

AVG Internet Security 2011

User Manual

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Contents

1. Ir	ntroduction ·····	7
2. A	VG Installation Requirements ·······	8
2.	1 Operation Systems Supported ······	8
2.	2 Minimum & Recommended HW Requirements ·····	8
	VG Installation Options ·······	
4. A	VG Installation Process ···································	10
4.	1 Welcome ·····	10
4.	2 Activate your AVG license ······	11
	3 Select type of installation ······	
4.	4 Custom options ·····	13
4.	5 Install the AVG Security Toolbar ·······	14
4.	6 Install progress ······	15
4.	7 Installation was successful ·······	15
	fter Installation ······	
5.	1 Product registration ······	17
5.	2 Access to user interface ·······	17
5.	3 Scanning of the whole computer ······	17
5.	4 Eicar test ······	17
5.	5 AVG default configuration ······	18
6. A	VG User Interface ······	19
6.	1 System Menu ·····	20
	6.1.1 File · · · · · · · · · · · · · · · · · · ·	20
	6.1.2 Components ·····	20
	6.1.3 History	
	6.1.4 Tools	20
	6.1.5 Help ·····	20
6.	2 Security Status Info ·····	22
6.	3 Quick Links ·····	23
6.	4 Components Overview ······	24
	5 Statistics ·····	
6.	6 System Tray Icon ·····	25
6.	7 AVG gadget ······	26



7	7. AVG Components ······	29
	7.1 Anti-Virus ·····	29
	7.1.1 Anti-Virus Principles ·····	29
	7.1.2 Anti-Virus Interface ······	29
	7.2 Anti-Spyware ·····	30
	7.2.1 Anti-Spyware Principles ······	30
	7.2.2 Anti-Spyware Interface ······	30
	7.3 Anti-Spam ·····	32
	7.3.1 Anti-Spam Principles ······	32
	7.3.2 Anti-Spam Interface ······	32
	7.4 Firewall ·····	
	7.4.1 Firewall Principles ·····	33
	7.4.2 Firewall Profiles ······	
	7.4.3 Firewall Interface ······	
	7.5 Link Scanner ······	37
	7.5.1 Link Scanner Principles ······	37
	7.5.2 Link Scanner Interface ·····	
	7.5.3 Search-Shield ······	
	7.5.4 Surf-Shield ·····	
	7.6 Resident Shield ······	40
	7.6.1 Resident Shield Principles ······	40
	7.6.2 Resident Shield Interface ······	40
	7.6.3 Resident Shield Detection ······	40
	7.7 Family Safety ······	44
	7.8 AVG LiveKive ·····	
	7.9 E-mail Scanner ·····	45
	7.9.1 E-mail Scanner Principles ······	45
	7.9.2 E-mail Scanner Interface ·····	
	7.9.3 E-mail Scanner Detection	
	7.10 Update Manager ······	48
	7.10.1 Update Manager Principles ·····	48
	7.10.2 Update Manager Interface ······	48
	7.11 License	
	7.12 Remote Administration ······	
	7.13 Online Shield ······	
	7.13.1 Online Shield Principles ······	
	7.13.2 Online Shield Interface ······	52



7.14.1 Anti-Rootkit Principles ······	55
7.14.2 Anti-Rootkit Interface ······	55
15 System Tools ·····	57
17 ID Protection ·····	64
7.17.1 ID Protection Principles ······	64
7.17.2 ID Protection Interface ······	64
7.17.3 ID Protection Settings ······	64
VG Security Toolbar ······	67
VG Advanced Settings ······	69
3 Ignore Faulty Conditions ······	72
4 Identity Protection ······	73
9.4.1 Identity Protection Settings	73
9.4.2 Allowed List ·····	73
7 Anti-Spam ······	79
9.7.2 Performance ·····	79
9.7.4 Whitelist ·····	79
9.7.6 Advanced Settings ·····	79
0.8.1 Wah Protection	90
9.8.2 Instant Messaging ·····	
	93
	7.13.3 Online Shield Detection 14 Anti-Rootkit 7.14.1 Anti-Rootkit Principles 7.14.2 Anti-Rootkit Interface 15 System Tools 7.15.1 Processes 7.15.2 Network Connections 7.15.3 Autostart 7.15.4 Browser Extensions 7.15.5 LSP Viewer 16 PC Analyzer 17 ID Protection 7.17.1 ID Protection Principles 7.17.2 ID Protection Interface 7.17.3 ID Protection Settings VG Security Toolbar VG Advanced Settings 1 Appearance 2 Sounds 3 Ignore Faulty Conditions 4 Identity Protection 9.4.1 Identity Protection 9.4.2 Allowed List 5 Virus Vault 5 PUP Exceptions 7 Anti-Spam 9.7.1 Settings 9.7.2 Performance 9.7.3 RBL 9.7.4 Whitelist 9.7.5 Blacklist 9.7.5 Blacklist 9.7.5 Blacklist 9.7.6 Advanced Settings 8 Online Shield 9.8.1 Web Protection



	9.10.1 Scan Whole Computer ······	94
	9.10.2 Shell Extension Scan ·····	94
	9.10.3 Scan Specific Files or Folders ······	94
	9.10.4 Removable Device Scan ······	94
	9.11 Schedules ·····	. 100
	9.11.1 Scheduled Scan ·····	100
	9.11.2 Virus Database Update Schedule ·····	100
	9.11.3 Program Update Schedule ······	100
	9.11.4 Anti-Spam Update Schedule ······	100
	9.12 E-mail Scanner ·····	
	9.12.1 Certification ·····	
	9.12.2 Mail Filtering ······	
	9.12.3 Servers	
	9.13 Resident Shield ·····	
	9.13.1 Advanced Settings ······	
	9.13.2 Excluded items ······	
	9.14 Cache Server ·····	
	9.15 Anti-Rootkit ·····	
	9.16 Update	
	9.16.1 Proxy ·····	
	9.16.2 Dial-up ······	
	9.16.3 URL ·····	
	9.16.4 Manage ·····	125
	9.17 Temporarily disable AVG protection	. 131
	9.18 Product Improvement Programme ······	
1	0. Firewall Settings ·····	134
	10.1 General ·····	. 134
	10.2 Security ·····	. 135
	10.3 Areas and Adapters Profiles ······	. 136
	10.4 IDS	
	10.5 Logs · · · · · · · · · · · · · · · · · · ·	
	10.6 Profiles ·····	. 140
1	1. AVG Scanning ······	142
	11.1 Scanning Interface ······	. 142
	11.2 Predefined Scans ·······	
	11.2.1 Whole Computer Scan ······	
	11.2.2 Scan Specific Files or Folders	143
	•	



11.2.3 Anti-Rootkit Scan ······ 1	
11.3 Scanning in Windows Explorer 1	.52
11.4 Command Line Scanning · · · · · · · 1	.52
11.4.1 CMD Scan Parameters	52
11.5 Scan Scheduling ······ 1	
11.5.1 Schedule Settings	54
11.5.2 How to Scan ······ 1	54
11.5.3 What to Scan ······ 1	54
11.6 Scan Results Overview ······ 1	.63
11.7 Scan Results Details ······ 1	.64
11.7.1 Results Overview Tab ······ 1	64
11.7.2 Infections Tab ······ 1	64
11.7.3 Spyware Tab ····· 1	64
11.7.4 Warnings Tab ······ 1	64
11.7.5 Rootkits Tab ······ 1	64
11.7.6 Information Tab ······ 1	
11.8 Virus Vault ····· 1	.71
12. AVG Updates	74
12.1 Update Levels ······ 1	.74
12.2 Update Types ······ 1	
12.3 Update Process ···································	.74
13. Event History	76
14. FAQ and Technical Support ····································	78



1. Introduction

This user manual provides comprehensive documentation for AVG Internet Security 2011.

Congratulations on your purchase of AVG Internet Security 2011!

AVG Internet Security 2011 is one of a range of award winning AVG products designed to provide you with peace of mind and total security for your PC. As with all AVG products AVG Internet Security 2011 has been completely re-designed, from the ground up, to deliver AVG's renowned and accredited security protection in a new, more user friendly and efficient way. Your new AVG Internet Security 2011 product has a streamlined interface combined with more aggressive and faster scanning. More security features have been automated for your convenience, and new 'intelligent' user options have been included so that you can fit our security features to your way of life. No more compromising usability over security!

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

All AVG products offer

- Protection that's relevant to the way you use your computer and the Internet: banking and shopping, surfing and searching, chatting and emailing, or downloading files and social networking – AVG has a protection product that's right for you
- Hassle-free protection that's trusted by over 110 million people around the world and fueled by a global network of highly-experienced researchers
- Protection that's backed by round-the-clock expert support



2. AVG Installation Requirements

2.1. Operation Systems Supported

AVG Internet Security 2011 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 <u>ID Protection</u> component is not supported on Windows XP x64. On this operating system you can install AVG Internet Security 2011 but only without the IDP component.

