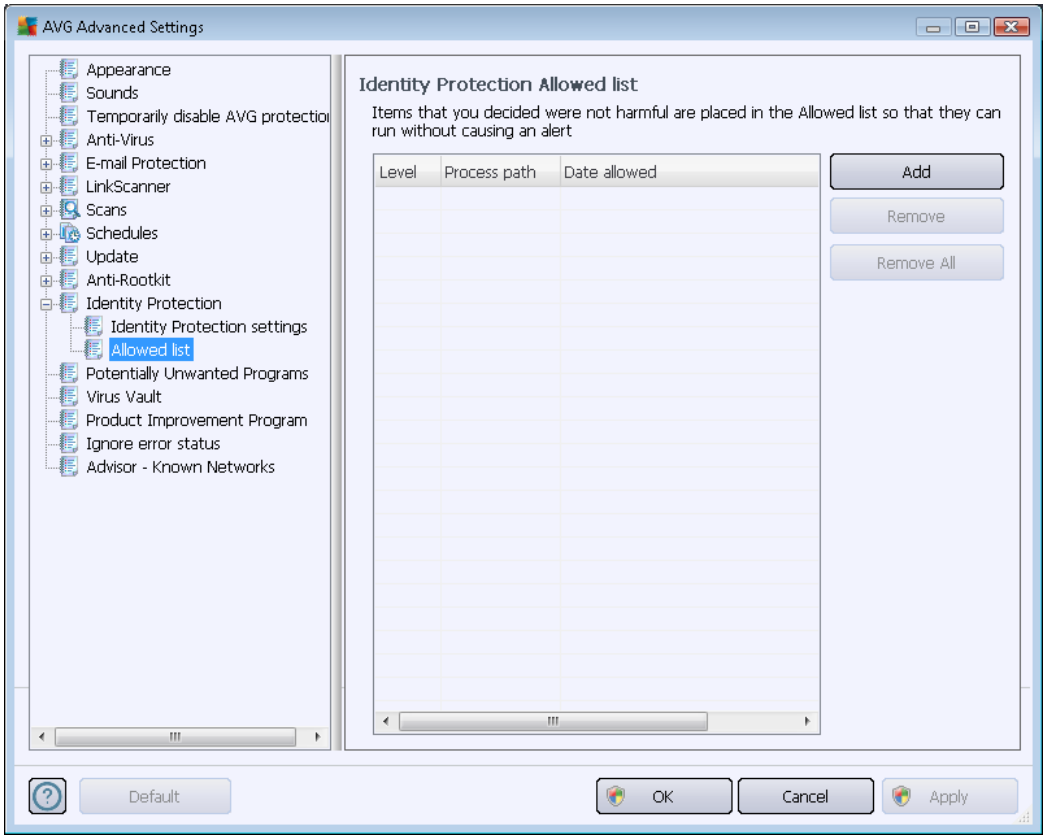
- ***Always prompt*** (*on by default*) - when a threat is detected, you will be asked whether it should be moved to quarantine to make sure no applications you want to run are removed.
- ***Automatically quarantine detected threats*** - mark this checkbox to specify that you want to have all possibly detected threats moved to the safe space of the Virus Vault immediately. Keeping the default settings, when a threat is detected, you will be asked whether it should be moved to quarantine to make sure no applications you want to run are removed.
- ***Automatically quarantine known threats*** - keep this item marked if you wish all applications detected as possible malware to be automatically and immediately moved to the Virus Vault.

You can also assign specific items to optionally activate more Identity Protection functionality:

- ***Prompt to save your work before removal*** - (*on by default*) - keep this item checked if you wish to be warned before the application detected as possible malware gets removed to quarantine. If you are currently working with the application, your project might be lost and you need to save it first. By default, this item is on and we strongly recommend that you keep it so.
- ***Show progress of threat removal*** - (*on by default*) - with this item on, once potential malware is detected, a new dialog opens to display the progress of the malware being removed to quarantine.
- ***Show final threat removal details*** - (*on by default*) - with this item on, ***Identity Protection*** displays detailed information on each object moved to quarantine (*severity level, location, etc.*).

10.11.2. Allowed List

If within the ***Identity Protection settings*** dialog you decided to keep the ***Automatically quarantine detected threats*** item unchecked, every time potentially dangerous malware is detected, you will be asked whether it should be removed. If you then define the suspicious application (*detected based on its behavior*) as safe, and you confirm it should be kept on your computer, the application will be added to so-called ***Identity Protection Allowed list***, and it will not be reported as potentially dangerous again:



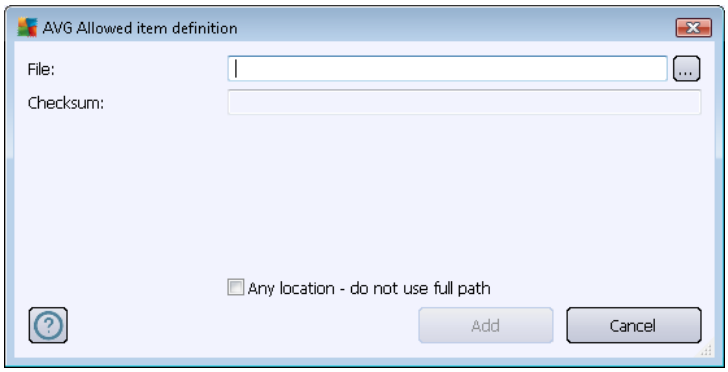
The ***Identity Protection Allowed list*** provides the following information on each application:

- ***Level*** - graphical identification of the respective process severity on a four-level scale from less important (■□□□) up to critical (■■■■)
- ***Process path*** - path to the application's (*process*) executable file location
- ***Date allowed*** - date when you manually assigned the application as safe

Control buttons

The control buttons available within the ***Identity Protection Allowed list*** dialog are as follows:

- ***Add*** - press this button to add a new application to the allowed list. The following dialog pops-up:



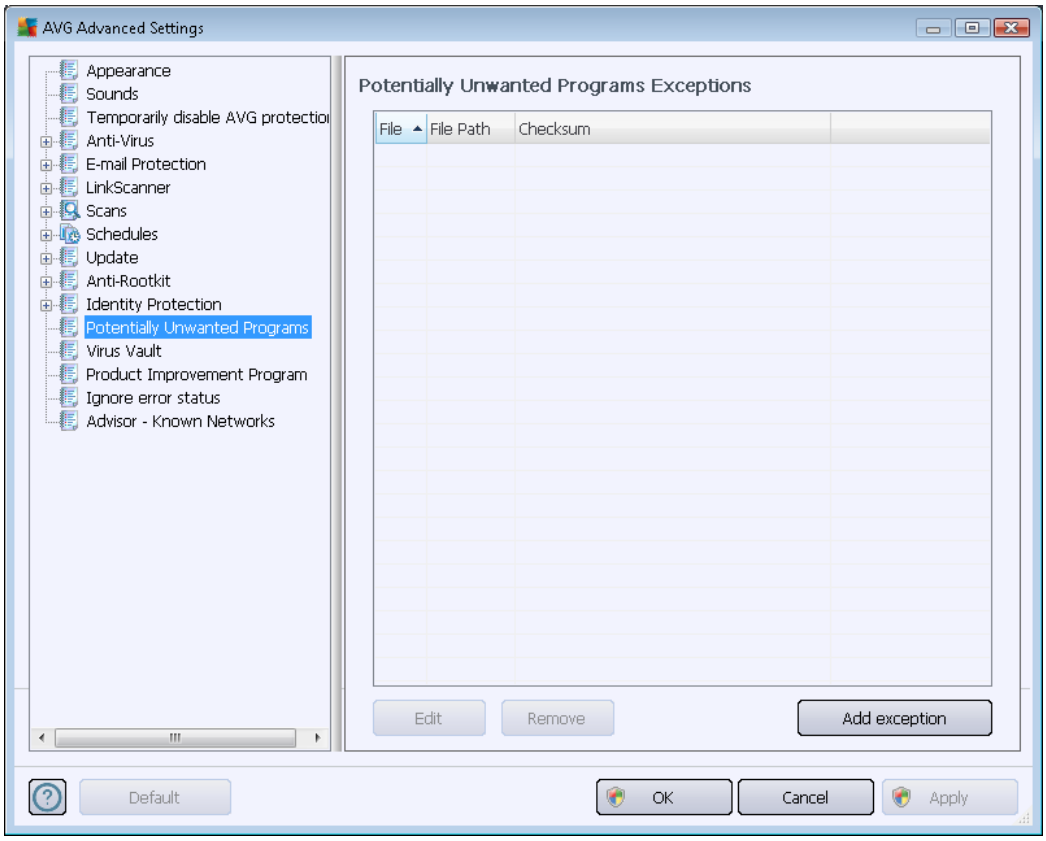
  - ***File*** - type the full path to the file (*application*) that you want to mark as an exception
  - ***Checksum*** - displays the unique 'signature' of the chosen file. This checksum is an automatically generated string of characters, which allows AVG to unequivocally distinguish the chosen file from other files. The checksum is generated and displayed after successful addition of the file.
  - ***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

- ***Remove*** - press to remove the selected application from the list
- ***Remove all*** - press to remove all listed applications

10.12. Potentially Unwanted Programs

AVG Internet Security 2012 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 Internet Security 2012** 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:



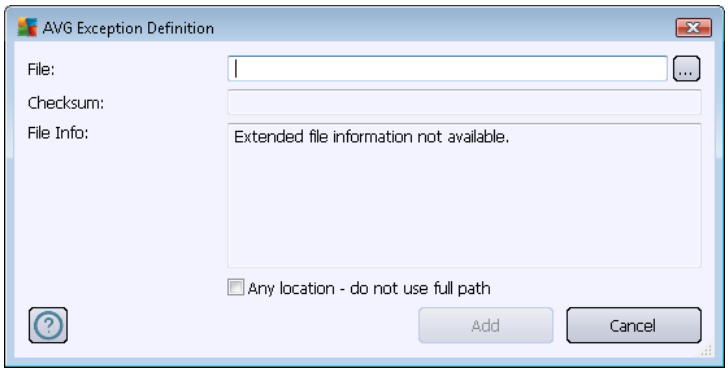
The ***Potentially Unwanted Programs Exceptions*** dialog displays a list of already defined and currently valid exceptions from potentially unwanted programs. You can edit the list, delete existing items, or add new exceptions. The following information can be found in the list for every single exception:

- ***File*** - provides the exact 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

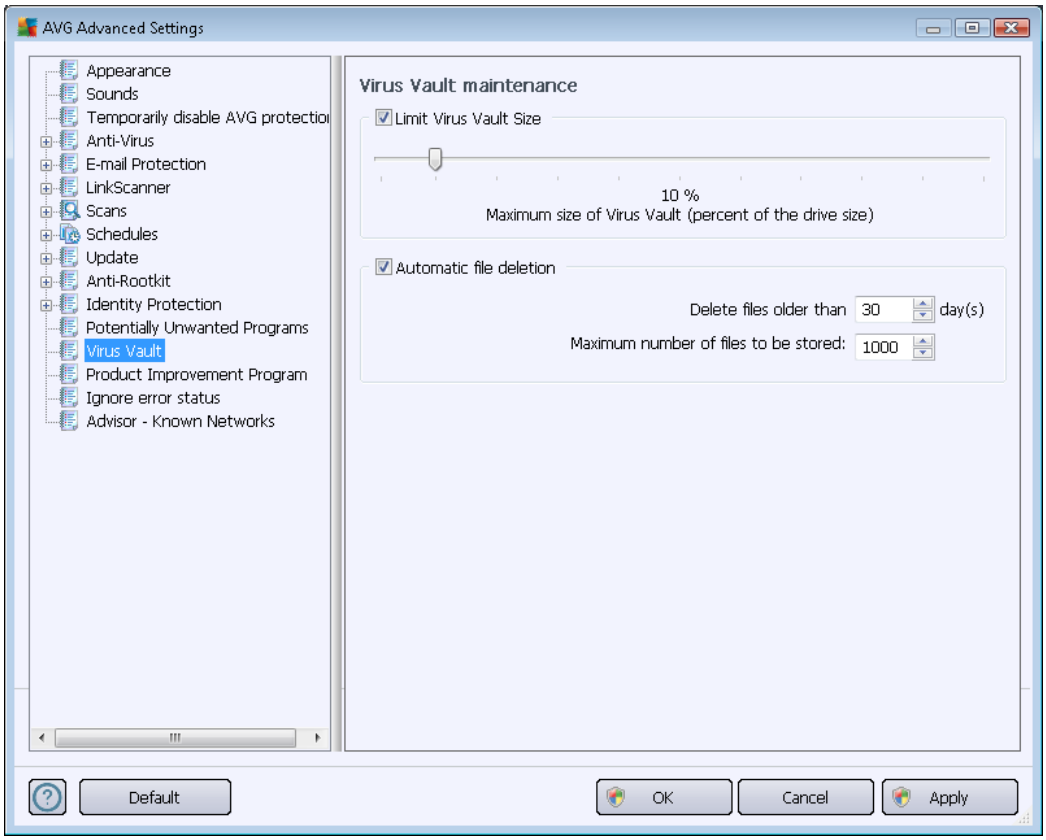
- ***Edit*** - opens an editing dialog (*identical with the dialog for a new exception definition, see below*) for an already defined exception where you can change the exception's parameters
- ***Remove*** - deletes the selected item from the list of exceptions

- ***Add exception*** - opens 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. If the checkbox is marked, the specified file is defined as an exception no matter where it is located *(however, you have to fill in the full path to the specific file anyway; the file will then be used as a unique example for the possibility that two files of the same name appear in your system)*.

10.13. Virus Vault



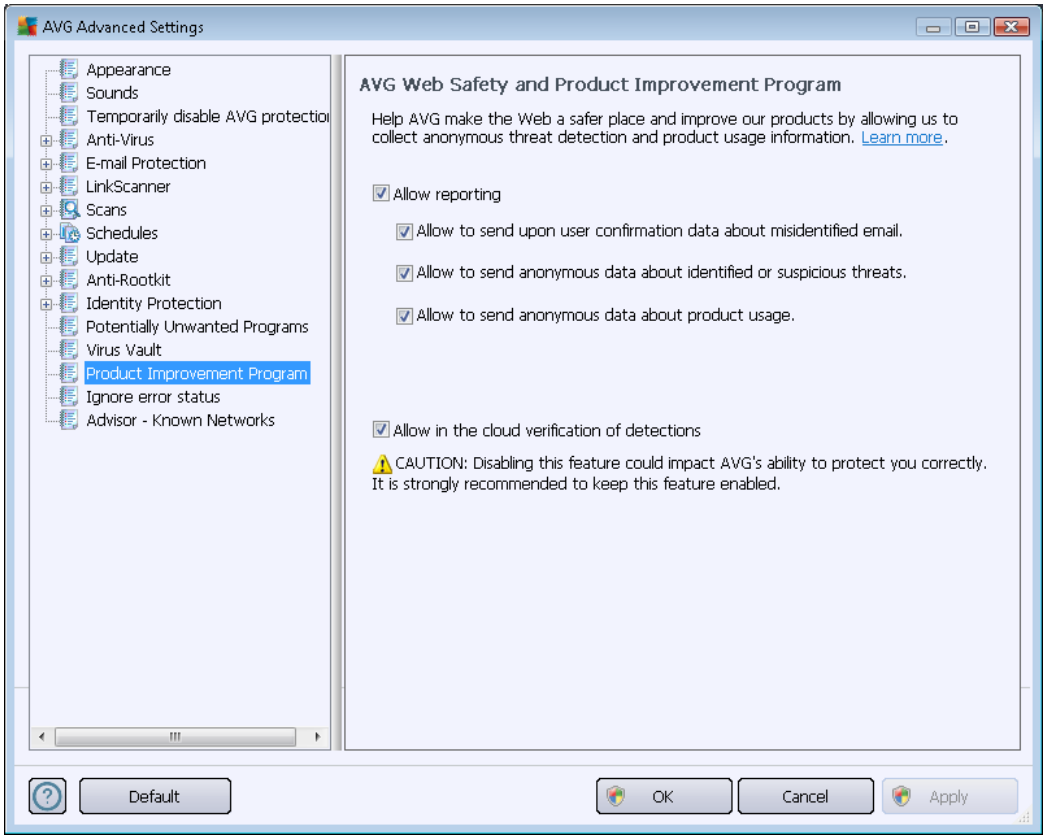
The ***Virus Vault maintenance*** dialog allows you to define several parameters regarding the administration of objects stored in the Virus Vault:

- ***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***).

10.14. Product Improvement Program

The ***AVG Web Safety and Product Improvement Program*** dialog invites you to participate in AVG product improvement, and to help us increase the overall Internet security level. Keep the ***Allow reporting*** option marked to enable reporting of detected threats to AVG laboratories. This helps us to collect up-to-date information on the latest threats from all participants worldwide, and in return we can improve protection for everyone.

The reporting is made automatically, and therefore does not cause you any inconvenience. No personal data is included in the reports. The reporting of detected threats is optional, however, we do ask you to keep this option switched on. It helps us improve protection for both you and other AVG users.



Within the dialog, the following setting options are available:

- ***Allow reporting*** *(on by default)* - If you want to help us further improve **AVG Internet Security 2012**, keep the checkbox marked. This will enable all encountered threats to be reported to AVG, so we will be able to collect up-to-date information on malware from all participants worldwide, and in return improve protection for everyone. The report is made automatically, and therefore does not cause you any inconvenience, and no personal data is included in the reports.
    - ***Allow to send upon user confirmation data about misidentified e-mail*** *(on by default)* – send information about e-mail messages incorrectly identified as spam, or about spam messages that were not detected by the Anti-Spam component. When sending this kind of information, you will be asked for confirmation.
    - ***Allow to send anonymous data about identified or suspicious threats*** *(on by default)* – send information about any suspicious or positively dangerous code or behaviour pattern *(can be a virus, spyware, or malicious webpage your are trying to access)* detected on your computer.
    - ***Allow to send anonymous data about product usage*** *(on by default)* – send basic statistics about the application usage, such as number of detections, scans launched, successful or unsuccessful updates etc.
- ***Allow in the cloud verification of detections*** *(on by default)* – detected threats will be

checked if really infected, to sort out false positives.