2.2. Minimum & Recommended HW Requirements

Minimum hardware requirements for AVG Internet Security 2011:

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

Recommended hardware requirements for AVG Internet Security 2011:

- Intel Pentium CPU 1,8 GHz
- 512 MB of RAM memory
- 1400 MB of free hard drive space (for installation purposes)



3. AVG Installation Options

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

Before you start installing AVG, we strongly recommend that you visit AVG website (http://www.avg.com/) to check for a new installation file. This way you can be sure to install the latest available version of AVG Internet Security 2011.

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



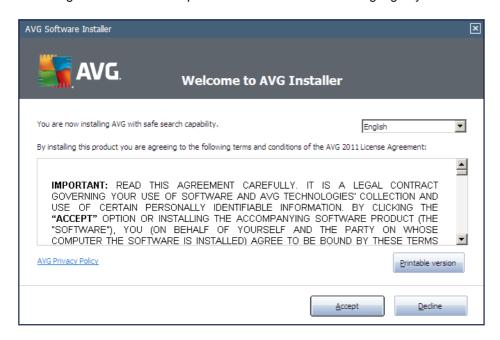
4. AVG Installation Process

To install **AVG Internet Security 2011** on your computer, you need to get the latest installation file. You can use the installation file from the CD that is a part of your box edition but this file might be out-of-date. Therefore we recommended getting the latest installation file online. You can download the file from AVG website (http://www.avg.com/), the Support Center / Download section.

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

4.1. Welcome

The installation process starts with the **Welcome** dialog window. Here you select the language used for the installation process, and the default language of AVG user interface. In the upper section of the dialog window find the drop-down menu with the list of languages you can chose from:



Attention: Here, you are selecting the language for the installation process. The language you select will be installed as the default language for AVG user interface, together with English that is installed automatically. If you want to have installed other additional languages for the user interface, please define them within one of the following setup dialogs named **Custom Options**.

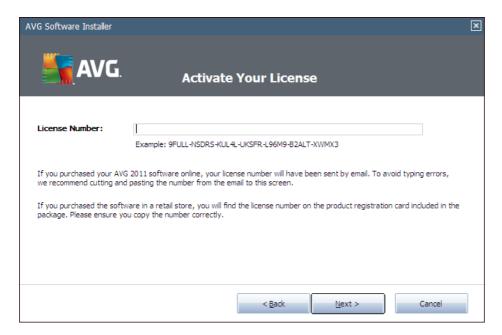
Further, the dialog provides the full wording of the AVG license agreement. Please read it carefully. To confirm that you have read, understood and accept the agreement press the *Accept* button. If you do not agree with the license agreement press the *Decline* button, and the installation process will be terminated immediately.



4.2. Activate your AVG license

In the *Activate Your License* dialog you are invited to fill in your license number into the provided text field.

The sales number can be found on the CD packaging in your **AVG Internet Security 2011** box. The license number will be in the confirmation email that you received after purchasing your **AVG Internet Security 2011** on-line. You must type in the number exactly as shown. If the digital form of the license number is available (*in the email*), it is recommended to use the copy and paste method to insert it.



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



4.3. Select type of installation



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

For most users, it is highly recommended to keep to the standard **Quick Install** that installs AVG in fully automatic mode with settings predefined by the program vendor. This configuration provides maximum security combined with the optimal use of resources. In the future, if the need arises to change the configuration, you will always have the possibility to do so directly in the AVG application. If you have selected the **Quick Install** option, press the **Next** button to proceed to the following **Install the AVG Security Toolbar** dialog.

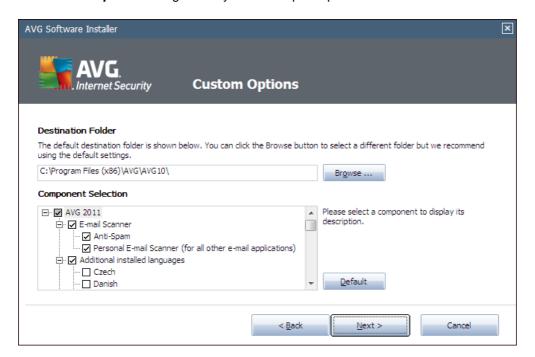
Custom Install should only be used by experienced users who have a valid reason to install AVG with non-standard settings; e.g. to fit specific system requirements. Having selected this option, press the **Next** button to proceed to the **Custom Options** dialog.

In the right-hand section of the dialog you can find the check box related to <u>AVG gadget</u> (supported in Windows Vista/Windows 7). If you wish to have installed this gadget, mark the respective checkbox. <u>AVG gadget</u> will then be accessible from the Windows Sidebar providing you an immediate access to the most important features of your **AVG Internet Security 2011**, i.e. scanning and updating.



4.4. Custom options

The *Custom Options* dialog allows you to set up two parameters of the installation:



Destination Folder

Within the **Destination Folder** section of the dialog you are supposed to specify the location where **AVG Internet Security 2011** should be installed. By default, AVG will be installed to the program files folder located on drive C:. If you want to change this location, use the **Browse** button to display the drive structure, and select the respective folder.

Component Selection

The *Component Selection* section provides an overview of all **AVG Internet Security 2011** 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.

Press the Next button to continue.



4.5. Install the AVG Security Toolbar



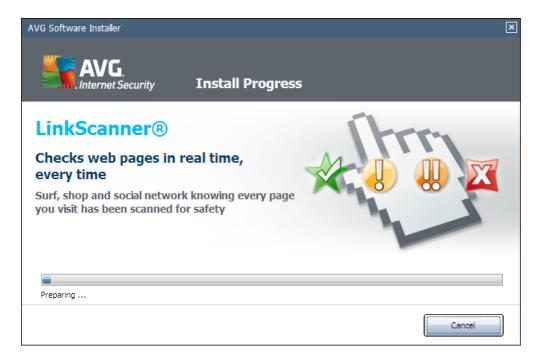
In the *Install the AVG Security Toolbar* dialog, decide whether you want to install the *AVG Security Toolbar*. If you do not change the default settings, this component will be installed automatically into your Internet browser (*currently supported browsers are Microsoft Internet Explorer version 6.0 or higher, and <i>Mozilla Firefox version 3.0 or higher*) and to provide you with comprehensive online protection while surfing the Internet.

Also, you have the option to decide whether you want to choose AVG Secure Search (powered by Google) as your default search provider. If so, keep the respective check box marked.



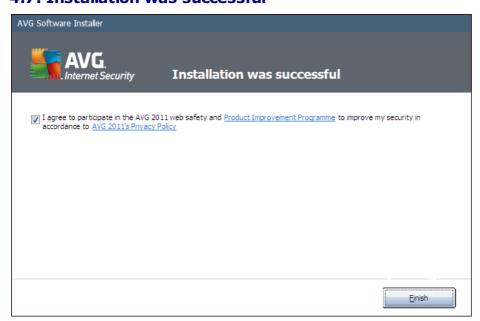
4.6. Install progress

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 redirected to the next dialog.

4.7. Installation was successful





The *Installation was successful* dialog confirms that your **AVG Internet Security 2011** has been fully installed and configured.

In this dialog please provide your contact information so that you can receive all product related information and news. Below the registration form you will find the following two options:

- Yes, keep me informed of security news and AVG 2011 special offers via e-mail mark
 the checkbox to state you would like to be informed about what is new in the Internet
 security sphere, and would like to receive information on AVG product special offers,
 improvements and upgrades, etc.
- I agree to participate in the AVG 2011 web safety and Product Improvement

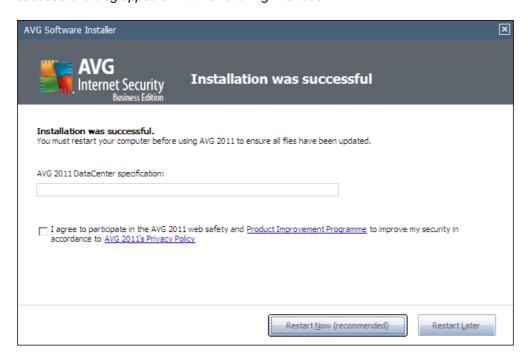
 Programme ... mark this checkbox to agree you want to participate in the Product

 Improvement Programme (for details see chapter AVG Advanced Settings / Product

 Improvement Programme) that collects anonymous information on detected threats in order
 to increase the overall Internet security level.

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

Note: If using any AVG business license, and in case that you have previously selected the Remote administration item to be installed (see <u>Custom Options</u>), the Installation was successful dialog appears with the following interface:



You need to specify AVG DataCenter parameters - please provide the connection string to AVG DataCenter in the form of server:port. If this information is not available at the moment, leave the field blank and you can set the configuration later in within the **Advanced Settings/Remote Administration** dialog. For detailed information on AVG Remote administration please consult AVG Business Edition user manual; to be downloaded from AVG website (http://www.avg.com/).



5. After Installation

5.1. Product registration

Having finished the **AVG Internet Security 2011** installation, please register you product online on AVG website (http://www.avg.com/), **Registration** page (follow the instruction provided directly in the page). After the registration you will be able to gain full access to your AVG User account, the AVG Update newsletter, and other services provided exclusively for registered users.

5.2. Access to user interface

The AVG User Interface is accessible in several ways:

- double-click the AVG system tray icon
- double-click the AVG icon on the desktop
- double click the status line located in the bottom section of the <u>AVG gadget</u> (<u>If you have previously decided to install the gadget</u>. The gadget is only supported on Windows Vista/Windows 7.)
- from the menu Start/Programs/AVG 2011/AVG User Interface
- from AVG Security Toolbar via option Launch AVG

5.3. 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 2011 installation. For this reason you should run a Scan of the whole computer to make sure there are no infections on your PC.

For instructions on running a <u>Scan of the whole computer</u> please consult the chapter <u>AVG</u> <u>Scanning</u>.

5.4. Eicar test

To confirm that **AVG Internet Security 2011** has been installed correctly you can perform the EICAR test.

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

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





From the http://www.eicar.com website you can also download the compressed version of the EICAR 'virus' (e.g. in the form of eicar_com.zip). Online Shield allows you to download this file and save it on your local disk but then the Resident Shield detects the 'virus' as you try to unpack it. If AVG fails to identify the EICAR test file as a virus, you should check the program configuration again!

5.5. AVG default configuration

The default configuration (*i.e.* how the application is set up right after installation) of **AVG Internet Security 2011** is set up by the software vendor so that all components and functions are tuned up to achieve optimum performance.

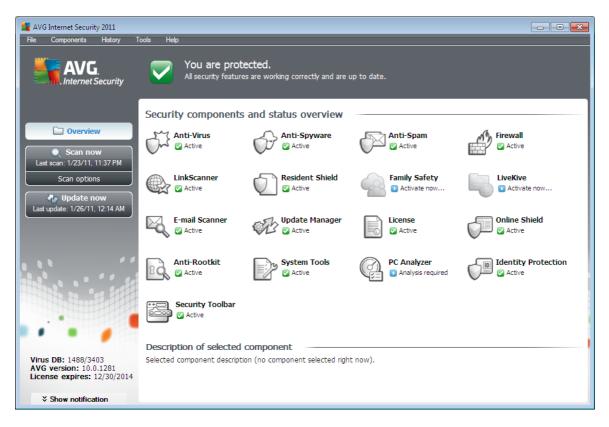
Unless you have a real reason to do so, do not change the AVG configuration! Changes to settings should only be performed by an experienced user.

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



6. AVG User Interface

AVG Internet Security 2011 open with the main window:



The main window is divided into several sections:

- **System Menu** (top system line in the window) is the standard navigation that allows you to access all AVG components, services, and features details >>
- **Security Status Info** (upper section of the window) provides you with information on the current status of your AVG program <u>details</u> >>
- Quick Links (left section of the window) allow you to quickly access the most important and most frequently used AVG tasks - details >>
- Components Overview (central section of the window) offer an overview of all installed AVG components details >>
- **Statistics** (left bottom section of the window) provide you with all statistical data regarding the programs operation details >>
- System Tray Icon (bottom right corner of the monitor, on the system tray) indicates the AVG current status - details >>
- AVG gadget (Windows sidebar, supported in Windows Vista/7) allows quick access to AVG scanning and update - details >>



6.1. 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 2011** main window. Use the system menu to access specific AVG components, feature, and services.

The system menu is divided into five main sections:

6.1.1. File

• Exit - closes the AVG Internet Security 2011's user interface. However, the AVG application will continue running in the background and your computer will still be protected!

6.1.2. Components

The <u>Components</u> 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 <u>overview of all</u> installed components and their status
- Anti-Virus ensures that your computer is protected from viruses trying to enter your computer details >>
- Anti-Spyware ensures that your computer is protected from spyware and adware details
 >>
- Anti-Spam checks all incoming e-mail messages and marks unwanted e-mails as SPAM details >>
- *Firewall* controls how your computer exchanges data with other computers on the Internet or local network <u>details >></u>
- Link Scanner checks the search results displayed in your internet browser details >>
- E-mail Scanner checks all incoming and outgoing mail for viruses details >>
- Family Safety helps monitor your children online activities, and protect them from inappropriate websites content - details >>
- LiveKive provides automatic back up to your data online details >>
- Resident Shield runs in the background and scans files as they are copied, opened or saved - details >>
- Update Manager controls all AVG updates details >>
- License displays the license number, type and expiration date details >>
- Online Shield scans all data being downloaded by a web browser details >>



- Anti-Rootkit detects programs and technologies trying to camouflage malware details >>
- **System Tools** offers a detailed summary of the AVG environment and operating system information <u>details >></u>
- PC Analyzer analyzer provides information about your computer status details >>
- *Identity Protection* anti-malware component focused on preventing identity thieves from stealing your personal digital valuables <u>details >></u>
- Security Toolbar allows you to use selected AVG functionality directly from your Internet browser - details >>
- **Remote Administration** is only displayed within AVG Business Editions in case you have specified during the <u>installation process</u> you want to have this component installed

6.1.3. History

- <u>Scan results</u> switches to the AVG testing interface, specifically to the <u>Scan Results</u> <u>Overview</u> dialog
- <u>Resident Shield detection</u> open a dialog with an overview of threats detected by <u>Resident Shield</u>
- <u>E-mail Scanner detection</u> open a dialog with an overview of mail messages attachments detected as dangerous by the <u>E-mail Scanner</u> component
- Online Shield findings open a dialog with an overview of threats detected by Online Shield
- <u>Virus Vault</u> opens the interface of the quarantine space (<u>Virus Vault</u>) to where AVG removes all detected infections that cannot be healed automatically for some reason. Inside this quarantine the infected files are isolated and your computer's security is guaranteed, and at the same time the infected files are stored for possible future repair
- <u>Event history log</u> opens the history log interface with an overview of all logged AVG Internet Security 2011 actions
- <u>Firewall</u> opens the Firewall settings interface on the <u>Logs</u> tab with a detailed overview of all Firewall actions

6.1.4. Tools

- <u>Scan computer</u> switches to the <u>AVG scanning interface</u> and launches a scan of the whole computer.
- Scan selected folder switches to the AVG scanning interface and allows you to define within the tree structure of your computer which files and folders should be scanned.
- <u>Scan file</u> allows you to run an on-demand test over a single file selected from the tree structure of your disk.



- <u>Update</u> automatically launches the update process of AVG Internet Security 2011.
- **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.
- <u>Advanced settings</u> opens the <u>AVG advanced settings</u> dialog where you can edit the AVG Internet Security 2011 configuration. Generally, it is recommended to keep the default settings of the application as defined by the software vendor.
- <u>Firewall settings</u> open a standalone dialog for advanced configuration of the <u>Firewall</u> component.

6.1.5. Help

- Contents opens the AVG help files
- **Get Help Online** opens AVG website (http://www.avg.com/) at the customer support center page
- Your AVG Web opens AVG website (http://www.avg.com/)
- About Viruses and Threats opens the online <u>Virus Encyclopedia</u> where you can look up detailed information on the identified virus
- Reactivate opens the Activate AVG dialog with the data you have entered in the Personalize AVG dialog of the installation process. Within this dialog you can enter your license number to either replace the sales number (the number you have installed AVG with), or to replace the old license number (e.g. when upgrading to a new AVG product).
- <u>Register now</u> connects to the registration page of AVG website (http://www.avg.com/).
 Please fill in your registration data; only customers who register their AVG product can receive free technical support.

Note: If using the trial version of **AVG Internet Security 2011**, the latter two items appear as **Buy now** and **Activate**, alowing you to buy the full version of the program right away. For **AVG Internet Security 2011** installed with a sales number, the items display as **Register** and **Activate**. For more information please consult the <u>License</u> section of this documentation.

 About AVG - opens the Information dialog with five tabs providing data on program name, program and virus database version, system info, license agreement, and contact information of AVG Technologies CZ.