Most common threats

Nowadays, there are far more threats out there than plain viruses. Authors of malicious codes and dangerous websites are very innovative, and new kinds of threats emerge quite often, the vast majority of which are on the Internet. Here are some of the most common:

- ***Virus*** is a malicious code that copies and spreads itself, often unnoticed until the damage is done. Some viruses are a serious threat, deleting or deliberately changing files on their way, while some viruses can do something seemingly harmless, like playing a piece of music. However, all viruses are dangerous due to the basic ability of multiplying – even a simple virus can take up all the computer memory in an instant, and cause a breakdown.

- ***Worm*** is a subcategory of virus which, unlike a normal virus, does not need a "carrier" object to attach to; it sends itself to other computers self-contained, usually via e-mail, and as a result often overloads e-mail servers and network systems.

- ***Spyware*** is usually defined as a malware category (*malware = any malicious software, including viruses*) encompassing programs – typically Trojan horses – aimed at stealing personal information, passwords, credit card numbers, or infiltrating a computer and allowing the attacker to control it remotely; of course, all without the computer owner's knowledge or consent.

- ***Potentially unwanted programs*** are a type of spyware that can but not necessarily be dangerous to your computer. A specific example of a PUP is adware, software designed to distribute advertisements, usually by displaying ad pop-ups; annoying, but not really harmful.

- ***Tracking cookies*** can also be considered a kind of spyware, as these small files, stored in the web browser and sent automatically to the "parent" website when you visit it again, can contain data such as your browsing history and other similar information.

- ***Exploit*** is a malicious code that takes advantage of a flaw or vulnerability in an operating system, Internet browser, or other essential program.

- ***Phishing*** is an attempt to acquire sensitive personal data by shamming a trustworthy and well-known organization. Usually, the potential victims are contacted by a bulk e-mail asking them to e.g. update their bank account details. In order to do that, they are invited to follow the link provided which then leads to a fake website of the bank.

- ***Hoax*** is a bulk e-mail containing dangerous, alarming or just bothering and useless information. Many of the above threats use hoax e-mail messages to spread.

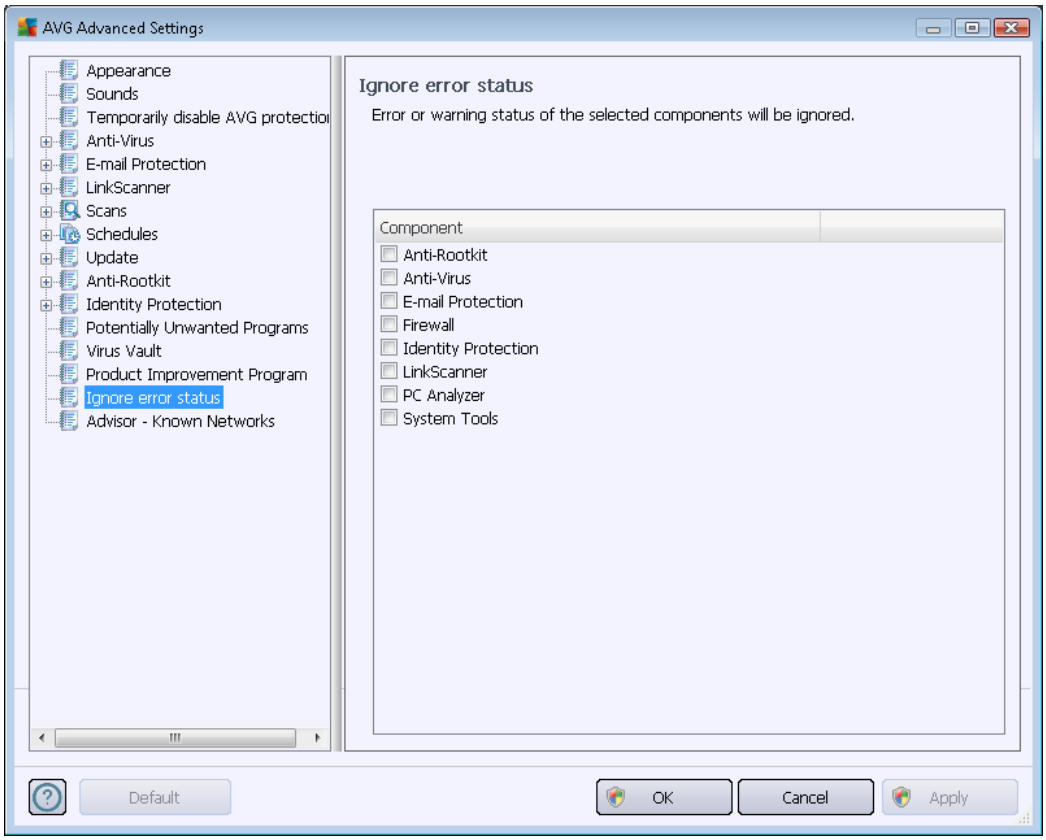
- ***Malicious websites*** are ones that deliberately install malicious software on your computer, and hacked sites do just the same, only these are legitimate websites that have been compromised into infecting visitors.

To protect you from all of these different kinds of threats, AVG Internet Security 2012 includes specialized components. For brief description of these please consult the Components

***Overview* chapter.**

10.15. Ignore error status

In the ***Ignore error status*** 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 is given 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

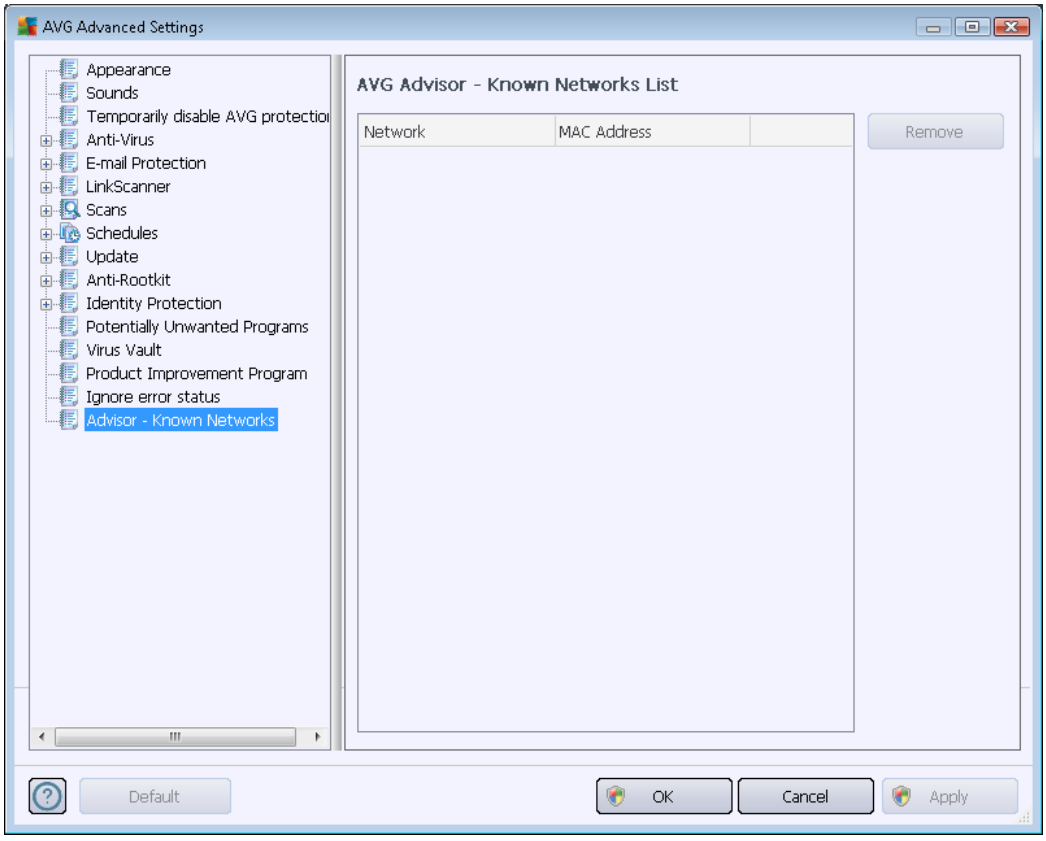
There might be a situation that for some reason you need to switch a component off temporarily (*this is not recommended, you should try to keep all components permanently on and in default configuration, but it may be happen*). In this case the system tray icon automatically reports the component's 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 receive information about it. The same option *(Ignore component state)* is also available for specific components directly from the components overview in the AVG main window.

10.16. Advisor - Known Networks

The AVG Advisor includes a feature that monitors networks you connect to, and if a new network is found *(with an already used network name, which can lead to confusion)* it will notify you and recommend that you check the network's safety. If you decide that the new network is safe to connect to, you can also save it to this list *(Via the link provided in the AVG Advisor tray notification that slides over the system tray once an unknown network is detected. For details please see chapter on AVG Advisor)*. AVG Advisor will then remember the unique attributes of the network *(specifically the MAC address)*, and will not display the notification next time. Each network that you connect to will be automatically considered the known network, and added to the list. You can delete individual entries by pressing the ***Remove*** button; the respective network will then be considered unknown and potentially unsafe again.

In this dialog window, you can check which networks are considered to be known:



Note: *The known networks feature within AVG Advisor is not supported at Windows XP 64-bit.*

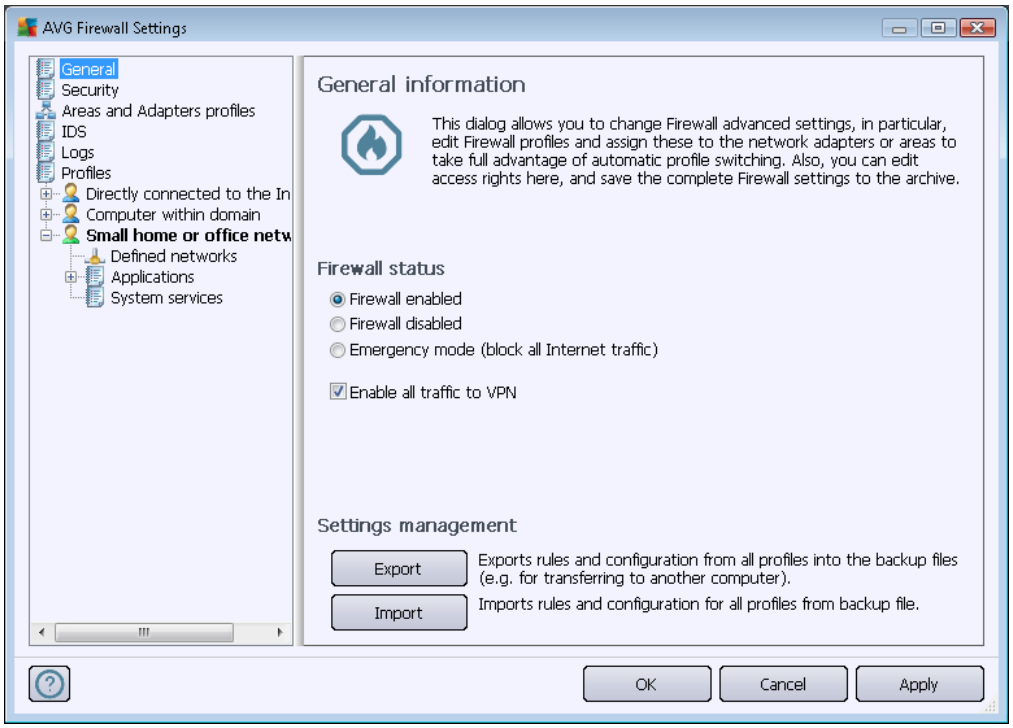
11. Firewall Settings

The Firewall configuration opens in a new window where in several dialogs you can set up very advanced parameters for the component.

However, the software vendor has set up all AVG Internet Security 2012 components to give optimum performance. Unless you have a real reason to do so, do not change the default configuration. Any changes to settings should only be performed by an experienced user!

11.1. General

The ***General information*** dialog is divided into two sections:



Firewall status

In the ***Firewall status*** section you can switch the Firewall status as the need arises:

- ***Firewall enabled*** - select this option to allow communication to those applications that are assigned as 'allowed' in the set of rules defined within the selected Firewall profile.
- ***Firewall disabled*** - this option switches the 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; the Firewall is still running but all network traffic is stopped.

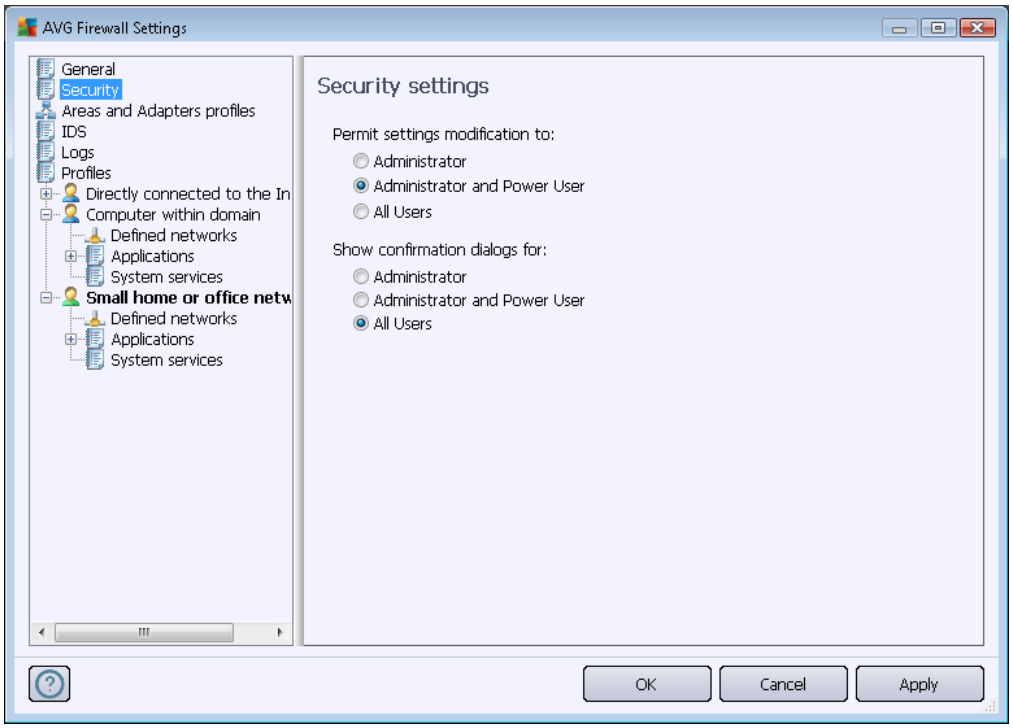
- ***Enable all traffic to VPN*** *(on by default)* - if you use a VPN *(Virtual Private Network)* connection, e.g. to connect to your office from home, we recommend that you check the box. ***AVG Firewall*** will automatically search through your network adapters, find those used for VPN connection, and allow all applications to connect to the target network *(only applies to applications with no specific Firewall rule assigned)*. On a standard system with common network adapters, this simple step should save you from having to set up a detailed rule for each application that you need to use over VPN.

Note: *To enable the VPN connection at all, it is necessary to allow communication to the following system protocols: GRE, ESP, L2TP, PPTP. This can be done in the System services dialog.*

Settings management

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

11.2. Security



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

- ***Permit settings modification to*** - specify who is allowed to change the Firewall's configuration.

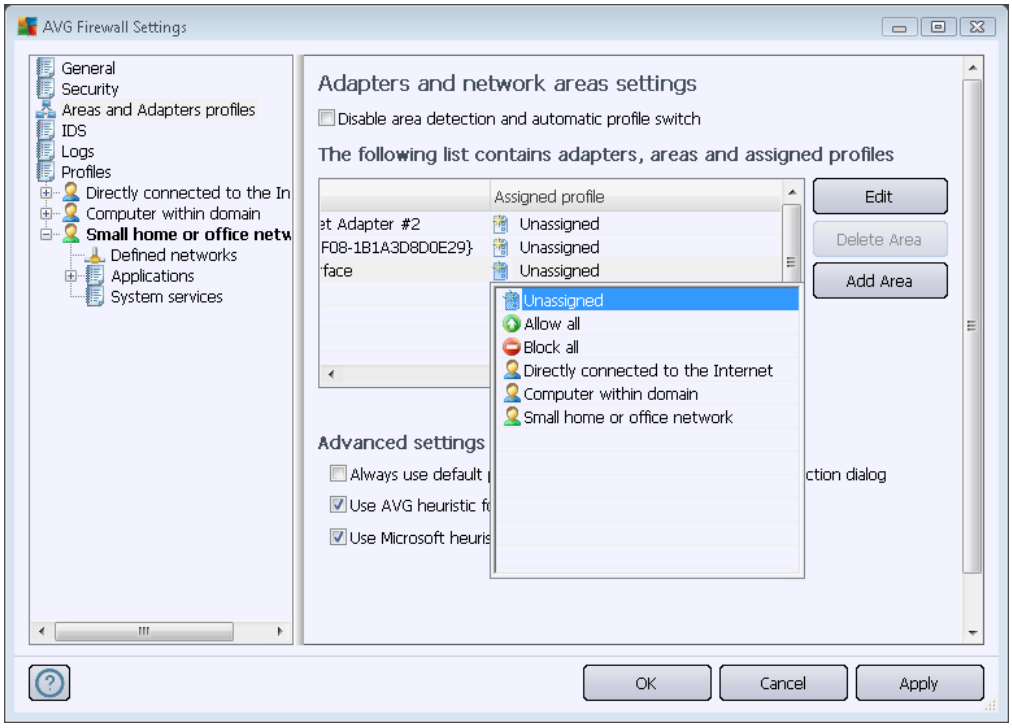
- ***Show confirmation dialogs for*** - specify to whom the confirmation dialogs *(dialogs asking for decisions in situations that are not covered by a defined Firewall rule)* should be displayed.

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 to groups with specifically defined authorities.
- ***Administrator and Power User*** – the administrator can assign any user into a specified group (*Power User*) and define authorities for the group members.
- ***All Users*** – other users not assigned to any specific group.

11.3. 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 the respective networks:



- ***Disable area detection and automatic profile switch*** *(off by default)* - 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 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.

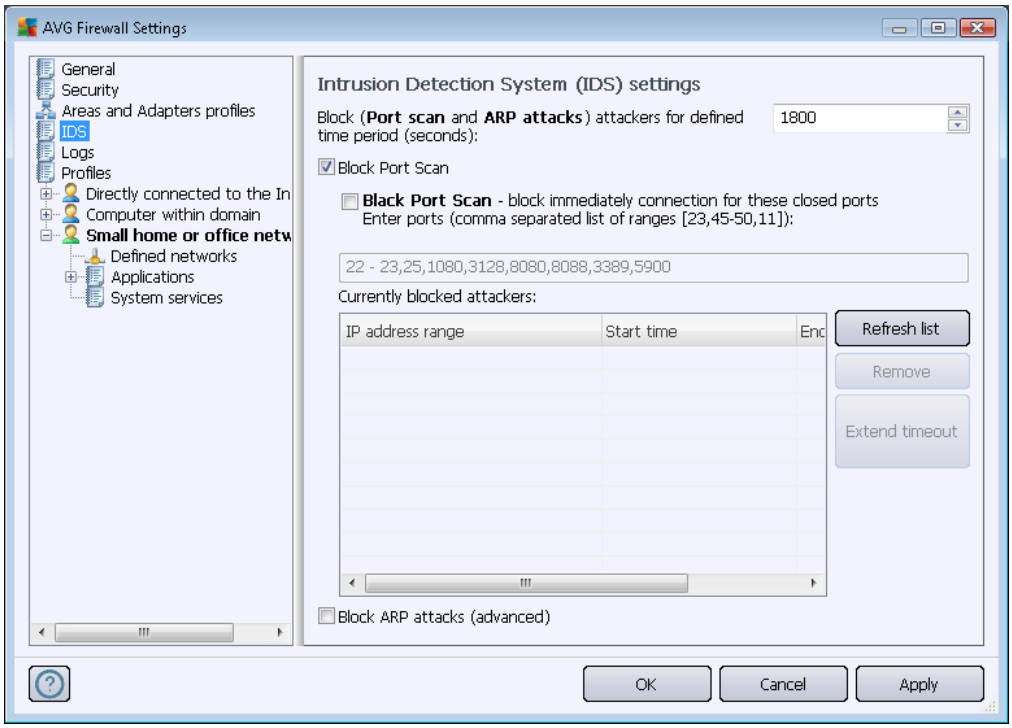
- ***List of adapters, areas and assigned profiles*** - in this list you can find an overview of the detected adapters and areas. To each of them you can assign a specific profile from the menu of defined profiles. To open this menu, left-click the respective item in the list of adapters *(in the Assigned profile column)*, and select the profile from the context menu.

Advanced settings

- ***Always use default profile and do not display new network detection dialog*** - your computer connects to a new network, the Firewall will alert you and display a dialog prompting you to select a type of network connection, and assign it a Firewall profile. If you do not want the dialog to be displayed, check this box.
- ***Use AVG heuristic for new networks detection*** - enables information gathering about a newly detected network with AVG's own mechanism (*however, this option is only available on VISTA OS, and higher*).
- ***Use Microsoft heuristics for new networks detection*** - enables information gathering about a newly detected network from the Windows service (*this option is only available on Windows Vista and higher*).

11.4. IDS

The Intrusion Detection System is a special behaviour analysis feature designed to identify and block suspicious communication attempts over specific ports on your computer. You can configure IDS parameters within the ***Intrusion Detections System (IDS) settings*** dialog:



The ***Intrusion Detection System (IDS) settings*** dialog offers these configuration options:

- ***Block (Port scan and ARP attacks) attackers for defined time period*** - here you can specify for how many seconds a port be blocked, whenever a suspicious communication attempt is detected on it. By default, the time interval is set to 1800 seconds (*30 minutes*).

- ***Block Port Scan*** *(on by default)* – check the box to block communication attempts over all TCP and UDP ports coming to the computer from outside. For any such connection, five attempts are allowed, and the sixth is blocked. The item is turned on by default, and it is recommended that you keep this setting. If you keep the ***Block Port Scan*** option on, some further detailed configuration is available *(otherwise, the following item will be deactivated)*:

    - ***Black Port Scan*** – check the box to immediately block any communication attempts over ports specified in the text field below. Individual ports or port ranges should be divided by commas. There is a predefined list of recommended ports should you wish to use this feature.

    - ***Currently blocked attackers*** - this section lists any communication attempts that are currently being blocked by the Firewall. The complete history of blocked attempts can be viewed in the Logs dialog (*Port scan logs tab*).

- ***Block ARP attacks (advanced)*** *(off by default)* - mark this option to activate blocking of special kinds of communication attempts inside a local network detected by ***IDS*** as potentially dangerous. The time set in ***Block attackers for defined time period*** applies. We recommend that only advanced users, familiar with the type and risk level of their local network, use this feature.

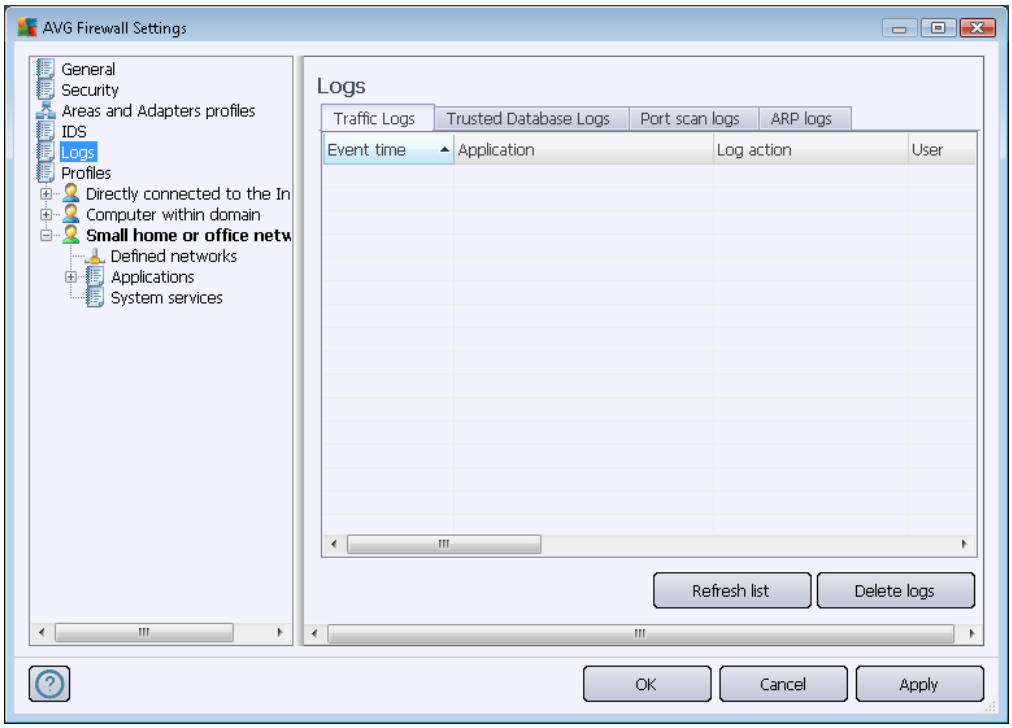
Control buttons

- ***Refresh list*** - press the button to update the list (*to include any latest blocked attempts*)

- ***Remove*** - press to cancel a selected blocking

- ***Extend timeout*** - press to prolong the time period for which a selected attempt is blocked. A new dialog with extended options will appear, allowing you to set a specific time and date, or unlimited duration.

11.5. 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 four tabs:

- ***Traffic Logs*** - offers information about activities by all application that have tried to connect to the network.
- ***Trusted Database Logs*** - *Trusted database* is AVG's internal database for 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 no firewall rule specified for this application yet*), 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 is 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.
- ***Port scan logs*** - provides logging for all Intrusion Detection System activity.
- ***ARP logs*** - logging info on blocking special kinds of communication attempts inside a local network (*Block ARP attacks option*) detected by Intrusion Detection System as potentially dangerous.

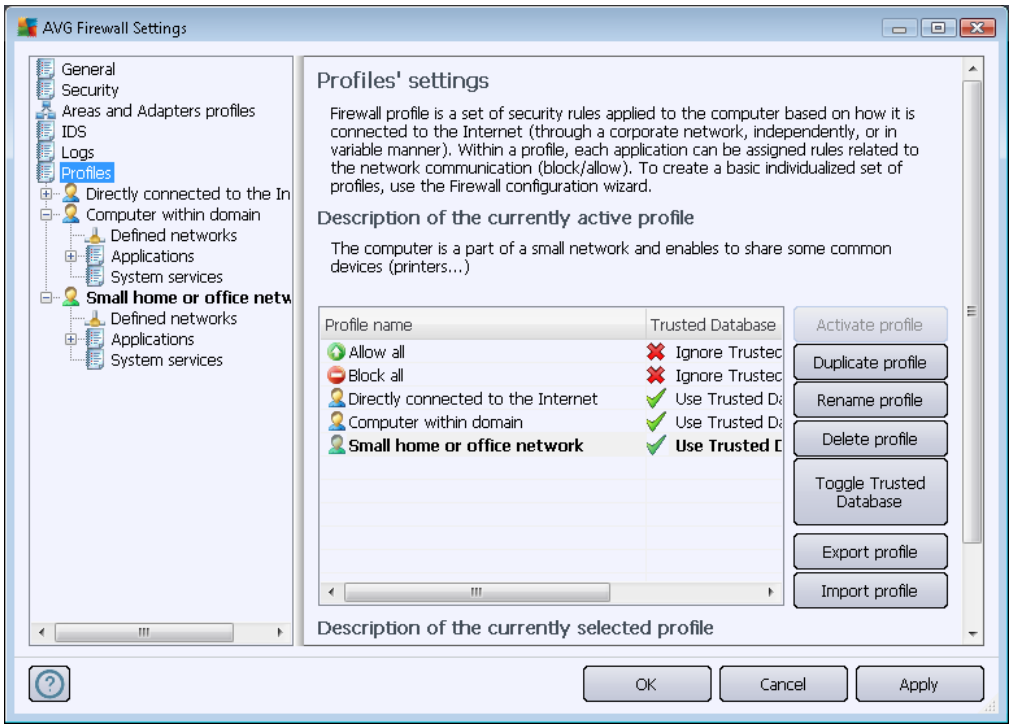
Control buttons

- ***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.

- ***Delete logs*** - press to delete all entries in the chart.

11.6. Profiles

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



System profiles *(Allow all, Block all)* cannot be edited. However, all custom profiles *(Directly connected to the Internet, Computer within domain, Small home or office network)* 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 the 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 name 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's internal database for collecting data on trusted and certified applications that can always be allowed to communicate online.*).

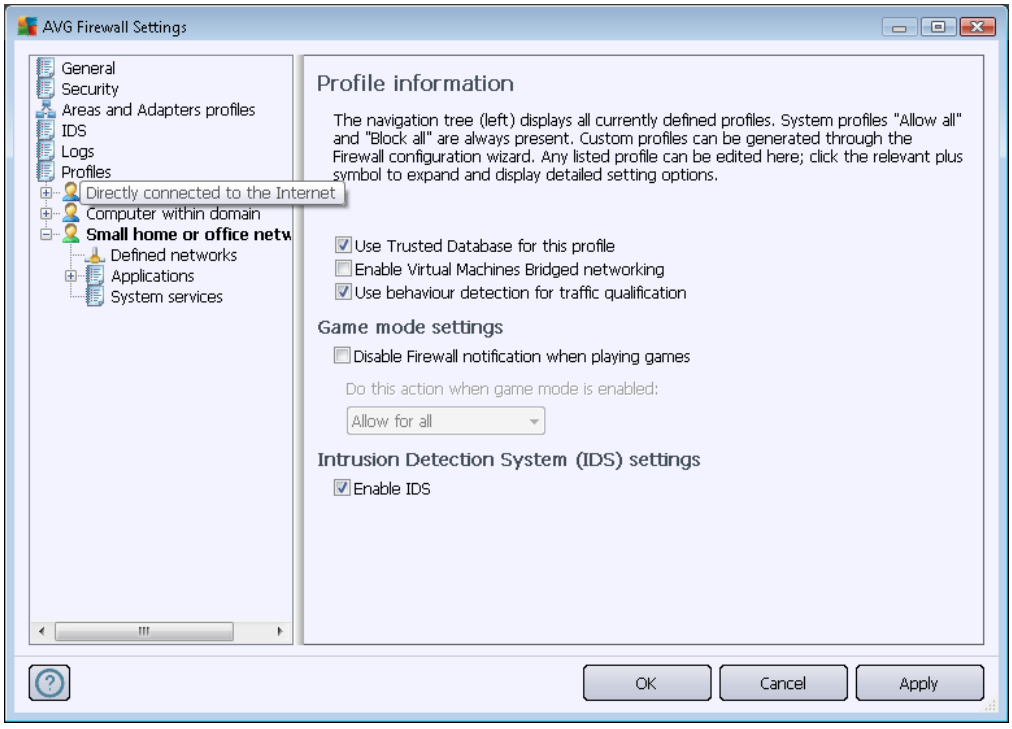
- ***Export profile*** - records the selected profile's configuration into a file that will be saved for possible further use.

- ***Import profile*** - configures the selected profile's settings based on the data exported from the backup configuration file.

In the bottom section of the dialog you can 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*):

11.6.1. Profile Information



The ***Profile information*** dialog is the first dialog of a section where you can edit the 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's internal database collecting information on trusted and certified applications 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 the network. Otherwise, you will be invited to decide whether the application should be allowed to communicate over the network*) for the respective profile.

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

- ***Use behavior detection for traffic qualification*** (*on by default*) - mark this option to allow the Firewall to use the Identity Protection functionality when evaluating an application - Identity Protection can tell whether the application shows any suspicious behavior, or it can be trusted and allowed to communicate online.

Game mode settings

In the ***Game 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.

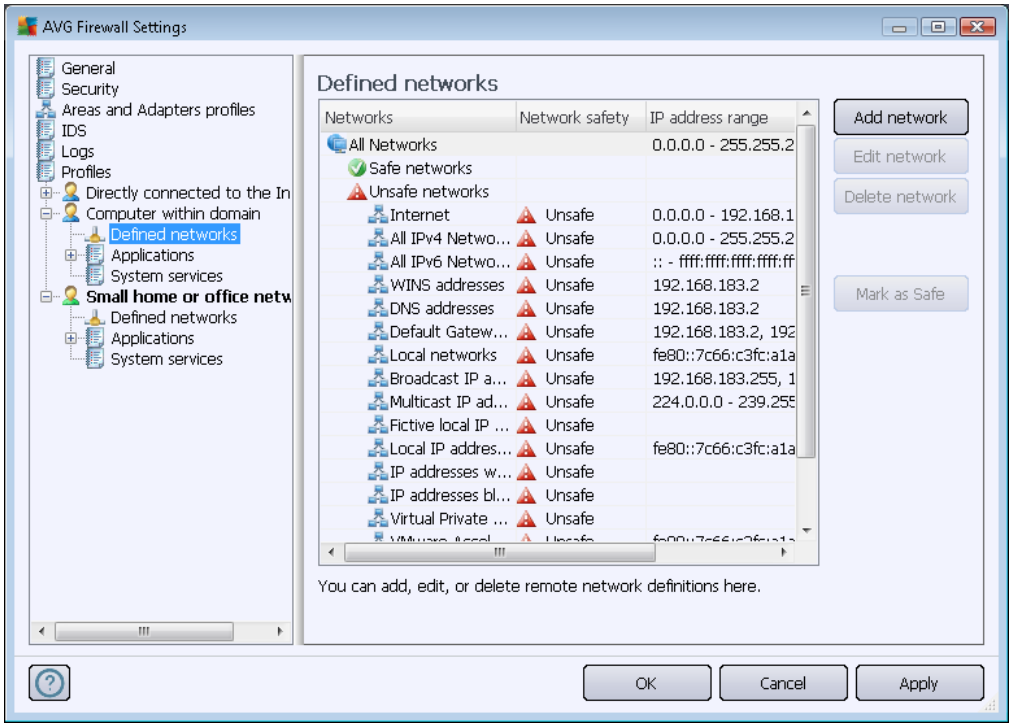
With the gaming mode on, all scheduled tasks (*scans, updates*) are postponed till the application is closed.

Intrusion Detection System (IDS) settings

Mark the ***Enable IDS*** checkbox to activate the special behavior analysis feature designed to identify and block suspicious communication attempts over specific ports of your computer *(for details on this feature settings please consult the IDS chapter of this documentation).*

11.6.2. Defined Networks

The ***Defined networks*** dialog offers a list of all networks that your computer is connected to.

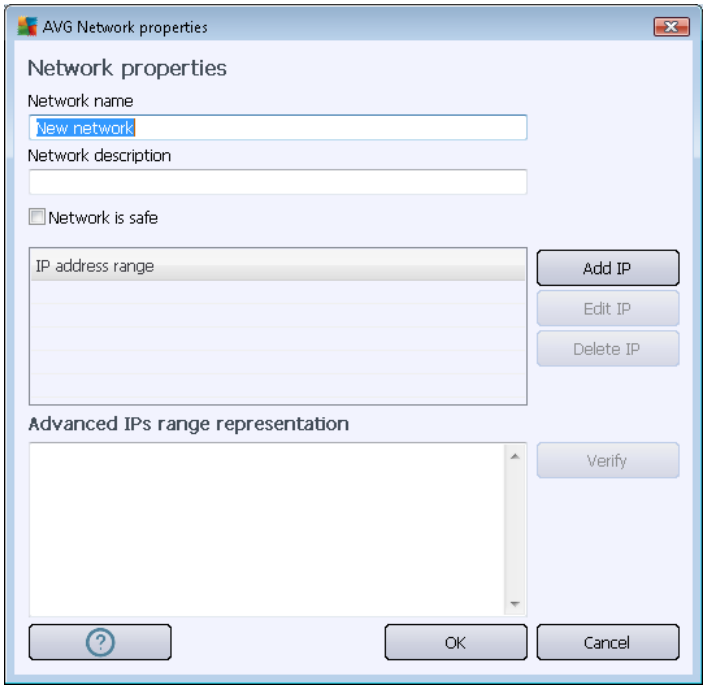


The list provides the following information on every detected network:

- ***Networks*** - provides 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 can you assign it (*click the list item referring to the respective network and select Safe from the context menu*) - all safe networks will then be included in the group of those that the application can communicate 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 address ranges.