6.2. Security Status Info

The **Security Status Info** section is located in the upper part of the AVG main window. Within this section you will always find information on the current security status of your **AVG Internet Security 2011**. Please see an overview of icons possibly depicted in this section, and their meaning:



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

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

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

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

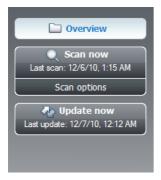
In case AVG is not set to the optimum performance, a new button named Fix (alternatively Fix all if the problem involves more than one component) appears next to the security status information. Press the button to launch an automatic process of program checkout and configuration. This is an easy way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

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

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

6.3. Quick Links

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





- **Overview** use this link to switch from any currently opened AVG interface to the default one with an overview of all installed components see chapter **Components Overview** >>
- Scan now by default, the button provides information (scan type, date of last launch) of
 the last scan launched. You can either execute the Scan now command to launch the
 same scan again, or follow the Scan options link to open the AVG scanning interface
 where you can run scans, schedule scans, or edit their parameters see chapter AVG
 Scanning >>
- Update now the link provides the date of the last launch of the update process. Press the
 button to open the updating interface, and run AVG update process immediately see
 chapter <u>AVG Updates</u> >>

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

6.4. Components Overview

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

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

Within the **AVG Internet Security 2011** the *Components Overview* section contains information on the following components:

- Anti-Virus ensures your computer is protected from viruses trying to enter your computer details >>
- Anti-Spyware ensures your computer is protected from spyware and adware details >>
- Anti-Spam checks all incoming e-mail messages and marks unwanted e-mails as SPAM details >>
- *Firewall* controls how your computer exchanges data with other computers on the Internet or local network <u>details >></u>
- Link Scanner checks the search results displayed in your internet browser details >>
- E-mail Scanner checks all incoming and outgoing mail for viruses details >>
- Resident Shield scans files as they are copied, opened or saved details >>
- Family Safety helps monitor your children online activities, and protect them from inappropriate websites content - details >>
- LiveKive provides automatic back up to your data online details >>



- Update Manager controls all AVG updates details >>
- License displays the license number, type and expiration date details >>
- Online Shield scans all data being downloaded by a web browser details >>
- Anti-Rootkit detects programs and technologies trying to camouflage malware details >>
- **System Tools** offers a detailed summary of the AVG environment and operating system information <u>details</u> >>
- PC Analyzer provides information about your computer status details >>
- *Identity Protection* anti-malware component focused on preventing identity thieves from stealing your personal digital valuables <u>details</u> >>
- Security Toolbar allows you to use selected AVG functionality directly from your Internet browser - details >>
- **Remote Administration** is only displayed within AVG Business Editions in case you have specified during the <u>installation process</u> you want to have this component installed

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

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

6.5. Statistics

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

- Virus DB informs you about the currently installed version of the virus database
- **AVG version** informs you about the AVG version installed (the number is in the form of 10.0.xxxx, where 10.0 is the product line version, and xxxx stands for the number of the build)
- License expires provides the date of your AVG license expiration

6.6. System Tray Icon

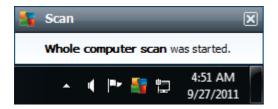
System Tray Icon (on your Windows taskbar) indicates the current status of your **AVG Internet Security 2011**. It is visible at all times on your system tray, no matter whether your AVG main window is opened or closed:





If in full color , the **System Tray Icon** indicates that all AVG components are active and fully functional. Also, AVG system tray icon can be displayed in full color if AVG is in error state but you are fully aware of this situation and you have deliberately decided to **Ignore the component state**. An icon with an exclamation mark indicates a problem (*inactive component, error status, etc.*). Double-click the **System Tray Icon** to open the main window and edit a component.

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



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

- Open AVG User Interface click to open the AVG User Interface
- Scans click to open the context menu of
- Firewall click to open the context menu of Firewall settings options where you can edit the major parameters: Firewall status (Firewall enabled/Firewall disabled/Emergency mode), gaming mode switchingand Firewall profiles
- Run PC Analyzer click to launch the PC Analyzer component
- Running scans this item is displays only in case a scan is currently running on your
 computer. For this scan you can then set its priority, alternatively stop or pause the running
 scan. Further, the following actions are accessible: Set priority for all scans, Pause all
 scans or Stop all scans.
- Update now launches an immediate update
- Help opens the help file on the start page

6.7. AVG gadget

AVG gadget displays on the Windows desktop (*Windows Sidebar*). This application is only supported in operating systems Windows Vista and Windows 7. **AVG** gadget offers an immediate access to the most important **AVG** Internet Security 2011 functionality, i.e. scanning and updating:





AVG gadget provides the following quick access options:

• Scan now - click the Scan now link to start the whole computer scan directly. You can watch the progress of the scanning process in the alternated user interface of the gadget. A brief statistics 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 update directly from within the gadget:



• Twitter link - opens a new AVG gadget interface providing an overview of the latest AVG feeds posted at the 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 related news:



- Facebook link 1 opens your Internet browser on the Facebook website, specifically on the AVG community page
- LinkedIn in 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
- PC Analyzer open the user interface in the PC Analyzer component
- **Search box** type in a keyword and get the search results immediately in a newly opened window with your default web browser



7. AVG Components

7.1. Anti-Virus

7.1.1. Anti-Virus Principles

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

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

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

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

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



7.1.2. Anti-Virus Interface



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

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

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

7.2. Anti-Spyware

7.2.1. Anti-Spyware Principles

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

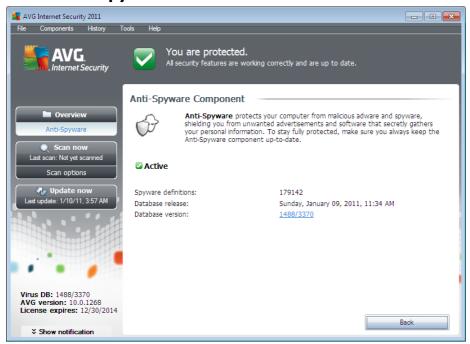
Currently, the most common source of infection is websites with potentially dangerous content.



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

There is also the potential risk that malware has been transmitted to your computer prior to AVG installation, or that you have neglected to keep your **AVG Internet Security 2011** up-to-date with the latest <u>database and program updates</u>. For this reason, AVG allows you to fully scan your computer for malware/spyware using the scanning feature. It also detects sleeping and non-active malware, i.e. malware that has been downloaded but not yet activated.

7.2.2. Anti-Spyware Interface



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

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

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



7.3. Anti-Spam

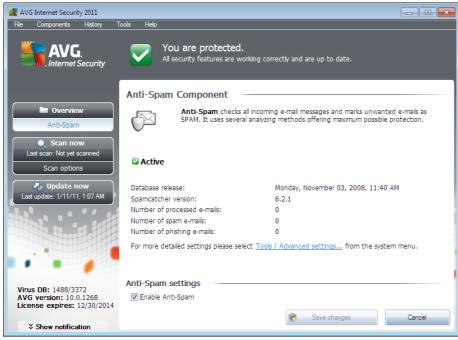
Spam refers to unsolicited e-mail, mostly advertising a product or service that is mass mailed to a huge number of e-mail addresses at a time, filling recipients' mail boxes. Spam does not refer to legitimate commercial e-mail for which consumers have given their consent. Spam is not only annoying, but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

7.3.1. Anti-Spam Principles

AVG Anti-Spam checks all incoming e-mail messages and marks unwanted e-mails as spam. **AVG Anti-Spam** can modify the subject of the email (*that has been identified as spam*) by adding a special text string. Then you can then easily filter your emails in your email client.

AVG Anti-Spam component uses several analyzing methods to process each e-mail message, offering maximum possible protection against unwanted e-mail messages. **AVG 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).

7.3.2. Anti-Spam Interface



In the *Anti-Spam* component's dialog you will find a brief text describing the component's functionality, information on its current status, and the following statistics:

- Database release specifies when and at what time the spam database was updated and published
- Spamcatcher version defines the number of the latest version of the anti-spam engine
- Number of processed emails specifies how many e-mail messages were scanned since



the last anti-spam engine launch

- Number of spam emails of all scanned e-mails, specifies how many messages were marked as spam
- **Number of phishing emails** of all scanned e-mails, specifies how many messages were assigned as phishing attempts

The *Anti-Spam* dialog further provides the <u>Tools/Advanced Settings</u> link. Use the link to get redirected to the environment for advanced configuration of all **AVG Internet Security 2011** components.

Please note: The software vendor has set up all AVG components to give optimum performance. Unless you have a real reason to do so, do not change the AVG configuration. Any changes to settings should only be performed by an experienced user.

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

7.4. Firewall

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

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

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

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

7.4.1. Firewall Principles

In AVG, the *Firewall* component controls all traffic on every network port of your computer. Based on the defined rules, the *Firewall* evaluates applications that are either running on your computer (and want to connect to the Internet/local network), or applications that approach your computer from outside trying to connect to your PC. For each of these applications the *Firewall* then either allows



or forbids the communication on the network ports. By default, if the application is unknown (i.e. has no defined *Firewall* rules), the *Firewall* will ask you if you wish to allow or block the communication attempt.