Control buttons

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

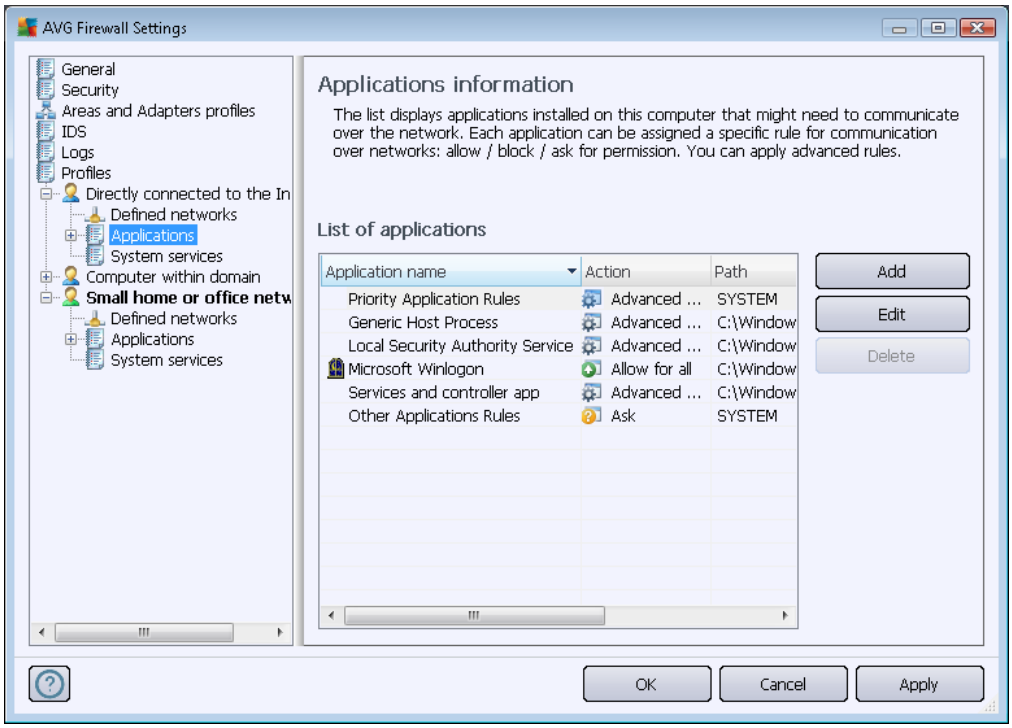


Within this dialog, you can specify the ***Network name***, provide the ***Network description*** and possibly assign the network as safe. The new network can be either defined manually in a standalone dialog opened via the ***Add IP*** button (alternatively ***Edit IP*** / ***Delete IP***), within this dialog you can specify the network by providing its IP range or mask. For large numbers 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 the parameters of an already defined network (*the dialog is identical with the dialog for adding new networks, see the description in the previous paragraph*).
- ***Delete network*** - removes the reference to 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 can you use this button to assign it (*and vice versa, once the network is assigned as safe, the button text changes to "Mark as unsafe"*).

11.6.3. Applications

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



The applications in the ***List of applications*** are those detected on your computer (*and assigned respective actions*). The following action types can be used:

- - allow communication for all networks
- - allow communication for networks defined as Safe only
- - block communication
- - display ask dialog (*user will be able to decide whether they want to allow or block the communication when the application attempts to communicate over the network*)
- - advanced settings defined

Please note that only applications 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's 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 the rules for 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. Select the action that should be triggered when such an application attempts to communicate over the network:
    - *Block* – communication will be always blocked.
    - *Allow* – communication will be allowed over any network.
    - *Ask* – you will be invited to decide whether the communication should be allowed or blocked.

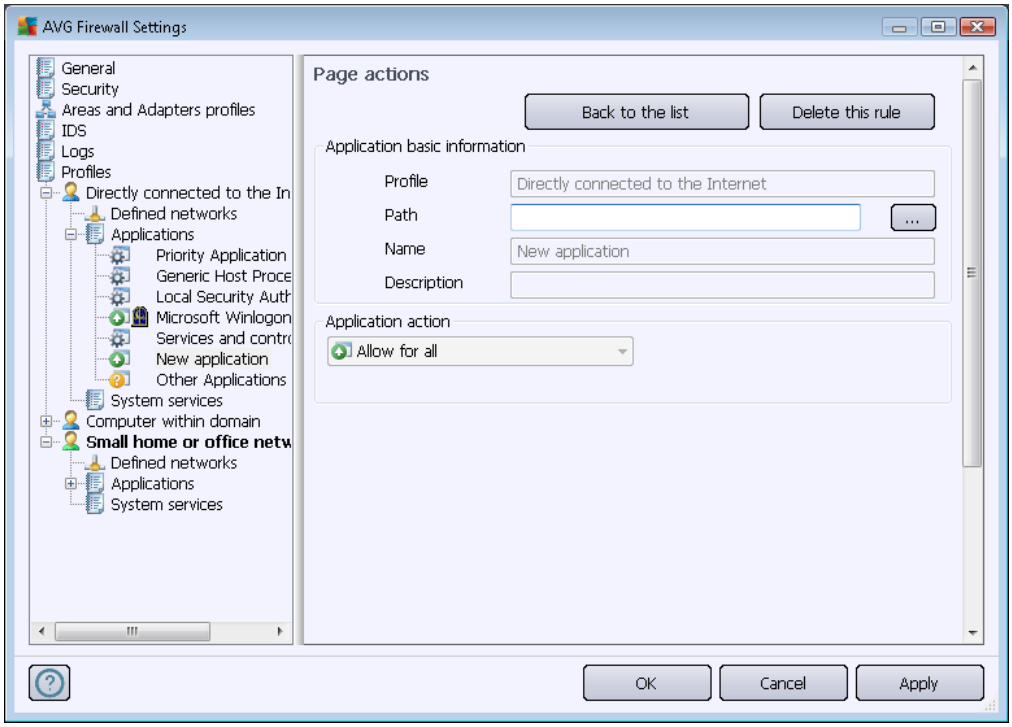
These items have different setting options from common applications, and are only intended for experienced users. We strongly recommend that you do not modify the settings!

Control buttons

The list can be edited using the following control buttons:

- ***Add*** - opens an empty Page Actions dialog for defining new application rules.
- ***Edit*** - opens the same Page Actions dialog with data provided for editing an existing application's rule set.
- ***Delete*** - removes the selected application from the list.

In the ***Page actions*** dialog, you can define the settings for the respective application in detail:



Control buttons

Two control buttons are available at the top of the dialog:

- ***Back to the list*** - press the button to display the overview of all defined applications rules.
- ***Delete this rule*** - press the button to erase the 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

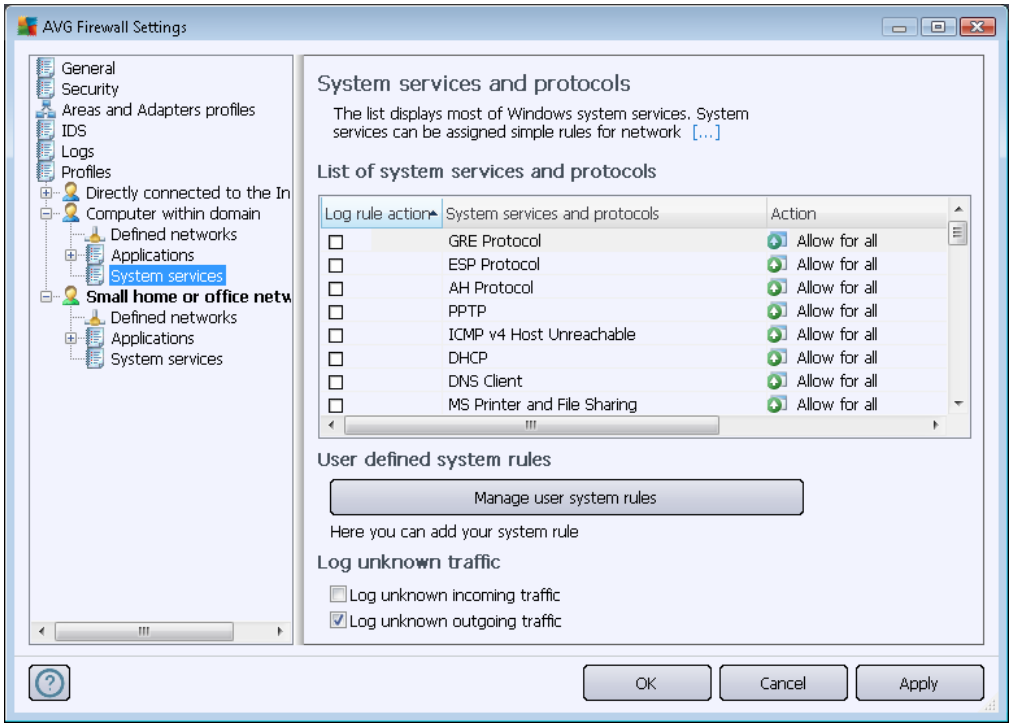
In the drop-down menu, you can select the Firewall rule for the application, i.e. what the Firewall should do when the application tries to communicate over the network:

- ***Allow for all*** - allows the application to communicate over all defined networks and adapters without limitations.
- ***Allow for safe*** - only allows the application to communicate over networks defined as safe *(trustworthy)*.
- ***Block*** - forbids automatic communication; the application will not be allowed to connect to any network.
- ***Ask*** - displays 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 the necessary details.

11.6.4. 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:



List of system services and protocols

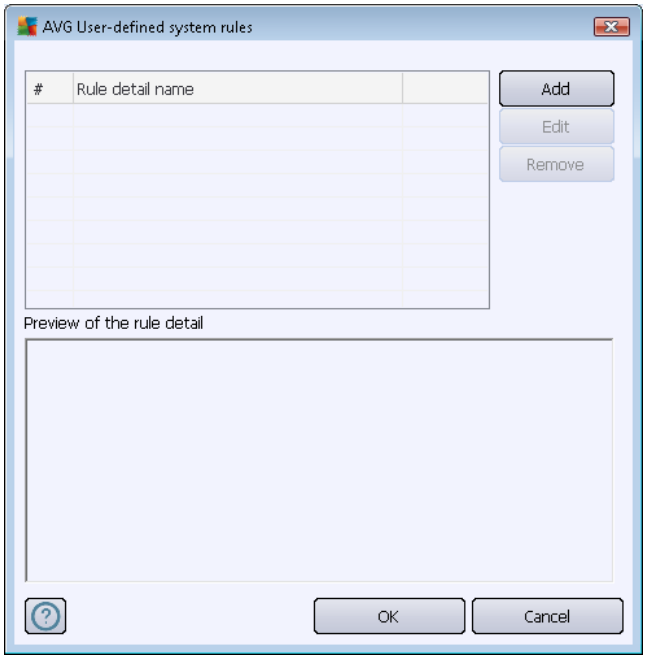
The chart consists of the following columns:

- ***Log rule action*** - This box enables you to switch on recording for each rule application in the logs.
- ***System service and protocols*** - This column shows the name of the respective system service.
- ***Action*** - This column displays an icon for the assigned action:
  - o allow communication for all networks
  - o allow communication for networks defined as Safe only
  - o block communication
- ***Networks*** - this column states on which specific network the system rule applies.

To edit settings of any item in the list (*including the assigned actions*), right-click the item and select ***Edit***. ***However, editing of system rules should be performed by advanced users only, and it is strongly recommended that you do not edit the system rules!***

User defined system rules

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 an 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:



Please bear in mind that detail rule settings are advanced and 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! If you really need to change the configuration, please consult the respective dialog help files for specific details.

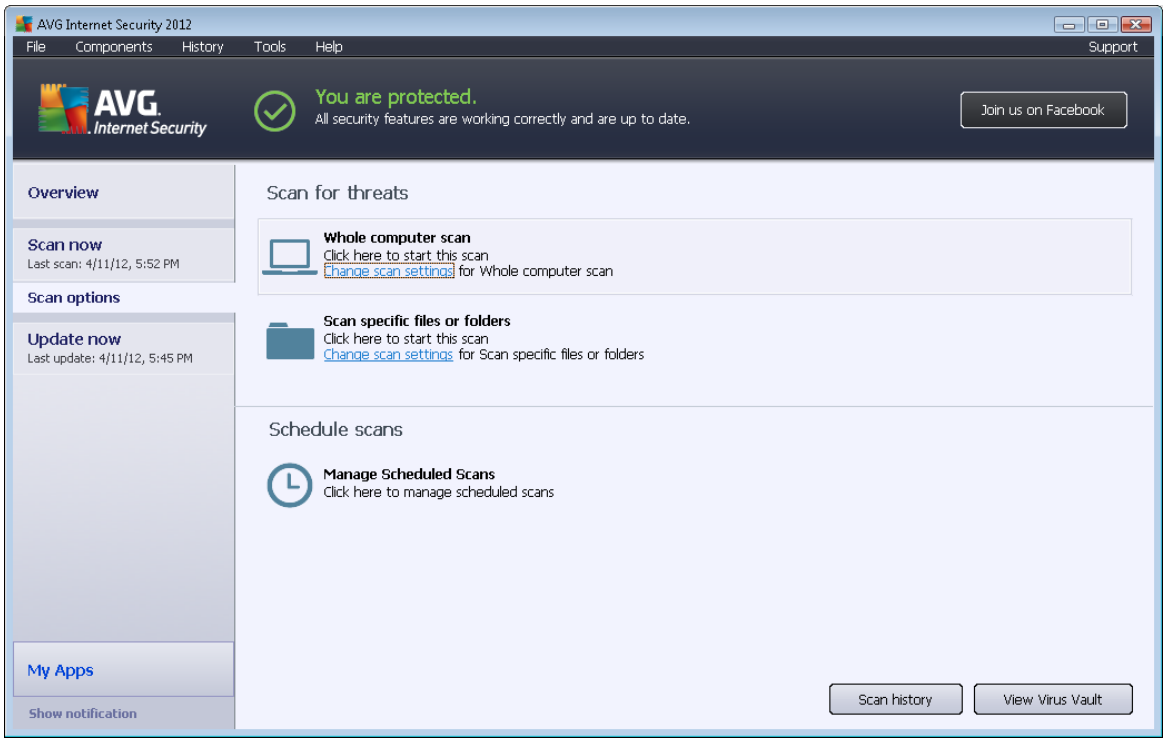
Log unknown traffic

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

12. AVG Scanning

By default, **AVG Internet Security 2012** does not run any scans, as after the initial one, you should be perfectly protected by the resident components of **AVG Internet Security 2012** that are always on guard, and do no let any malicious code get into your computer. Of course, you can schedule a scan to run at regular intervals, or manually launch a scan according to your needs any time.

12.1. Scanning Interface



The AVG scanning interface is accessible via the ***Scan options*** 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 as scheduled:
  - Whole computer scan
  - Scan specific files or folders
- Schedule scans section - where you can define new tests and create new schedules as needed.

Control buttons

The following control buttons available within the testing interface:

- ***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

12.2. Predefined Scans

One of the main features of **AVG Internet Security 2012** is on-demand scanning. On-demand tests are designed to scan various parts of your computer whenever suspicion about possible virus infection arises. Anyway, it is strongly recommended that you carry out such tests regularly even if you think that no virus can be found on your computer.

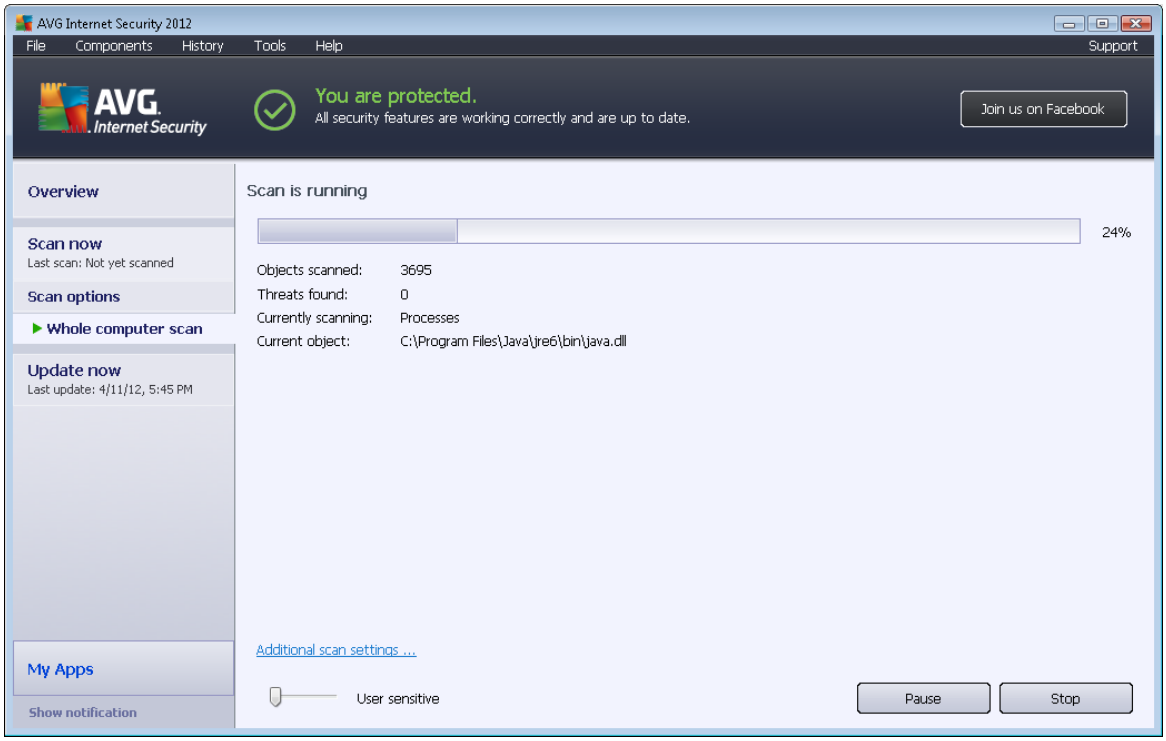
In the **AVG Internet Security 2012** you will find the following types of scan predefined by the software vendor:

12.2.1. Whole Computer Scan

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

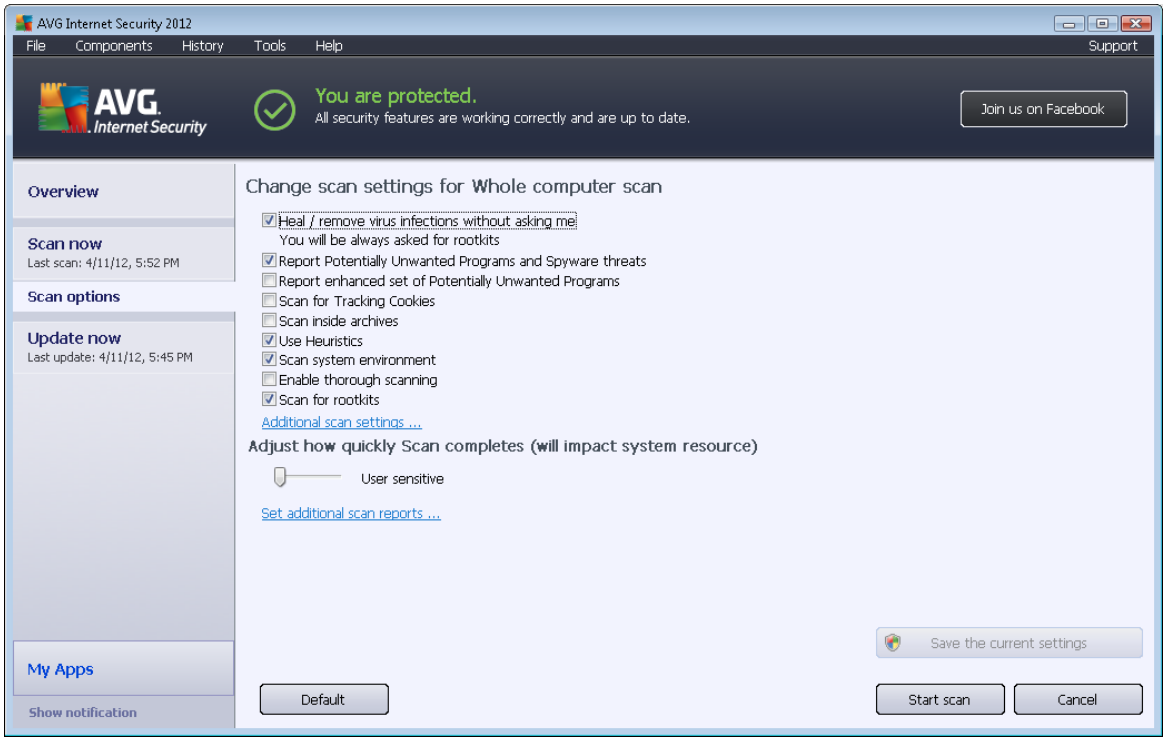
Scan launch

The ***Whole Computer scan*** 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 scan will start immediately within the ***Scan is running*** dialog (*see screenshot*). The scan can be temporarily interrupted (***Pause***) or canceled (***Stop***) if needed.



Scan configuration editing

You have the option of editing the predefined default settings for the ***Whole computer scan***. Press the ***Change scan settings*** link to get to the ***Change scan settings for Whole Computer scan*** dialog *(accessible from the scanning interface via the Change scan settings link for the Whole computer scan)*. ***It is recommended that you keep 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:

    - ***Heal / remove virus infection without asking me*** (*on by default*) - 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*** (*on by default*) - Check to activate the Anti-Spyware engine, and scan for spyware as well as for viruses. Spyware represents a questionable malware category: even though it usually represents a security risk, some of these programs can be installed intentionally. We recommend that you keep this feature activated as it increases your computer security.

    - ***Report enhanced set of Potentially Unwanted Programs*** (*off by default*) - Mark to detect extended packages of spyware: programs that are perfectly ok and harmless when acquired from the manufacturer directly, but can be misused for malicious purposes later. This is an additional measure that increases your computer security even more, however it may block legal programs, and is therefore switched off by default.

    - ***Scan for Tracking Cookies*** (*off by default*) - This parameter of the Anti-Spyware component specifies 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*** (*off by default*) - This parameter specifies that scanning should check all files stored inside archives, e.g. ZIP, RAR, ...

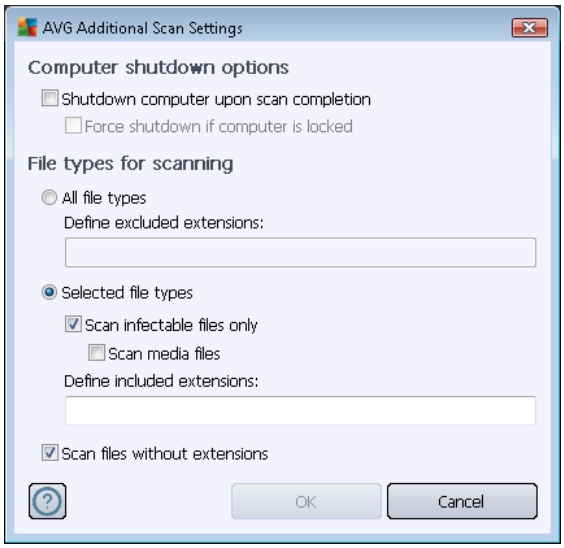
- ***Use Heuristics*** (*on by default*) - Heuristic analysis (*dynamic emulation of the scanned object's instructions in a virtual computer environment*) will be one of the methods used for virus detection during scanning.

- ***Scan system environment*** (*on by default*) - Scanning will also check the system areas of your computer.

- ***Enable thorough scanning*** (*off by default*) - In specific situations (*suspicions about your computer being infected*) you may check this option to activate the most thorough scanning algorithms that will scan even those areas of your computer that rarely get infected, just to be absolutely sure. Remember though that this method is rather time-consuming.

- ***Scan for rootkits*** (*on by default*) - Anti-Rootkit scan searches your computer for possible rootkits, i.e. programs and technologies that can cover malware activity in your computer. If a rootkit is detected, this does not necessarily mean your computer is infected. In some cases, specific drivers or sections of regular applications may be misleadingly detected as rootkits.

- ***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***).

- ***File types for scanning*** - you should also decide whether you want scan:

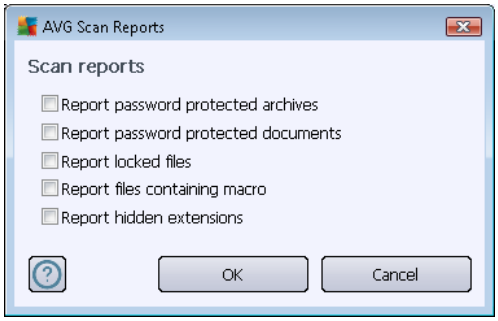
- ***All file types*** with the option of defining exceptions from scanning by providing a list of comma separated file extensions that should not be scanned;

- ***Selected file types*** - you can specify that you want to scan only files that can be infected (*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 likely to be infected by a virus*). Again, you can specify by extensions which files should always be scanned.

- Optionally, you can decide 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 extensions are rather suspicious and should be scanned at all times.

- ***Adjust how quickly Scan completes*** - you can use the slider to change the scanning process priority. By default, this option value is set to the *user sensitive* level of automatic resource usage. 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 resource 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 for a newly defined scan - as described in the AVG Scanning / Scan scheduling/ How to Scan chapter. 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 for the whole computer.*

12.2.2. Scan Specific Files or Folders

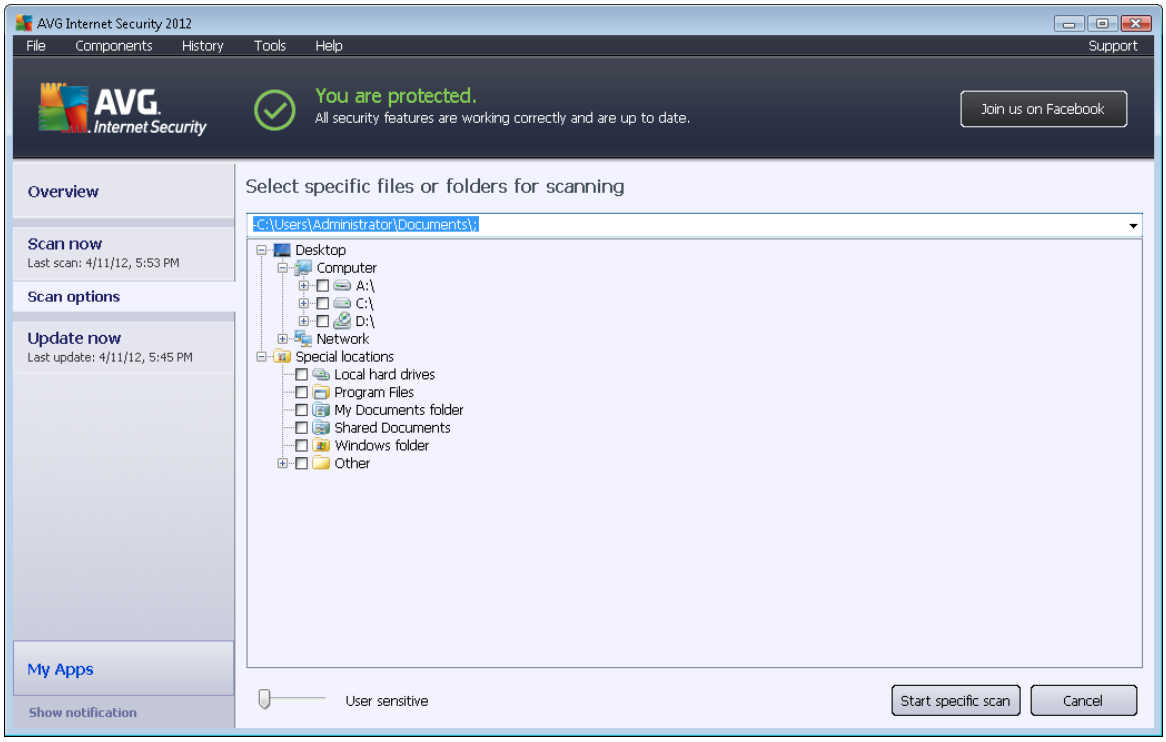
Scan specific files or folders - scans only those areas of your computer that you have selected to be scanned (*selected folders, hard disks, floppy discs, CDs, etc.*). The scanning progress in case of virus detection and its treatment is the same as when scanning the whole computer: any virus found 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 scan. The path to each selected folder will be generated automatically and appear in the text box in the upper part of this dialog.

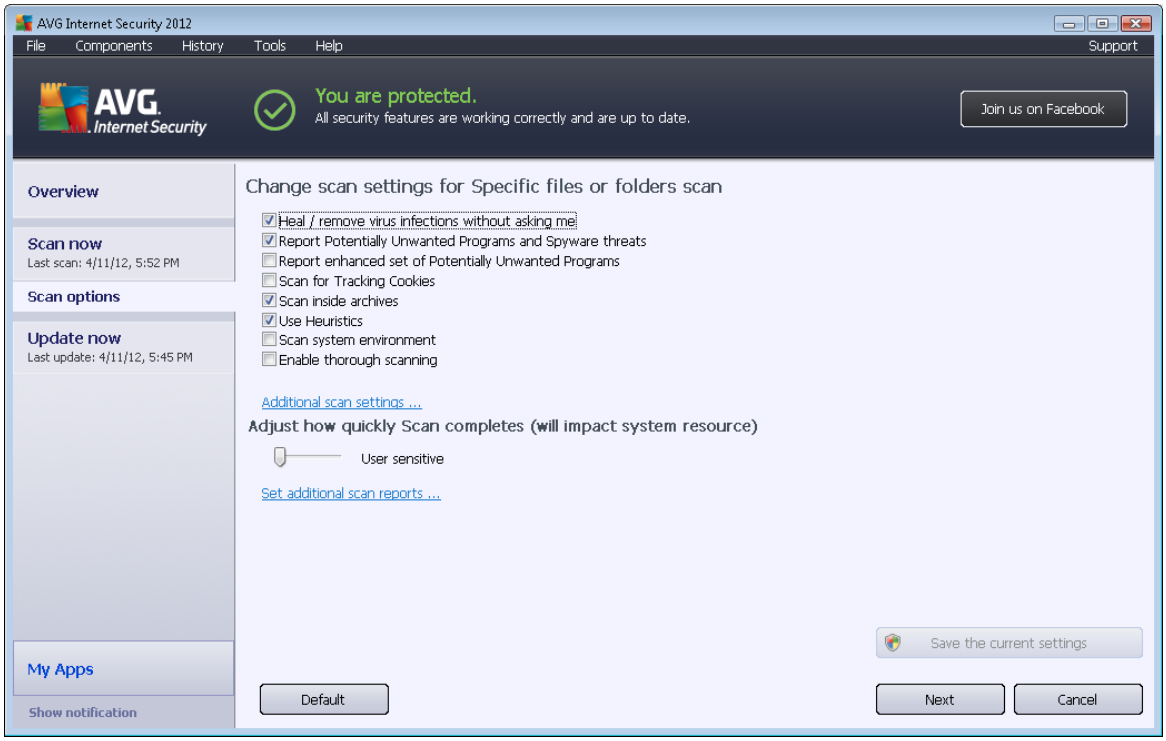
There is also the option of having a specific folder scanned while all its subfolders are excluded from this scan; to do that write a minus sign "**-**" in front of the automatically generated path (*see screenshot*). To exclude the entire folder from scanning use the "!" parameter.

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



Scan configuration editing

You have the option of editing the predefined default settings for 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 that you keep the default settings unless you have a valid reason to change them!***



- ***Scanning parameters*** - in the list of scanning parameters you can switch specific parameters on/off as needed:

    - ***Heal / remove virus infection without asking me*** (*on by default*) - 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*** (*on by default*) - check to activate the Anti-Spyware engine, and scan for spyware as well as for viruses. Spyware represents a questionable malware category: even though it usually represents a security risk, some of these programs can be installed intentionally. We recommend that you keep this feature activated as it increases your computer security.

    - ***Report enhanced set of Potentially Unwanted Programs*** (*off by default*) - mark to detect extended packages of spyware: programs that are perfectly ok and harmless when acquired from the manufacturer directly, but can be misused for malicious purposes later. This is an additional measure that increases your computer security even more, however it may block legal programs, and is therefore switched off by default.

    - ***Scan for Tracking Cookies*** (*off by default*) - this parameter of the Anti-Spyware component specifies 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*).

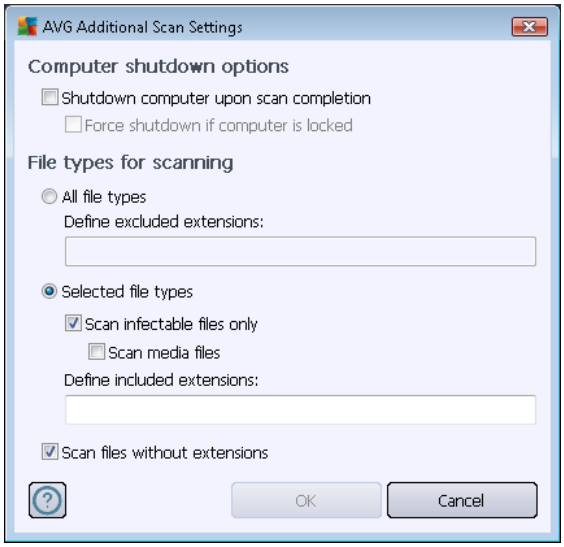
- **Scan inside archives** (*on by default*) - this parameters defines that scanning should check all files stored inside archives, e.g. ZIP, RAR, ...

- **Use Heuristics** (*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** (*off by default*) - scanning will also check the system areas of your computer.

- **Enable thorough scanning** (*off by default*) - in specific situations (*suspicions about your computer being infected*) you may check this option to activate the most thorough scanning algorithms that will scan even those areas of your computer that rarely get infected, just to be absolutely sure. Remember though that this method is rather time-consuming.

- **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**).

- **File types for scanning** - you should also decide whether you want to scan:

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

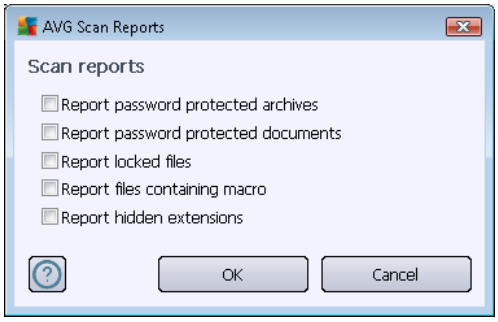
  - **Selected file types** - you can specify that you want to scan only files that can be infected (*files that cannot get infected will not be scanned, for instance some plain text files, or some other non-executable files*), including media files (*video,*

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 likely to be infected by a virus). Again, you can specify by extensions which files should always be scanned.

- Optionally, you can decide 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 extensions 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, this option value is set to the *user sensitive* level of automatic resource usage. 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*).

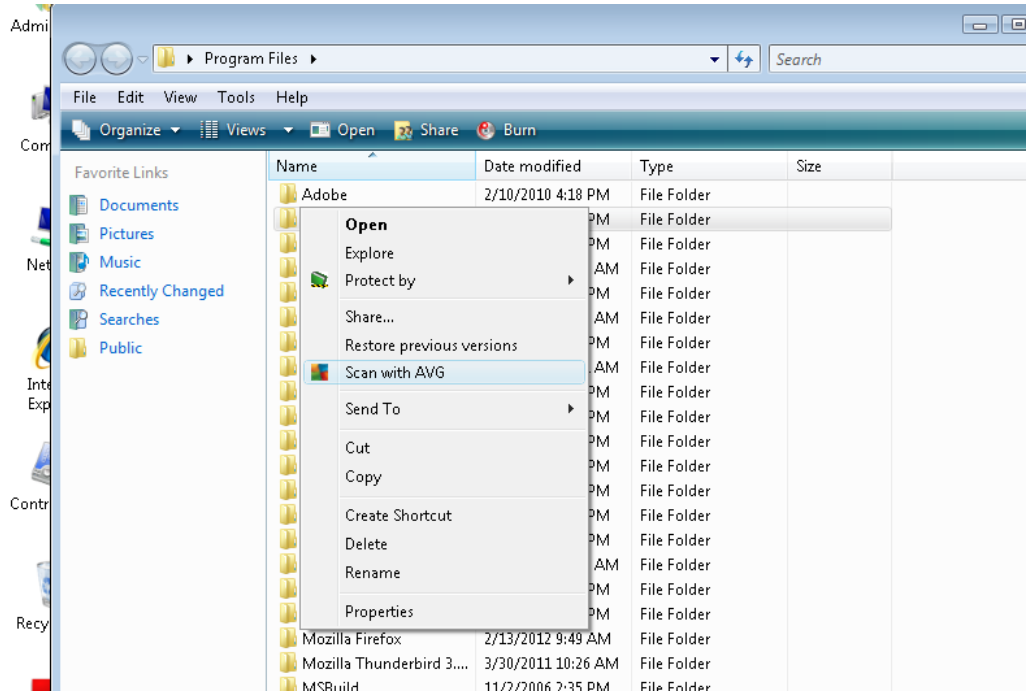
- ***Set additional scan reports*** - the link opens a new ***Scan Reports*** dialog where you can select what types of potential findings should be reported:



Warning: *These scan settings are identical to the parameters for a newly defined scan - as described in the AVG Scanning / Scan scheduling/ How to Scan chapter. 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).*

12.3. Scanning in Windows Explorer

Besides the pre-defined scans launched for the entire computer or its selected areas, **AVG Internet Security 2012** 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 Internet Security 2012**

12.4. Command Line Scanning

Within **AVG Internet Security 2012** 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 scan with most parameters as offered in the AVG graphical user interface.