Note: AVG Firewall is not intended for server platforms!

What AVG Firewall can do:

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

7.4.2. Firewall Profiles

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

Available profiles

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

Custom profiles.

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



- Computer in domain suitable for computers in a local network, e.g. school or corporate network. It is assumed that the network is protected by some additional measures so that the security level can be lower than for a standalone computer.
- Small home or office network suitable for computers in a small network, e.g. at home or in a small business, typically only several computers connected together, without a "central" administrator.

Profile switching

The profile switching feature allows the <u>Firewall</u> 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 <u>Firewall</u> 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 <u>Areas and Adapters Profiles</u> 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.

7.4.3. Firewall Interface



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



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

Firewall settings

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

• Firewall status.

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

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

Control buttons

- 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 <u>AVG user interface</u> (components overview)



7.5. Link Scanner

7.5.1. Link Scanner Principles

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

The LinkScanner technology consists of two features, Search-Shield and Surf-Shield:

- <u>Search-Shield</u> contains list of websites (*URL addresses*) which are known to be dangerous. When searching with Google, Yahoo! JP, WebHledani, Yandex, Baidu, Bing, AOL, AltaVista, EarthLink, Ask, Seznam, eBay, Twitter, Digg, or SlashDot, all results of the search are checked according to this list and a verdict icon is shown (*for Yahoo search results only "exploited website" verdict icons are shown*).
- <u>Surf-Shield</u> scans the contents of the websites you are visiting, regardless of the websites address. Even if some website is not detected by <u>Search-Shield</u> (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 <u>Surf-Shield</u> once you try to visit it.

Note: Link Scanner is not intended for server platforms!

7.5.2. Link Scanner Interface

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





LinkScanner Settings

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

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

7.5.3. Search-Shield

When searching Internet with the Search-Shield on, all search results returned from the most popular search engines (Google, Yahoo! JP, WebHledani, 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 AVG Link Scanner warns you before you click on dangerous or suspicious links, so you can ensure you only go to safe websites.

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

The linked page is safe (this icon will not be displayed for safe Yahoo! JP search results).



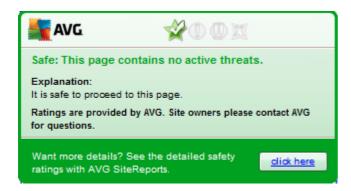
The linked page does not contain threats but is somewhat suspicious (questionable in origin or motive, therefore not recommended for e-shopping etc.).

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

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

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

Hovering over an individual rating icon will display details about the particular link in question. Information include additional details of the threat (*if any*):



7.5.4. Surf-Shield

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

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





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

7.6. Resident Shield

7.6.1. Resident Shield Principles

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

What the Resident Shield can do:

- Scan for specific kinds of possible threats
- Scan removable media (flash disk etc.)
- Scan files with specific extensions or without extensions at all
- Allow exceptions from scanning specific files or folders that should never be scanned

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



7.6.2. Resident Shield Interface



Besides an overview of the **Resident Shield** functionality, and the information on the component's status, the **Resident Shield** interface offers some statistic data as well:

- Resident Shield has been running for provides the time since the latest component's launch
- Threats detected and blocked number of detected infections that were prevented from being run/opened (if needed, this value can be reset; e.g. for statistic purposes Reset value)

Resident Shield settings

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

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

- o either automatically (*Remove all threats automatically*)
- o or only after the user's approval (Ask me before removing threats)

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



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

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

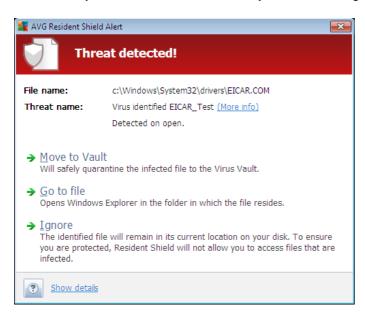
Control buttons

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

- Manage exceptions opens the <u>Resident Shield Excluded Items</u> dialog where you can
 define folders and files that should be left out from the <u>Resident Shield</u> scanning
- Save changes press this button to save and apply any changes made in this dialog
- Cancel press this button to return to the default <u>AVG user interface</u> (components overview)

7.6.3. Resident Shield Detection

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



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 <u>Virus</u> <u>encyclopedia</u> where you can find detailed information on the detected infection, if known (*More info*).

Further, you have to decide what action should be taken now - the following options are available:

Please note that, upon specific conditions (what kind of file is infected, and where it is located), not all of the options are always available!

- Remove threat as Power User check the box if you suppose that you might not have sufficient rights to remove the threat as a common user. Power Users have extensive access rights, and if the threat is located in a certain system folder, you might need to use this checkbox to successfully remove it.
- **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 the virus will be moved to AVG Virus Vault
- **Go to file** this option redirects you to the exact location of the suspicious object (*opens new Windows Explorer window*)
- Ignore we strictly recommend NOT TO use this option unless you have a very good reason to do so!

Note: It may happen that the size of the detected object exceeds the free space limit in Virus Vault. If so, a warning message pops up informing you about the issue as you try to move the infected object to Virus Vault. However, the Virus Vault size can be edited. 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 link **Show details** - click it to open a pop-up window with detailed information on the process running while the infection was detected, and the process' identification.

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





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

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

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

7.7. 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. You can set the appropriate level of protection for each of your children and monitor them separately via unique logins.



The component is active only when the **AVG Family Safety** product is installed your machine. If you do not have the **AVG Family Safety** product installed, click the respective icon within the **AVG Internet Security 2011** user interface and you will be redirected to the product web site where you can find all details required.

7.8. AVG LiveKive

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.

The component is active only when the **AVG LiveKive** product is installed on your machine. If you do not have the **AVG LiveKive** product installed, click the respective icon within the **AVG Internet Security 2011** user interface and you will be redirected to the product web site where you can find all details required.

7.9. E-mail Scanner

One of the most common sources of viruses and trojans is via e-mail. Phishing and spam make e-mail an even greater source of risks. Free e-mail accounts are more likely to receive such malicious e-mails (as they rarely employ anti-spam technology), and home users rely quite heavily on such e-mail. Also home users, surfing unknown sites and filling in online forms with personal data (such as their e-mail address) increase exposure to attacks via e-mail. Companies usually use corporate e-mail accounts and employ anti-spam filters etc, to reduce the risk.

7.9.1. E-mail Scanner Principles

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, and The Bat). Primarily, it is to be used with e-mail applications like Outlook Express, Mozilla, Incredimail, etc.

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

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

- Incoming mail: While receiving a message from the server, the E-mail Scanner
 component tests it for viruses, removes infected attachments, and adds certification. When
 detected, viruses are quarantined in Virus Vault immediately. Then the message is passed
 to the e-mail client.
- Outgoing mail: Message is sent from e-mail client to E-mail Scanner; it tests the message and its attachments for viruses and then sends the message to the SMTP server (scanning of outgoing e-mails is disabled by default, and can be set up manually).

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



7.9.2. E-mail Scanner Interface



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

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

E-mail Scanner settings

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

- **Scan incoming messages** check the item to specify that all e-mails delivered to your account should be scanned for viruses. By default, this item is on, and it is recommended not to change this setting!
- **Scan outgoing messages** check the item to confirm all e-mail sent from your account should be scanned for viruses. By default, this item is off.
- Display notification window while e-mail is being scanned check the item to confirm



you want to be informed via notification dialog displayed over the AVG icon on the system tray during the scanning of your mail via <u>E-mail Scanner</u> component. By default, this item is on, and it is recommended not to change this setting!

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

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

Control buttons

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

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





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



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

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

Control buttons

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

- Refresh list updates the list of detected threats
- Back switches you back to the previously displayed dialog

7.10. Update Manager

7.10.1. Update Manager Principles

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

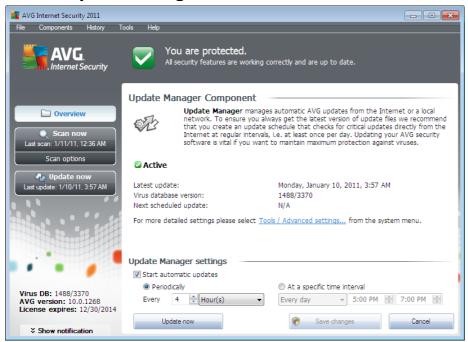
It is crucial to update your AVG regularly!

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

Note: Please pay attention to the <u>AVG Updates</u> chapter for more information on update types and levels!