To launch the 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 up in a row and separated by a space and a slash character

- if a parameter requires specific value to be provided (e.g. the ***/scan*** parameter that requires information on 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 separated 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 using ***Ctrl+C*** or ***Ctrl+Pause*** .

CMD scanning launched from graphic interface

When you run your computer in Windows Safe Mode, there is also an option 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 a detailed description of this dialog please consult the help file opened directly from the dialog.

12.4.1. CMD Scan Parameters

There follows a list of all parameters available for command line scanning:

- /SCAN Scan specific files or folders /SCAN=path;path (e.g. /SCAN=C:\;D:\)
- /COMP Whole Computer scan
- /HEUR Use heuristic analysis
- /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
- /LOG Generate a scan result file
- /MACROW Report macros
- /PWDW Report password-protected files
- /ARCBOMBSW Report archive bombs (repeatedly compressed archives)
- /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
- /PUPEXT Report enhanced set of 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)
- /HIDDEN Report files with hidden extensions
- /INFECTABLEONLY Scan files with infectable extensions only
- /THOROUGHSCAN Enable thorough scanning

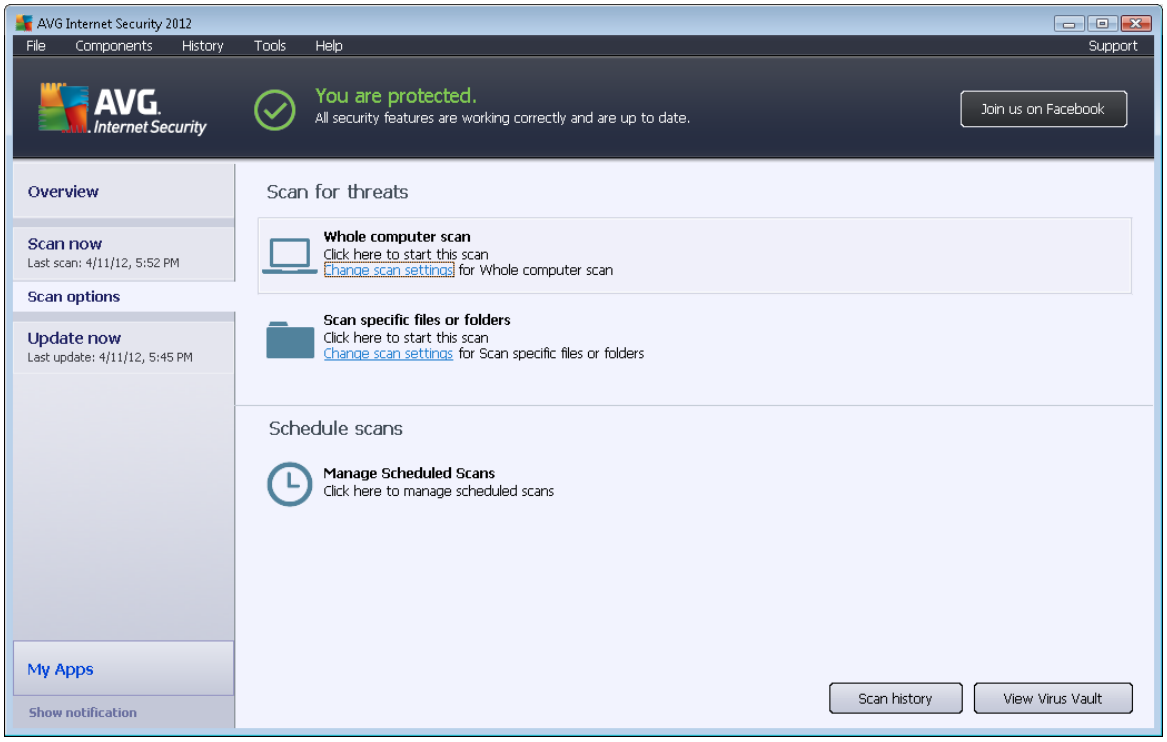
- /CLOUDCHECK Check for false positives
- /ARCBOMBSW Report re-compressed archive files

12.5. Scan Scheduling

With **AVG Internet Security 2012** you can run scan on demand (for instance when you suspect an infection has penetrated your computer) or based on a scheduled plan. It is highly recommended that you 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.

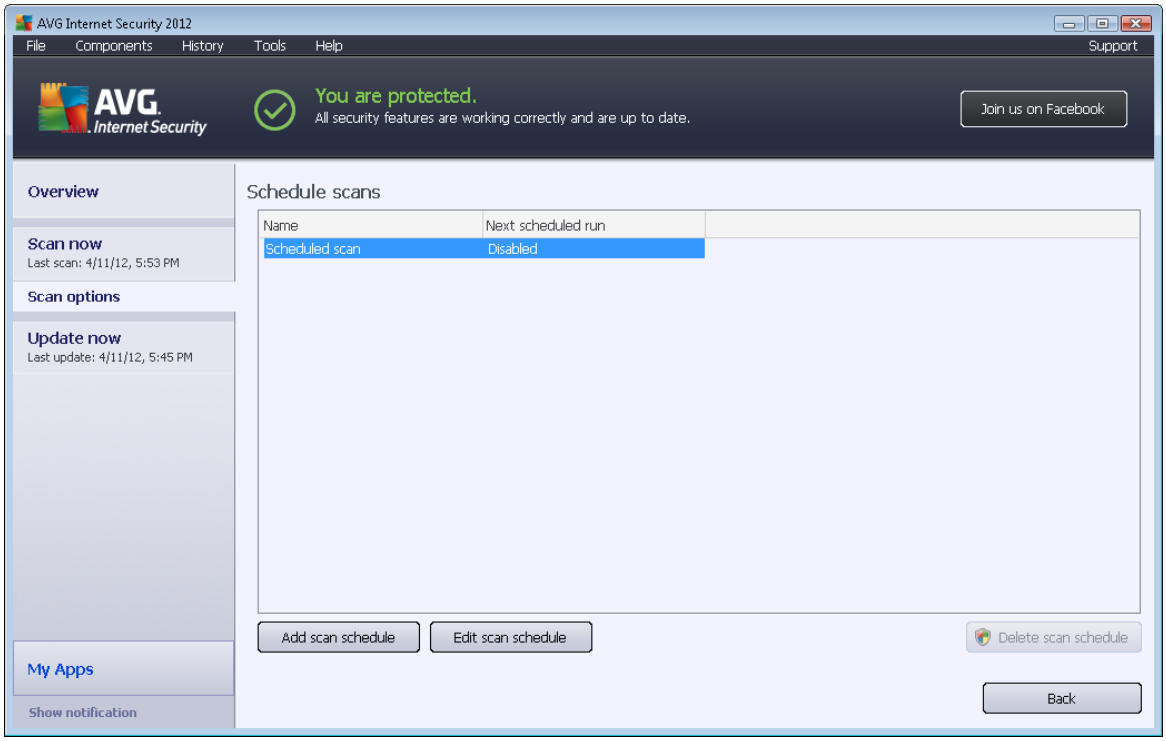
You should launch the Whole Computer scan regularly, at least once a week. However, if possible, launch the scan of your entire computer daily - as set up in the scan schedule default configuration. If the computer is "always on" then you can schedule scans out of working hours. If the computer is sometimes switched off, then schedule scans to occur on 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:

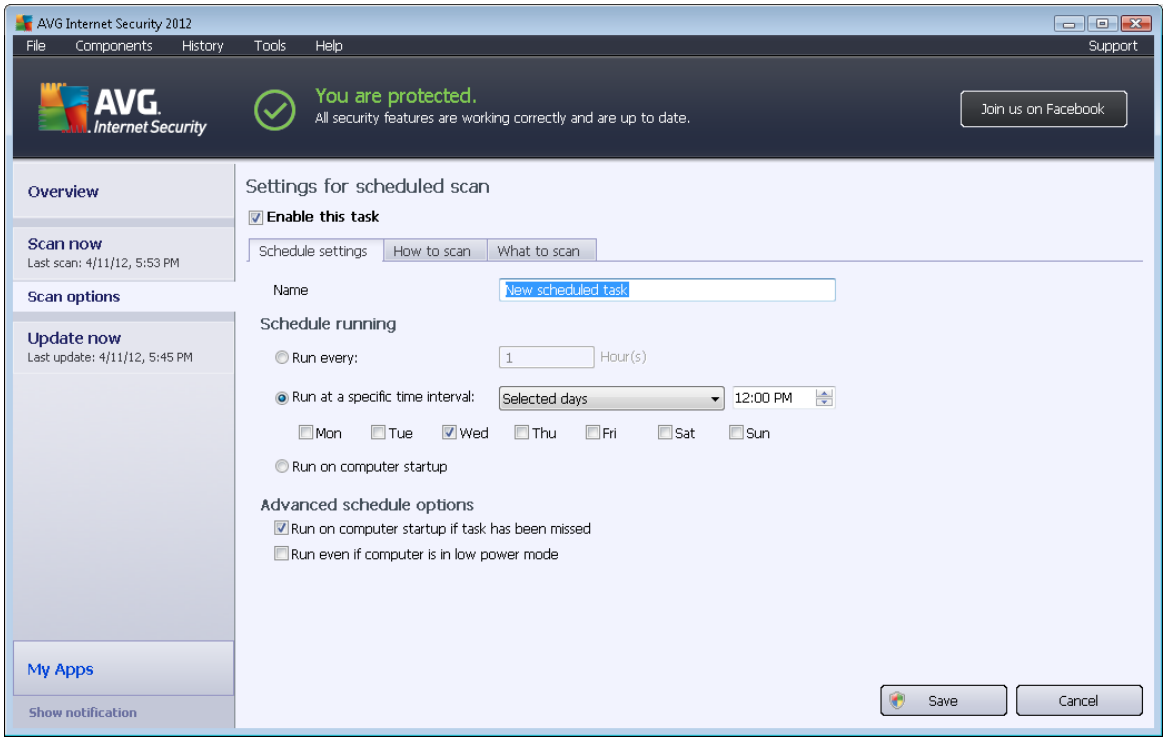


You can edit / add scans using the following control buttons:

- ***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 active and you can click it to switch to the ***Settings for scheduled scan*** dialog, Schedule settings tab. Parameters for 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

12.5.1. 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 "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. It is also not necessary to specify in the scan's name whether it scans the whole of the computer or just scans 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 for 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.

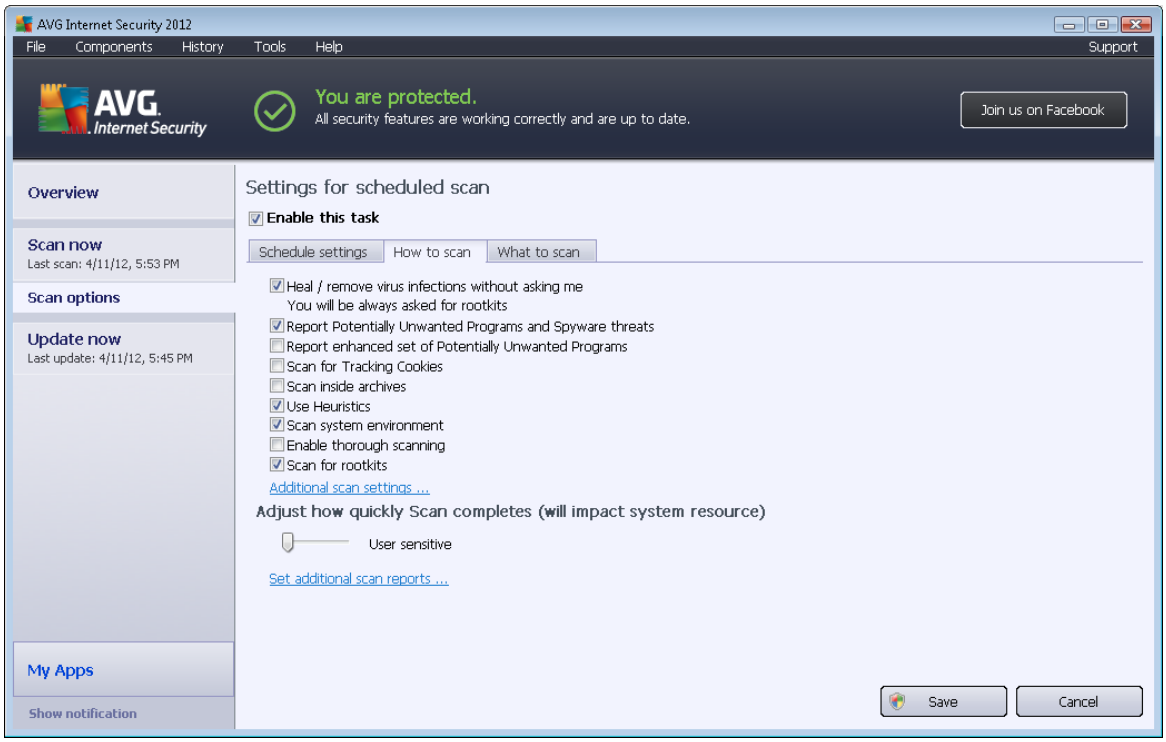
Control buttons for the settings for scheduled scan dialog

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 on 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 on this dialog and switches back to the AVG scanning interface default dialog.

12.5.2. 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 that you keep to the pre-defined configuration:

- ***Heal / remove virus infection without asking me*** (*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*** (*on by default*): check to activate the Anti-Spyware engine, and scan for spyware as well as for viruses. Spyware represents a questionable malware category: even though it usually represents a security

risk, some of these programs can be installed intentionally. We recommend that you keep this feature activated as it increases your computer security.

- ***Report enhanced set of Potentially Unwanted Programs*** (*off by default*): mark to detect extended packages of spyware: programs that are perfectly ok and harmless when acquired from the manufacturer directly, but can be misused for malicious purposes later. This is an additional measure that increases your computer security even more, however it may block legal programs, and is therefore switched off by default.

- ***Scan for Tracking Cookies*** (*off by default*): this parameter of the Anti-Spyware component specifies 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*** (*off by default*): this parameter specifies that the scanning should check all files even if these are packed inside some type of archive, e.g. ZIP, RAR, ...

- ***Use Heuristics*** (*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.

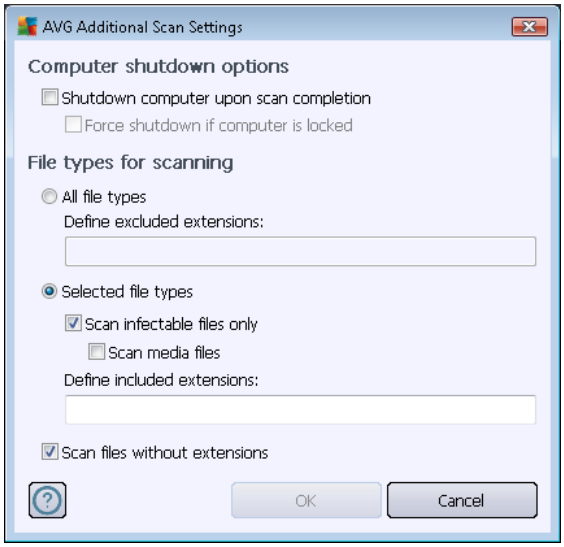
- ***Scan system environment*** (*on by default*): scanning will also check the system areas of your computer.

- ***Enable thorough scanning*** (*off by default*) - in specific situations (*suspicions about your computer being infected*) you may check this option to activate the most thorough scanning algorithms that will scan even those areas of your computer that rarely get infected, just to be absolutely sure. Remember though that this method is rather time-consuming.

- ***Scan for rootkits*** (*on by default*): Anti-Rootkit scan searches your computer for possible rootkits, i.e. programs and technologies that can cover malware activity in your computer. If a rootkit is detected, this does not necessarily mean your computer is infected. In some cases, specific drivers or sections of regular applications may be misleadingly detected as rootkits.

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***).

- ***File types for scanning*** - you should also decide whether you want to scan:

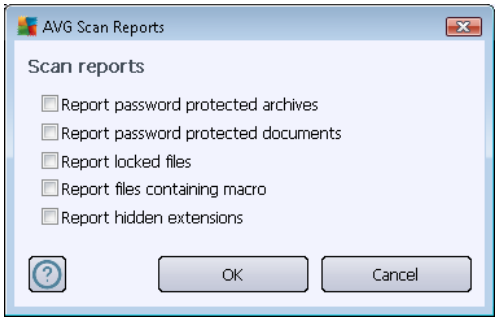
  - ***All file types*** with the option of defining exceptions from scanning by providing a list of comma separated file extensions that should not be scanned;

  - ***Selected file types*** - you can specify that you want to scan only files that can be infected (*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 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 extensions are rather suspicious and should be scanned at all times.