7.10.2. Update Manager Interface



The *Update Manager's* interface displays information about the component's functionality and its current status, and provides the relevant statistical data:

- Latest update specifies date and time of the last database update
- Virus database version defines the number of the currently installed virus database version; and this number increases with every virus base update
- Next scheduled update specifies the date and time of the next database update

Update Manager settings

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

Further you can define when the update should be launched:

- o Periodically define the time interval
- o At a specific time interval define the exact day time the update should be launched

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



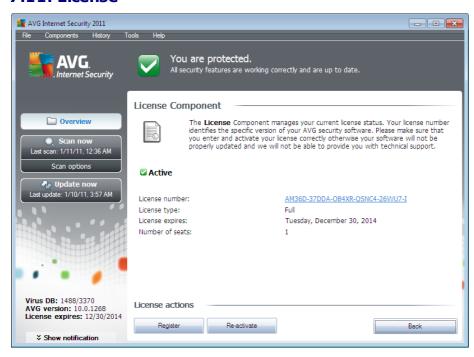
Please note: The software vendor has set up all AVG components to give optimum performance. Unless you have a real reason to do so, do not change the AVG configuration. Any changes to settings should only be performed by an experienced user. If you need to change AVG configuration, select the system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

Control buttons

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

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

7.11. License



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

- License number provides the shortened form of your license number (for security reasons the last four symbols are missing). When entering your license number, you have to be absolutely precise and type it exactly as shown. Therefore we strongly recommend to always use "copy & paste" method for any manipulation with the license number.
- License type specifies the product type installed.



- License expires this date determines the period of validity of your license. If you want to
 go on using AVG Internet Security 2011 after this date you have to renew your license.
 The license renewal can be performed online on AVG website.
- Number of seats how many workstations on which you are entitled to install your AVG Internet Security 2011.

Control buttons

- **Register** connects to the registration page of AVG website (http://www.avg.com/). Please fill in your registration data; only customers who register their AVG product can receive free technical support.
- **Re-activate** opens the **Activate AVG** dialog with the data you have entered in the <u>Personalize</u> **AVG** dialog of the <u>installation process</u>. Within this dialog you can enter your license number to either replace the sales number (the number you have installed AVG with), or to replace the old license number (e.g. when upgrading to a new AVG product).

Note: If using the trial version of **AVG** Internet Security 2011, the buttons appear as **Buy now** and **Activate**, alowing you to buy the full version of the program right away. For **AVG** Internet Security 2011 installed with a sales number, the buttons display as **Register** and **Activate**.

Back - press this button to return to the default <u>AVG user interface</u> (components overview).

7.12. Remote Administration





The **Remote Administration** component only displays in the user interface of **AVG Internet Security 2011** in case you have installed the Business Edition of your product (see component **License**). In the **Remote Administration** dialog you can find the information on whether the component is active and connected to server. All settings of the **Remote Administration** component is to be done within the **Advanced Settings/Remote Administration**.

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 (www.avg.com), in the Support center / Documentation section.

Control buttons

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

7.13. Online Shield

7.13.1. Online Shield Principles

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

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

Note: AVG Online Shield is not intended for server platforms!

7.13.2. Online Shield Interface

The *Online Shield* component's interface describes the behavior of this type of protection. Further you can find information on the component's current status. In the bottom part of the dialog you will then find the elementary editing options of this component's functionality:





Online Shield Settings

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

- **Enable Web protection** this option confirms that the **Online Shield** should perform scanning of the website content.
- Enable Instant Messaging protection check this item if you wish the Online Shield to verify the instant messaging communication (e.g. ICQ, MSN Messenger, ...) is virus free.

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

Control buttons

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

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



overview)

7.13.3. Online Shield Detection

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:

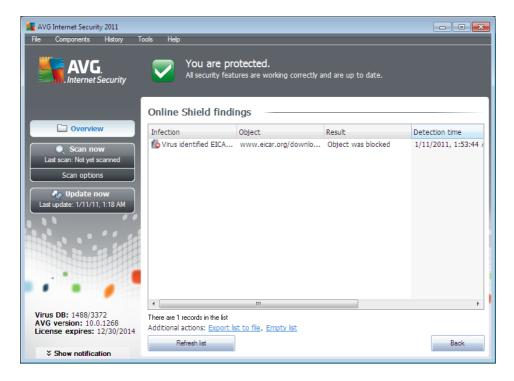


Within this warning dialog you will find data on the file that was detected and assigned as infected (*File name*), the name of the recognized infection (*Threat name*), and a link to the *Virus encyclopedia* where you can find detailed information on the detected infection (*if known*). The dialog provides 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 suspect 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 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 out the potentially dangerous object so that it
 could be detected

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

7.14. Anti-Rootkit

A rootkit is a program designed to take fundamental control of a computer system, without authorization by the system's owners and legitimate managers. Access to the hardware is rarely required as a rootkit is intended to seize control of the operating system running on the hardware. Typically, rootkits act to obscure their presence on the system through subversion or evasion of standard operating system security mechanisms. Often, they are also Trojans as well, thus fooling



users into believing they are safe to run on their systems. Techniques used to accomplish this can include concealing running processes from monitoring programs, or hiding files or system data from the operating system.

7.14.1. Anti-Rootkit Principles

AVG 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. **AVG 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*). In case **AVG 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.

7.14.2. Anti-Rootkit Interface



The *Anti-Rootkit* user interface provides a brief description of the component's functionality, informs on the component's current status, and also brings information on the last time the *Anti-Rootkit* test was launched (*Last rootkit search*). The *Anti-Rootkit* dialog further provides the *Tools/Advanced Settings* link. Use the link to get redirected to the environment for advanced configuration of *Anti-Rootkit* component.

Please note: The software vendor has set up all AVG components to give optimum performance. Unless you have a real reason to do so, do not change the AVG configuration. Any changes to settings should only be performed by an experienced user.

Anti-Rootkit settings

In the bottom part of the dialog you can find the Anti-Rootkit settings section where 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 DLL libraries
- Scan drivers

Further you can pick the rootkit scanning mode:

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

Control buttons

- Search for rootkits since the rootkit scan is not an implicit part of the <u>Scan of the whole</u> <u>computer</u>, 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 user interface (components overview)
- **Cancel** press this button to return to the default <u>AVG user interface</u> (components overview) without having saved any changes you made

7.15. System Tools

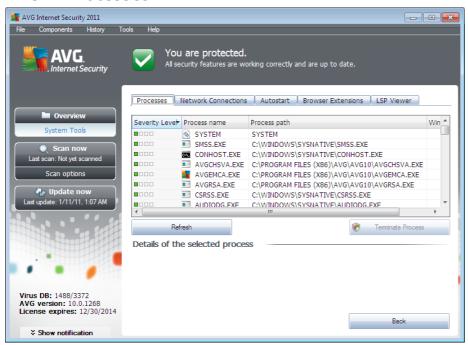
System Tools refer to tools offering a detailed summary of the **AVG Internet Security 2011** environment and the operating system. The component displays an overview of:

- <u>Processes</u> 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
- <u>Browser Extensions</u> 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!



7.15.1. 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 (upup) up to critical (upup)
- Process name name of the running process
- Process path physical path to the running process
- Window if applicable, indicates application Window name
- PID process identification number is a unique Windows internal process identifier

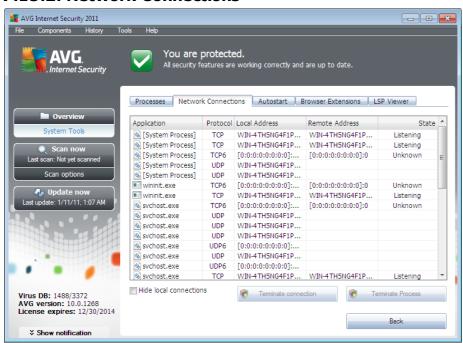
Control buttons

The control buttons available within the **System Tools** interface 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 to terminate any applications, unless you
 are absolutely sure that they represent a real threat!
- Back switches you back to the default AVG user interface (components overview)



7.15.2. 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
 - o 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

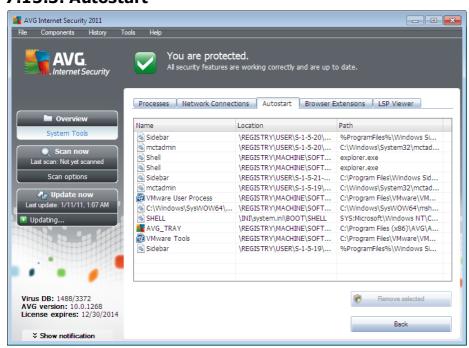


The control buttons available are:

- 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 switch back to the default AVG user interface (components overview).

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

7.15.3. Autostart



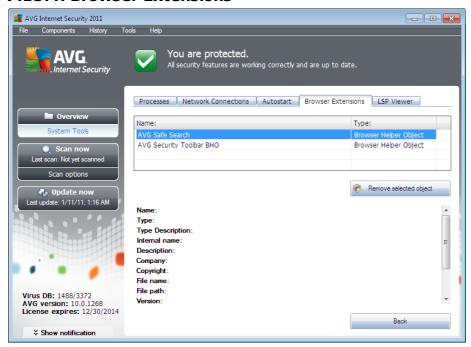
The *Autostart* dialog shows a list of all applications that are executed during Windows system startup. Very often, several malware applications add themselves automatically to the start-up registry entry.

You can delete one or more entries by selecting them and pressing the *Remove selected* button. The *Back* button switches you back to the default <u>AVG user interface</u> (*components overview*).

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



7.15.4. 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.

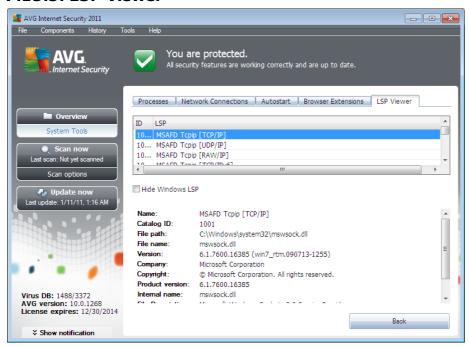
Control buttons

The control buttons available on the **Browser Extension** tab are:

- Remove selected object removes the plug-in that is currently highlighted in the list. We strongly suggest not to delete 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 user interface (components overview)



7.15.5. 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.

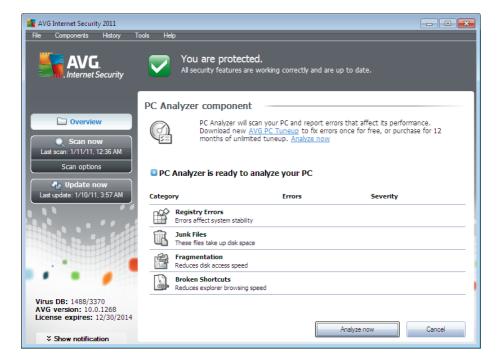
Under certain circumstances, it is also possible to repair broken LSPs (for example when the file has been removed but the registry entries remain untouched). A new button for fixing the issue is displayed once a repairable LSP is discovered.

To include Windows LSP in the list, uncheck the *Hide Windows LSP* checkbox. The *Back* button switches you back to the default <u>AVG user interface</u> (components overview).

7.16. 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:

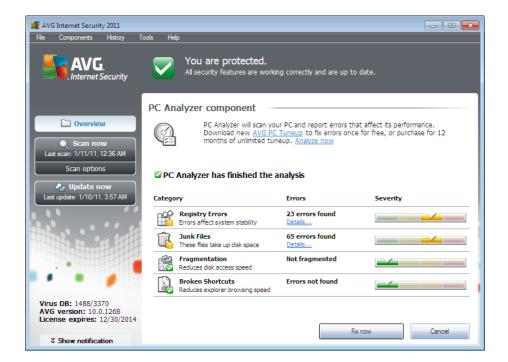




- Registry Errors will give you the number of errors in Windows Registry. As fixing the Registry requires quite advanced knowledge, we do not recommend to try and fix it yourself.
- **Junk Files** will give you the number of files that can be most likely done without. Typically, these will be many kinds of temporary files, and files in the Recycle Bin.
- **Fragmentation** will calculate the percentage of your harddisk 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 starts) 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 <u>AVG user interface</u> (components overview) once the analysis is completed

7.17. ID Protection

AVG Identity Protection is an anti-malware product that 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 are operating correctly. **AVG Identity Protection** spots and blocks suspicious behavior on a continuous basis and protects your computer from all new malware.

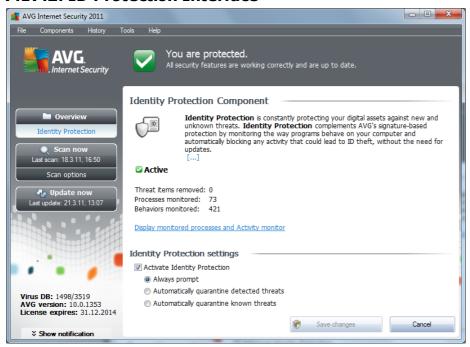


7.17.1. ID Protection Principles

AVG 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. As malware gets sophisticated and comes in a form of normal programs that can open up your PC to the remote attacker for identity theft, **AVG Identity Protection** secures you from these new execution based malware. It is a complimentary protection to **AVG Anti-Virus** that protects you from file based and known viruses using signature mechanism and scanning.

We strongly recommend you have the both <u>AVG Anti-Virus</u> and AVG Identity Protection components installed, in order to have complete protection for your PC.

7.17.2. ID Protection Interface



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

- Malware 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 <u>Display monitored processes and Activity monitor</u> link that will take you to the user interface of the <u>System tools</u> component where you can find a detailed overview of all monitored processes.



7.17.3. ID Protection Settings

In the bottom part of the dialog you will find the *Identity Protection settings* section where 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 *Identity Protection* component's behavior in case of a suspicious activity detection:

- 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

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 <u>AVG user interface</u> (components overview)



8. AVG Security Toolbar

AVG Security Toolbar is a tool that closely cooperates with the <u>LinkScanner</u> component, and guards your maximum security while browsing the Internet. Within **AVG Internet Security 2011**, the installation of **AVG Security Toolbar** is optional; during the <u>installation process</u> 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 can meet 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 <u>Search-Shield</u> 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 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 AVG Security Toolbar.
 - About... Opens a new window with the information on 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
 Link Scanner component).
- Shortcut buttons for quick access to these applications: Calculator, Notepad, Windows Explorer
- **Weather** The button opens a new dialog providing information on the current weather in your location, and the weather forecast for the upcoming two days. This information is being 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 <u>Facebook</u> social network directly from within the AVG Security Toolbar.

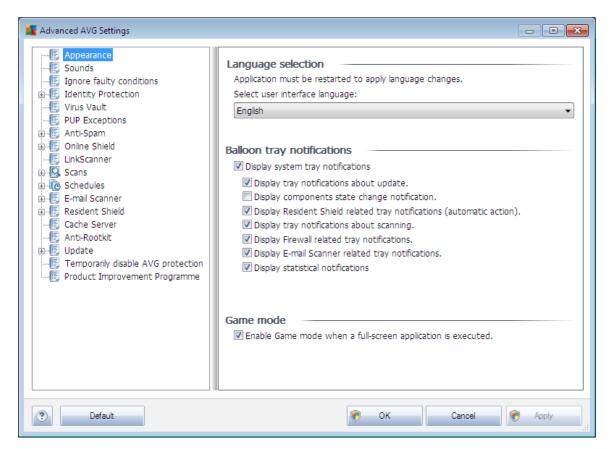


9. AVG Advanced Settings

The advanced configuration dialog of **AVG Internet Security 2011** opens in a new window named **Advanced AVG Settings**. The window is divided into two sections: the left part offers a tree-arranged navigation to the program configuration options. Select the component you want to change the configuration of (*or its specific part*) to open the editing dialog in the right-hand section of the window.

9.1. Appearance

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



Language selection

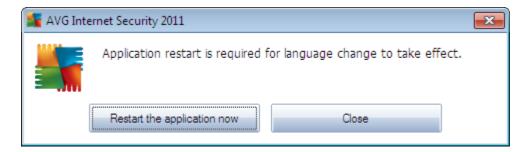
In the *Language selection* section you can chose your desired language from the drop-down menu; the language will then be used for the entire <u>AVG user interface</u>. The drop-down menu only offers those languages you have previously selected to be installed during the <u>installation process</u> (see *chapter <u>Custom Option</u>*) plus English (*that is installed by default*). However, to finish switching the application to another language you have to restart the user interface; follow these steps:

Select the desired language of the application and confirm your selection by pressing the



Apply button (right-hand bottom corner)

- Press the OK button confirm
- New dialog window pops-up informing you the language change of AVG user interface requires the application restart:



Balloon tray notifications

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

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

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



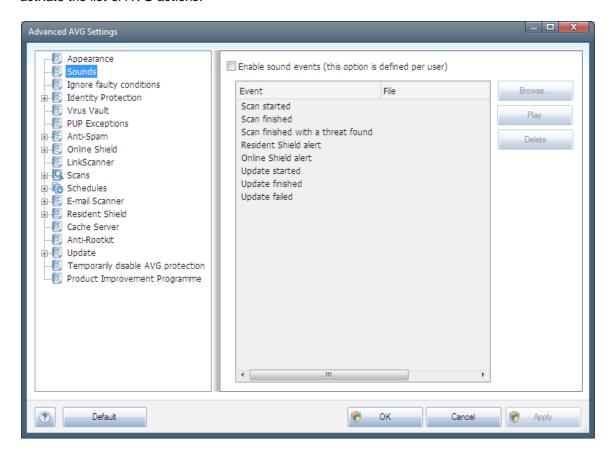
- Display <u>Firewall</u> related tray notifications decide whether information concerning Firewall status and processes, e.g. component's activation/deactivation warnings, possible traffic blocking etc. should be displayed;
- Display <u>E-mail Scanner</u> related tray notifications decide whether information upon scanning of all incoming and outgoing e-mail messages should be displayed.
- Display statistical notifications keep the option checked to allow regular statistical review notification to be displayed in the system tray.