- ***Adjust how quickly Scan completes*** - you can use the slider to change the scanning process priority. By default, this option value is set to the *user sensitive* level of automatic resource usage. 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:



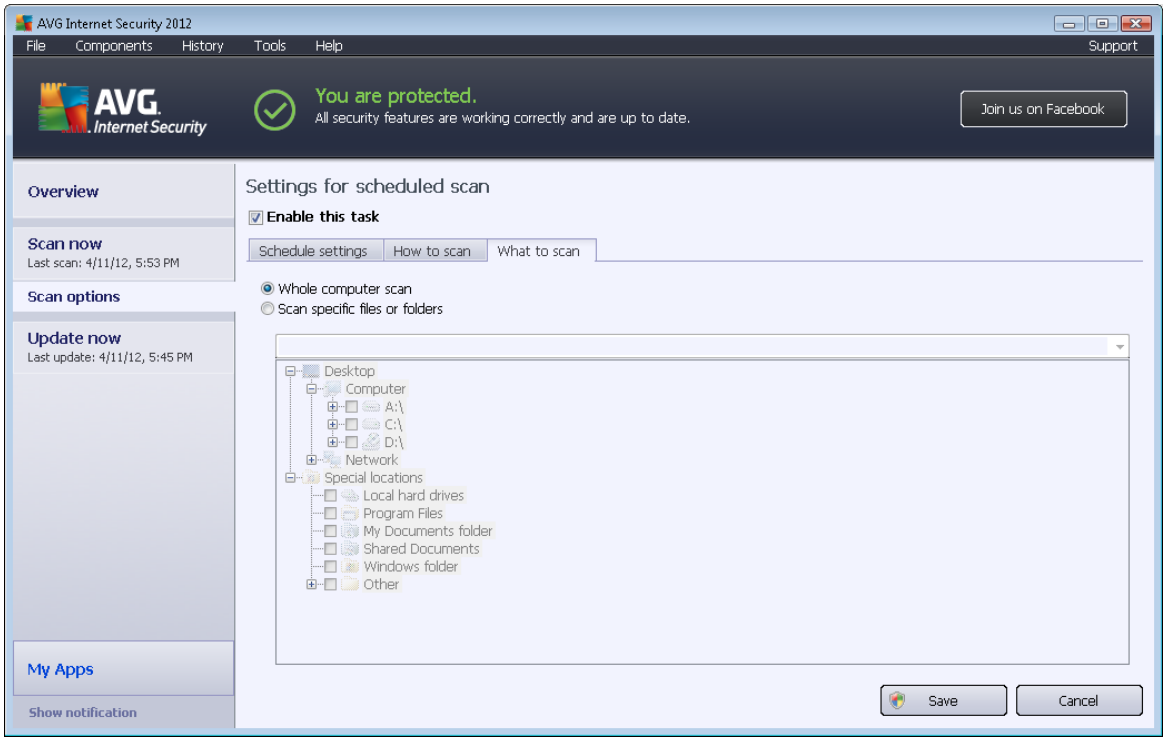
Control buttons

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 on 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 of 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.

12.5.3. 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 the 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 scan history for later use. Alternatively, you can enter the full path to the desired folder manually (*if you enter multiple paths, it is necessary to separate with semi-colons without extra spaces*).

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

- ***Local hard drives*** - all hard drives of your computer
- ***Program files***
    - C:\Program Files\
    - *in 64-bit version* C:\Program Files (x86)
- ***My Documents folder***
    - *for Win XP:* C:\Documents and Settings\Default User\My Documents\
    - *for Windows Vista/7*: C:\Users\user\Documents\
- ***Shared Documents***
    - *for Win XP*: C:\Documents and Settings\All Users\Documents\
    - *for Windows Vista/7*: C:\Users\Public\Documents\
- ***Windows folder*** - C:\Windows\
- ***Other***
    - *System drive* - the hard drive on which the operating system is installed (usually C:)
    - *System folder* - C:\Windows\System32\
    - *Temporary Files folder* - C:\Documents and Settings\User\Local\ (*Windows XP*); or C:\Users\user\AppData\Local\Temp\ (*Windows Vista/7*)
    - *Temporary Internet Files* - C:\Documents and Settings\User\Local Settings\Temporary Internet Files\ (*Windows XP*); or C: \Users\user\AppData\Local\Microsoft\Windows\Temporary Internet Files (*Windows Vista/7*)

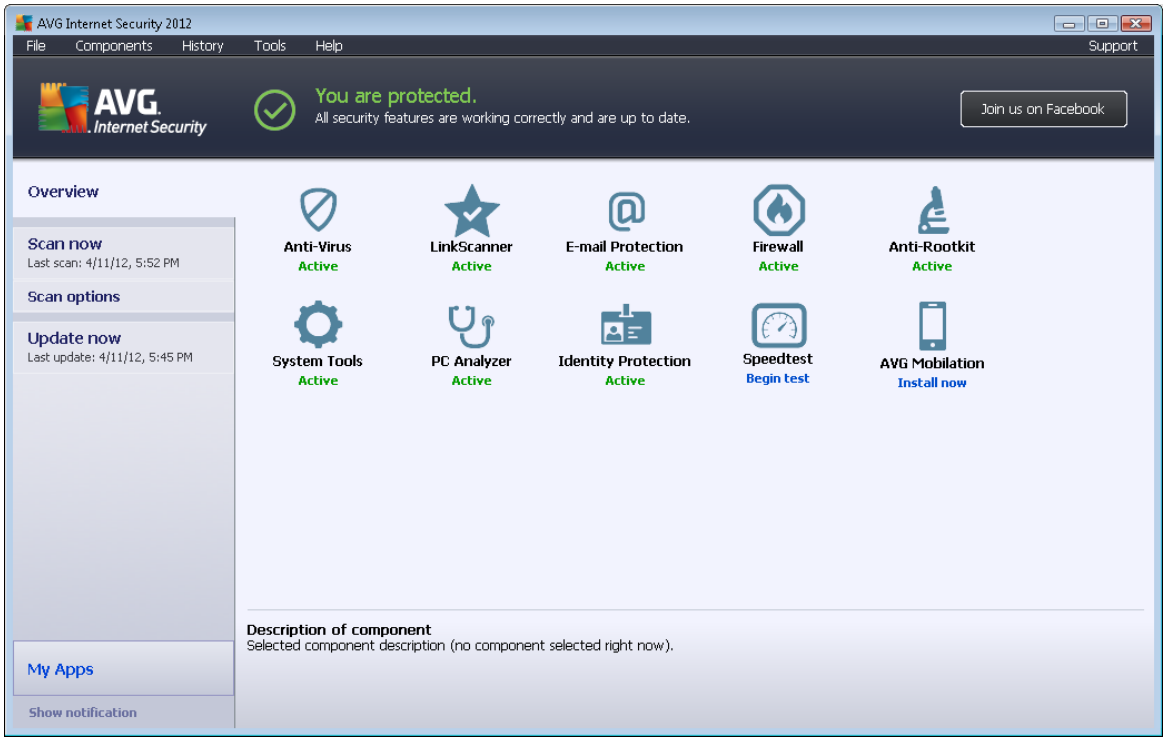
Control buttons

The same two control buttons are available on all three tabs on the ***Settings for scheduled scan*** dialog *(Schedule settings, How to scan, and What to scan)*:

- ***Save*** - saves all changes you have performed on this tab or on any other tab on 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 of your requirements.

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

12.6. 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 all previously launched scans and information on 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 you 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 icon 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
- ***Warnings*** - number of detected suspicious objects
- ***Rootkits*** - number of detected rootkits
- ***Scan log information*** - information relating to the scanning progress 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

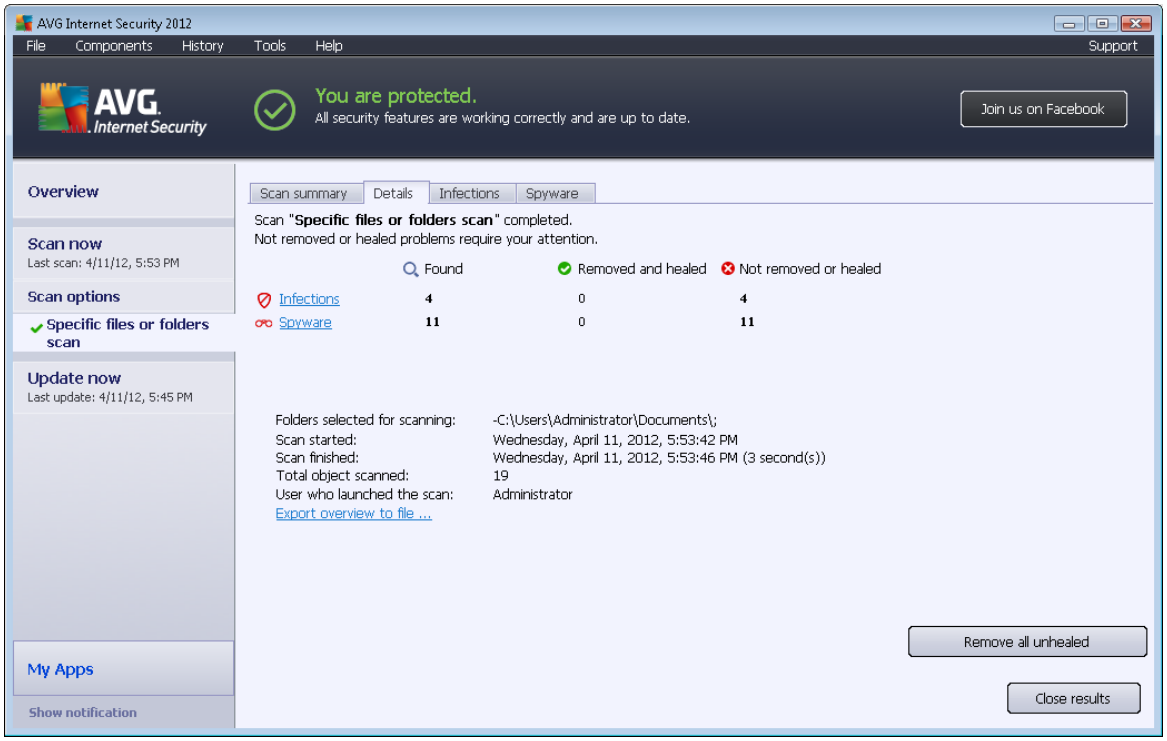
12.7. Scan Results Details

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
- Rootkits - this tab is displayed only if rootkits 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 about the finding. You will also find here information on objects that could not be scanned *(e.g. password protected archives)*.

12.7.1. Results Overview Tab



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

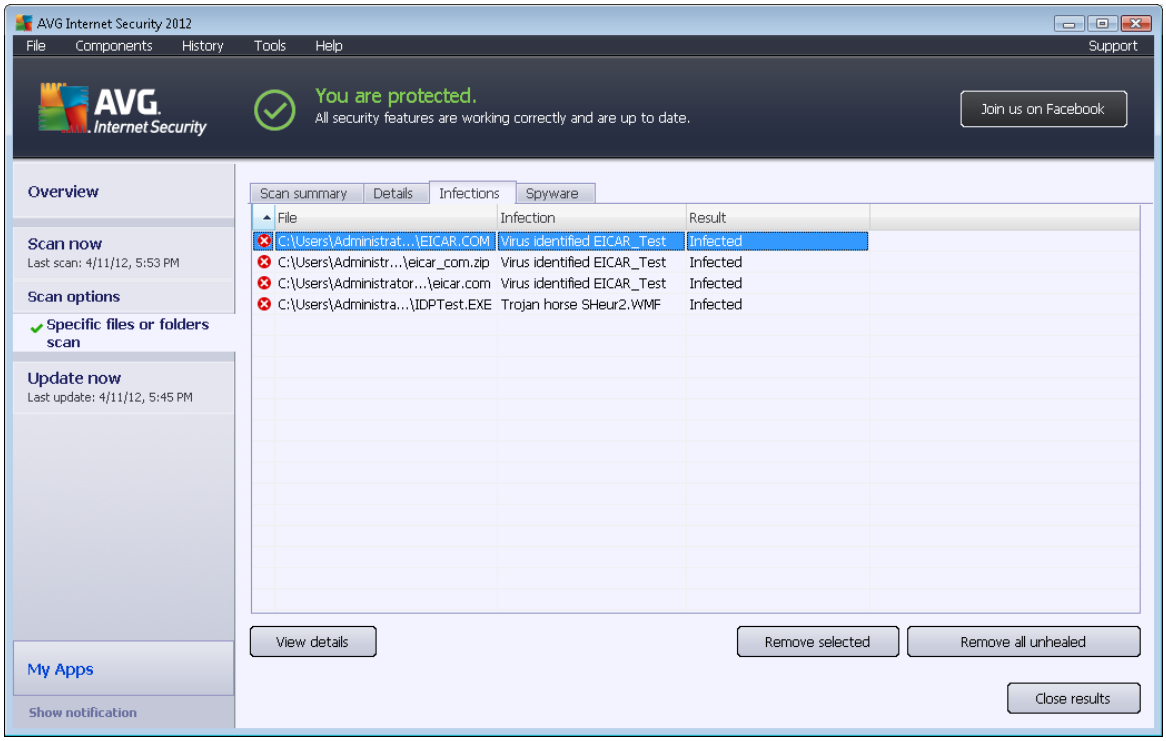
- detected virus infections / spyware
- removed virus infections / spyware
- the number of virus infections / spyware that cannot be removed or healed

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.

12.7.2. 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

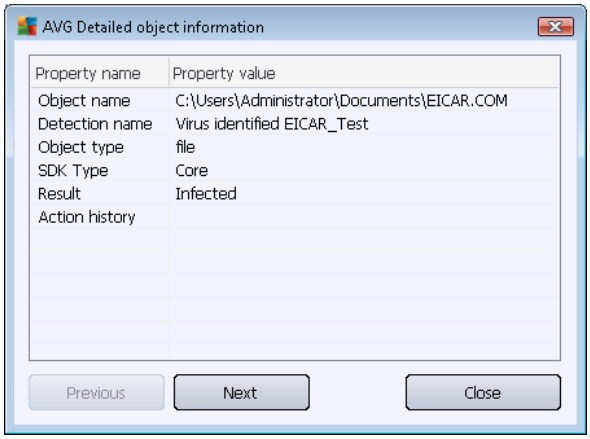
- ***Potentially dangerous object*** - the object was detected as potentially dangerous but not infected (*it may contain macros, for instance*); the information should be taken as a warning only

- ***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 object information***:



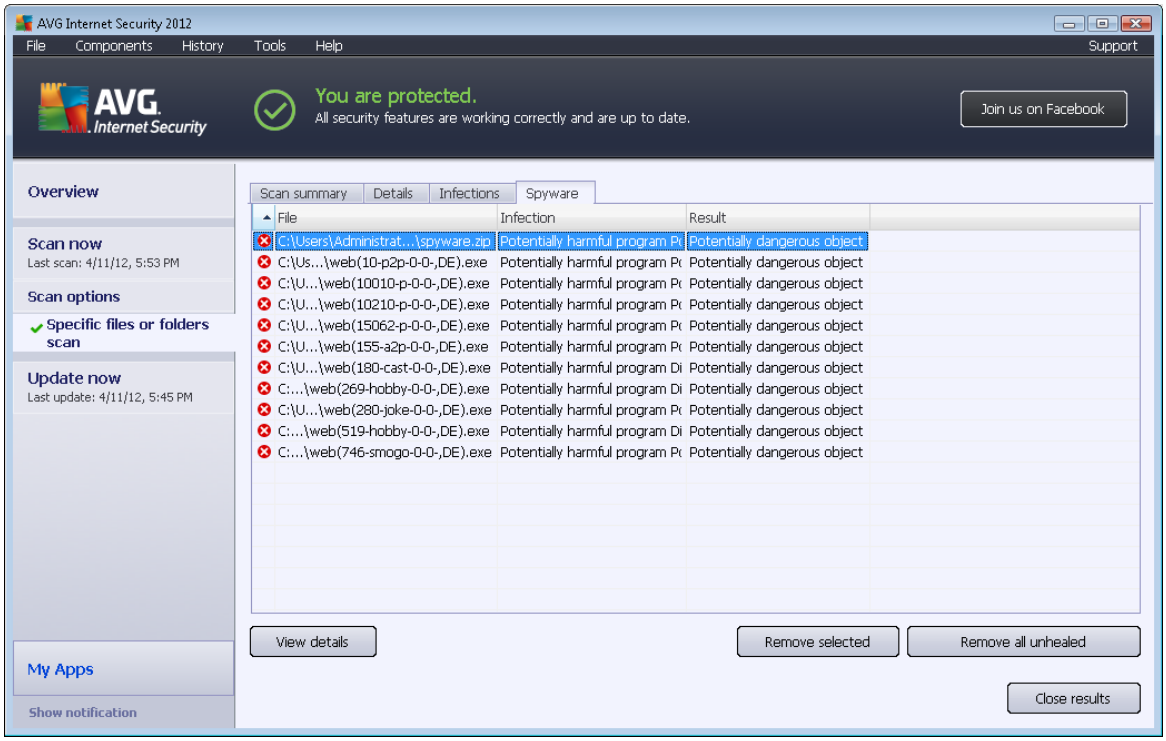
  In this dialog you can find detailed information on the detected infectious object (*e.g. infected object name and location, object type, SDK type, detection result, and history of actions related to the detected object*). Using the ***Previous*** / ***Next*** buttons you can view information on specific findings. Use the ***Close*** button to close this dialog.

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

- ***Remove all unhealed*** - 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

12.7.3. 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

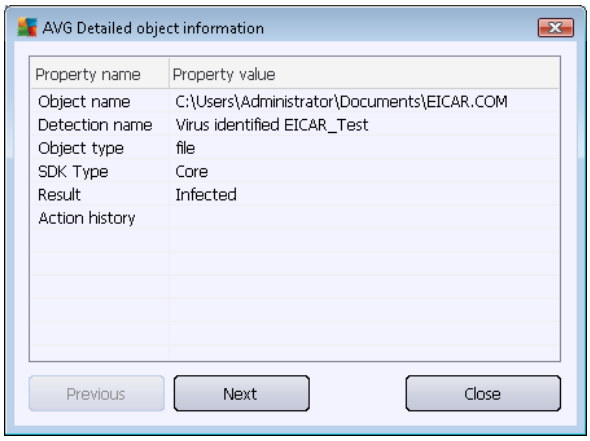
- o ***Potentially dangerous object*** - the object was detected as potentially dangerous but not infected (it may contain macros, for instance); the information is a warning only

- o ***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 object information***:



In this dialog you can find detailed information on the detected infectious object (*e.g. infected object name and location, object type, SDK type, detection result, and history of actions related to the detected object*). Using the ***Previous*** / ***Next*** buttons you can view information on specific findings. Use the ***Close*** button to leave this dialog.

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

- ***Remove all unhealed*** - 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

12.7.4. 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 adware or spyware detected on your computer. If the test results only contain Warnings detected by **AVG Internet Security 2012**, 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 files with this attribute. If **AVG Internet Security 2012** reports a hidden file which you suspect to be malicious, you can move it to your 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 in the Windows registry to ensure it is loaded on startup or to extend its effect on the operating system.

12.7.5. Rootkits Tab

The ***Rootkits*** tab displays information on rootkits detected during anti-rootkit scanning included within the Whole Computer Scan.

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. They are often also Trojans, 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.

12.7.6. 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. The **AVG Internet Security 2012** 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:

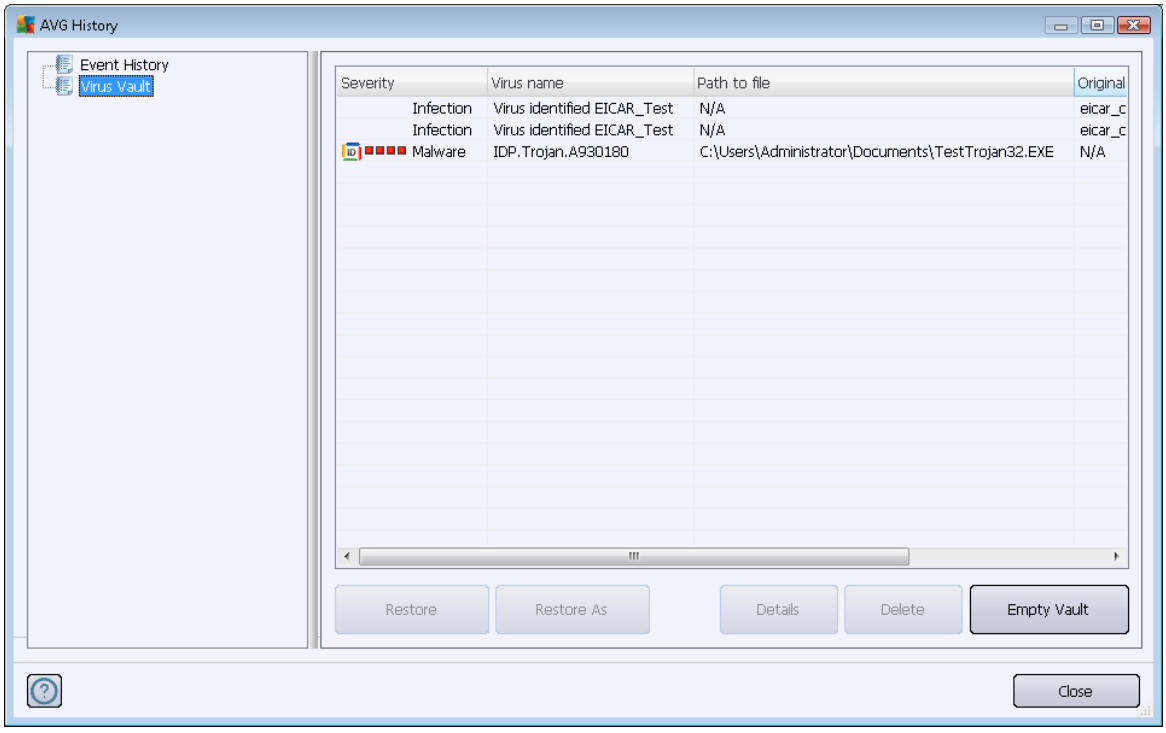
- ***Run-time packed*** - the file was packed with one of the less common run-time packers, which may indicate an attempt to prevent scanning of such a file. However, not every report of such a file indicates a virus.
- ***Run-time packed recursive*** - similar to above, however less frequent amongst 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 Internet Security 2012** (*or generally any other anti-malware program*).
- ***Document with macros*** - the reported document contains macros, which may be malicious.

- ***Hidden extension*** - files with hidden extensions 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 Internet Security 2012** reports such files to prevent them being opened accidentaly.

- ***Improper file path*** - if an important system file is running from other than the default path (*e.g. winlogon.exe running from other than Windows folder*), **AVG Internet Security 2012** 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 Internet Security 2012**. This usually means that a file is constantly being used by the system (*e.g. swap file*).

12.8. 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 main purpose of the ***Virus Vault*** is to keep any deleted file for a certain period of time, so that you can make sure you do not need the file any more in its original location. Should you find out that the file absence causes problems, you can send the file in question to analysis, or restore it to the original location.

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

- ***Severity*** - in case you decided to install the Identity Protection component within your **AVG Internet Security 2012**, a graphical identification of the respective finding severity on a four-level scale from unobjectionable (■□□□) up to very dangerous (■■■■) will be provided in this section; and the information on the infection type (*based on their infection 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. If 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

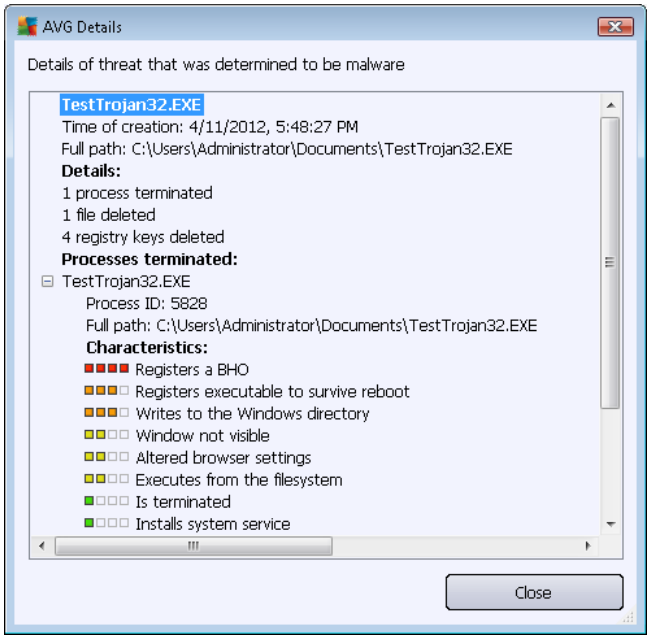
Control buttons

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*** - moves the infected file to a selected folder

- ***Details*** - this button only applies to threats detected by Identity Protection. Upon clicking, it displays a synoptic overview of the threat details (*what files/processes have been affected, characteristics of the process etc.*). Please note that for all items detected by IDP, this button is grayed out and inactive!



- ***Delete*** - removes the infected file from the ***Virus Vault*** completely and irreversibly
- ***Empty Vault*** - removes all ***Virus Vault*** content completely. By removing the files from the ***Virus Vault***, these files are irreversibly removed from the disk (*not moved to the recycle bin*).

13. AVG Updates

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.

Considering all the newly-emerged computer threats and the speed at which they spread, it is absolutely crucial to update your **AVG Internet Security 2012** regularly. The best solution is to stick to the program default settings where the automatic update is configured. Please bear in mind that if the virus database of your **AVG Internet Security 2012** is not up-to-date, the program will not be able to detect the latest threats!

It is crucial to update your AVG regularly! Essential virus definition updates should be daily if possible. Less urgent program updates can be weekly.

13.1. Update launch

To provide the maximum security available, **AVG Internet Security 2012** is by default scheduled to look for new updates every four hours. Since AVG updates are not released according to any fixed schedule but rather in response to the amount and severity of new threats, this check-up is highly important to make sure your AVG virus database is kept up-to-date all the time.

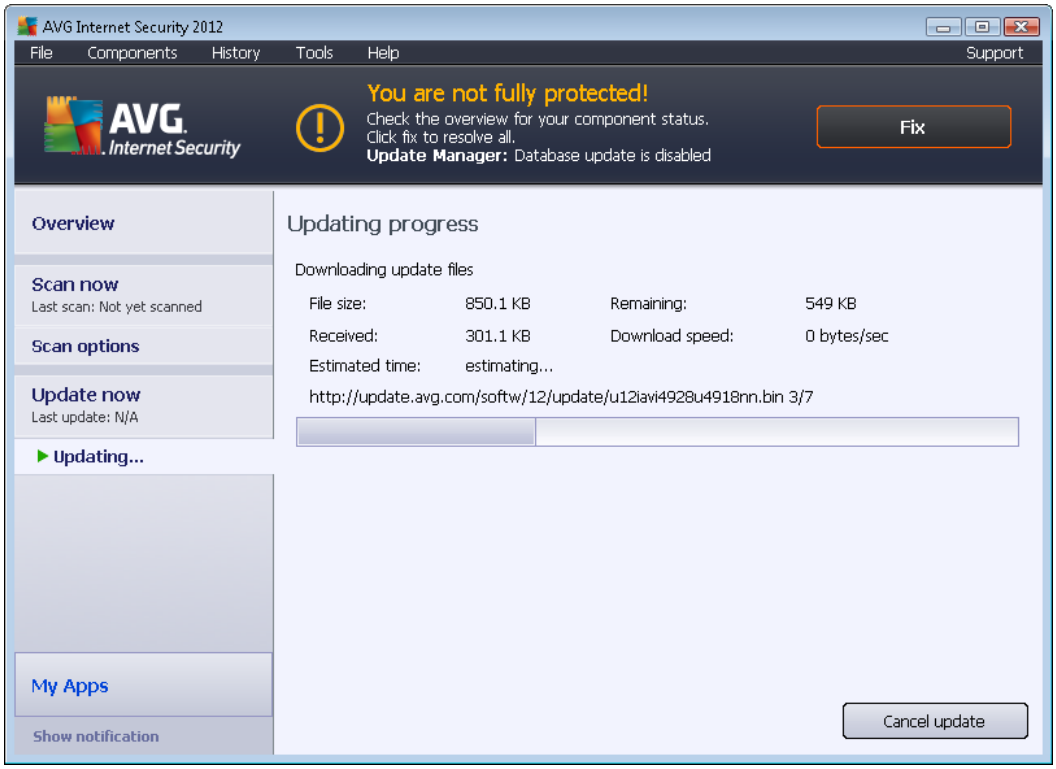
Should you wish to reduce the number of update launches, you can set up your own update launch parameters. However, it is strictly recommended that you launch the update at least once a day! The configuration can be edited within the Advanced settings/Schedules section, specifically in the following dialogs:

- Definitions update schedule
- Program update schedule
- Anti-Spam update schedule

If you want to check the new update files immediately, use the Update now quick link in the main user interface. This link is available at all times from any user interface dialog.

13.2. Update progress

Once you start the update, AVG will first verify whether there are new update files available. If so, **AVG Internet Security 2012** starts to download them and launches the update process itself. During the update process you will get redirected to the ***Update*** interface where you can view the progress in its graphical representation as well as in an overview of relevant statistical parameters *(update file size, received data, download speed, elapsed time, ...)*:



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

13.3. Update levels

AVG Internet Security 2012 offers two update levels to select from:

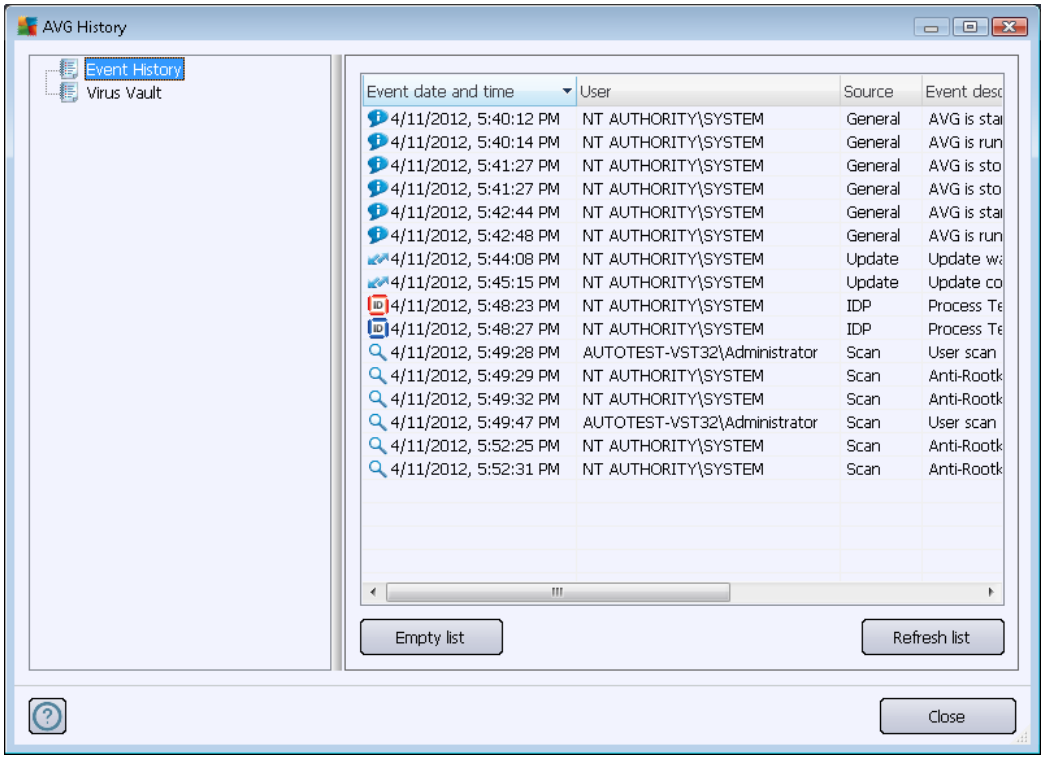
- ***Definitions update*** contains changes necessary for reliable anti-virus, anti-spam and anti-malware protection. Typically, it does not include any changes to the code and updates only the definition database. This update should be applied as soon as it is available.
- ***Program update*** contains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

When scheduling an update, it is possible to define specific parameters for both update levels:

- Definitions update schedule
- Program update schedule

***Note:** If a scheduled program update and scheduled scan coincides, the update process is of higher priority and the scan will be interrupted.*

14. Event History



The ***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 Internet Security 2012** operation. The ***History*** records the following types of events:

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

For each event, the following information is listed:

- ***Event date and time*** gives the exact date and time the event occurred
- ***User*** states the name of the user currently logged in at the time that the event occured
- ***Source*** gives information about a source component or other part of the AVG system that triggered the event
- ***Event description*** gives a brief summary of what actually happened

Control buttons

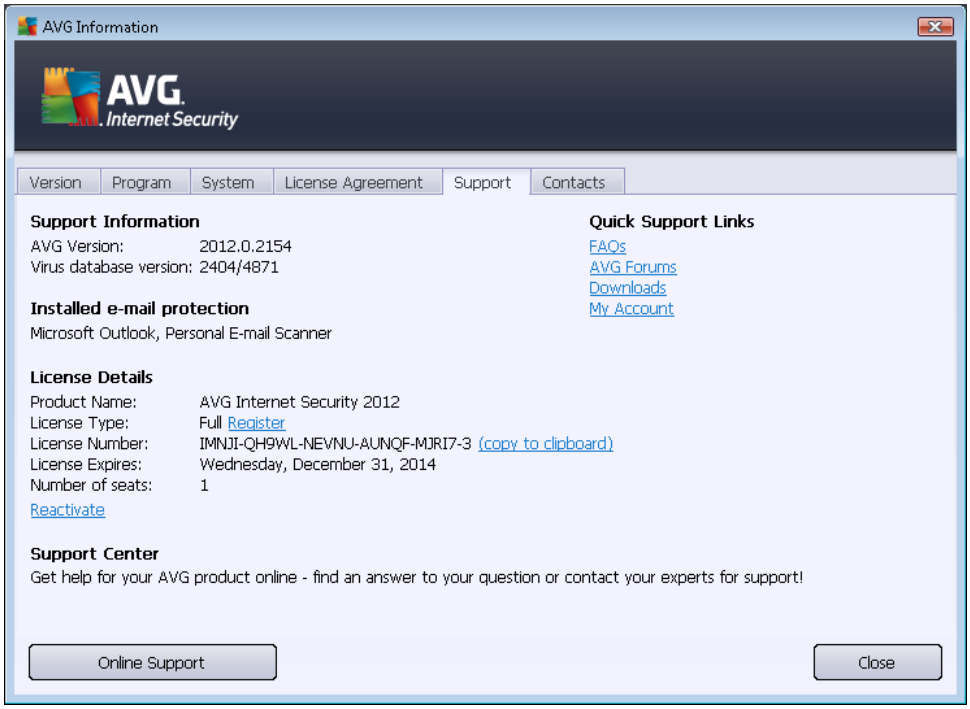
- ***Empty list*** - press the button to deletes all entries in the list of events
- ***Refresh list*** - press the button to updates all entries in the list of events

15. FAQ and Technical Support

Should you have any sales or technical trouble with your **AVG Internet Security 2012** application, there are several ways to obtain help. Please chose from the following options:

- ***Get Support***: Right within the AVG application you can reach a dedicated customer support page on the AVG website (http://www.avg.com/). Select the ***Help / Get Support*** main menu item to get redirected to the AVG website with available support avenues. To proceed, please follow the instructions on the web page.

- ***Support (main menu link)***: The AVG application menu (*on top of the main user interface*) includes the ***Support*** link that opens a new dialog with all types of information you might need when trying to find help. The dialog includes basic data on your installed AVG program (*program / database version*), license details, and a list of quick support links:



- ***Troubleshooting in help file***: A new ***Troubleshooting*** section is available directly in the help file included with **AVG Internet Security 2012** *(to open the help file, press F1 key in any dialog in the application)*. This section provides a list of the most frequently occurring situations when a user desires to look up professional help for a technical issue. Please select the situation that best describes your problem, and click it to open detailed instructions leading to the problem solution.

- ***AVG website Support Center***: Alternatively, you can look up the solution to your problem on the AVG website (http://www.avg.com/). In the ***Support Center*** section you can find a structured overview of thematic groups dealing with both sales and technical issues.

- ***Frequently asked questions***: On the AVG website (http://www.avg.com/) you can also find a separate and elaborately structured section of frequently asked questions. This section is accessible via the ***Support Center / FAQ*** menu option. Again, all questions are divided in a

well-organized way into sales, technical, and virus categories.

- ***About viruses & threats***: A specific part of the AVG website (http://www.avg.com/) is dedicated to virus issues *(the webpage is accessible from the main menu via the Help / About Viruses and Threats option)*. In the menu, select ***Support Center / About viruses & threats*** to enter a page providing a structured overview of information related to online threats. You can also find instructions on removing viruses, spyware, and advice on how to stay protected.

- ***Discussion forum***: You can also use the AVG users discussion forum at http://forums.avg.com.