Gaming mode

This AVG function is designed for full-screen applications where possible 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 check box for the **Enable** gaming mode when a full-screen application is executed option marked (default setting).

9.2. Sounds

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



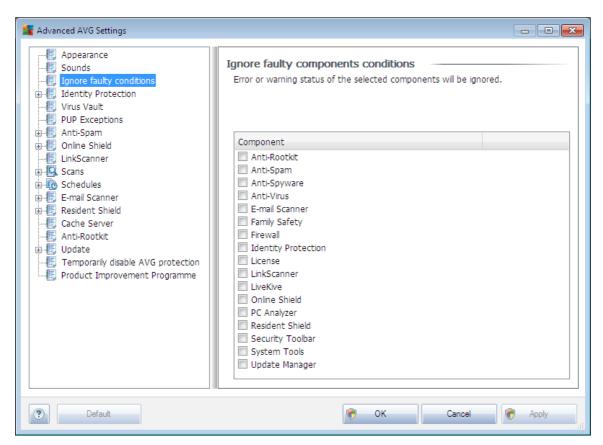


Then, select the respective event from the list and browse (*Browse*) your disk for an appropriate sound you want to assign to this event. To listen to the selected sound, highlight the event in the list and push the *Play* button. Use the *Delete* button to remove the sound assigned to a specific event.

Note: Only *.wav sounds are supported!

9.3. Ignore Faulty Conditions

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



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

- <u>system tray icon</u> 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 <u>Security Status Info</u> section of the AVG main window

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



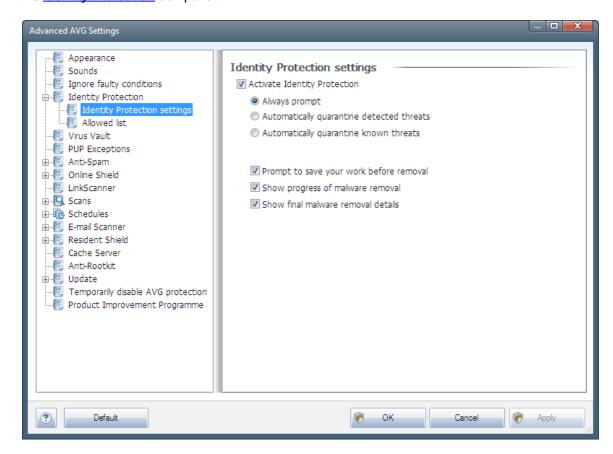
have deliberately induced it yourself, and you are aware of the potential risk. At the same time, once being displayed in grey color, the icon cannot actually report any possible further error that might appear.

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

9.4. Identity Protection

9.4.1. Identity Protection Settings

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



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

We strongly recommend not to do 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 check box to define you want have
 all possibly detected threats moved to the safe space of <u>AVG Virus Vault</u> 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
 AVG Virus Vault.

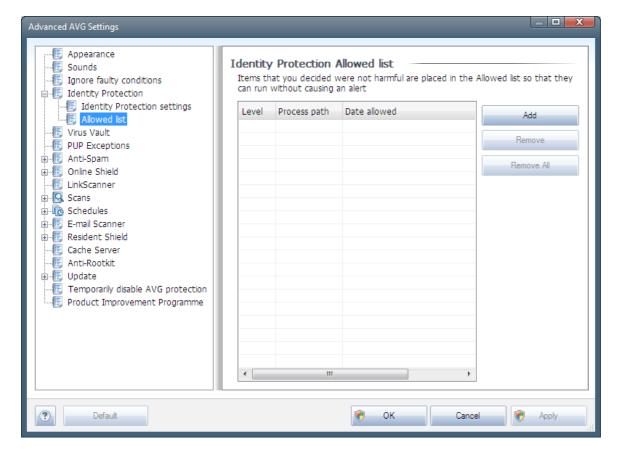
Further you can assign specific items to optionally activate more <u>Identity Protection</u> functionality:

- **Prompt to save your work before removal** (on by default) keep this item checked if you wish to be warn before the application detected as possible malware gets removed to quarantine. In case you just work 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 to keep it so.
- **Show progress of malware removal** (on by default) with this item on, once a potential malware is detected, a new dialog opens to display progress of the malware being removed to quarantine.
- Show final malware removal details (on by default) with this item on, Identity **Protection** displays detailed information on each object moved to quarantine (severity level, location, etc.).

9.4.2. Allowed List

If within the *Identity Protection settings* dialog you decided to keep the *Automatically quarantine detected threats* item unchecked, every time a possibly dangerous malware is detected, you will be asked whether it should be removed. If then you assign 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:

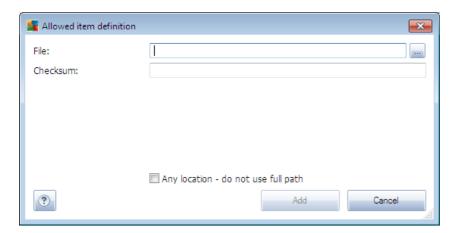
- Process path path to the application's (process) executable file location
- Date allowed date when you manually assigned the application as safe

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:

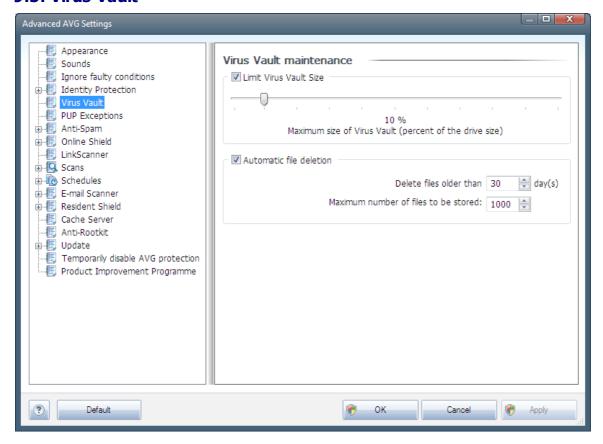




- o File type the full path to the file (application) that you want to mark as an exception
- Checksum displays the unique 'signature' of the chosen file. This checksum is an
 automatically generated string of characters, which allows AVG to unequivocally
 distinguish the chosen file from other files.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



9.5. Virus Vault



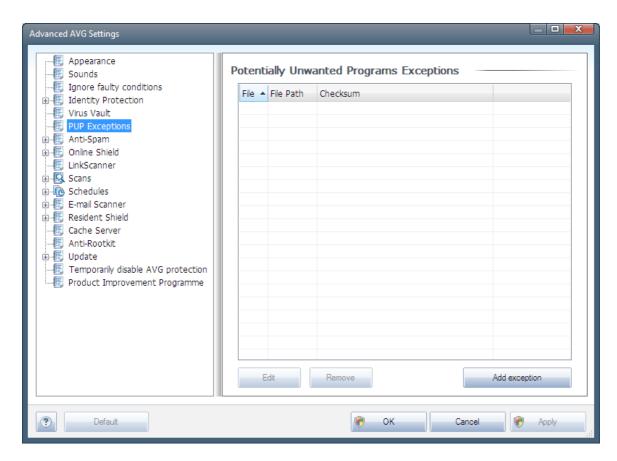
The *Virus Vault maintenance* dialog allows you to define several parameters regarding the administration of objects stored in the *Virus Vault*:

- Limit Virus Vault size use the slider to set up the maximum size of the <u>Virus Vault</u>. 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 <u>Virus Vault</u> (Delete files older than ... days), and the maximum number of files to be stored in the <u>Virus Vault</u> (Maximum number of files to be stored)

9.6. PUP Exceptions

AVG Internet Security 2011 is able to analyze and detect executable applications or DLL libraries that could be potentially unwanted within the system. In some cases the user may wish to keep certain unwanted programs on the computer (*programs that were installed on purpose*). Some programs, especially free ones, include adware. Such adware might be detected and reported by AVG as a **potentially unwanted program**. If you wish to keep such a program on your computer, you can define it as a potentially unwanted program exception:





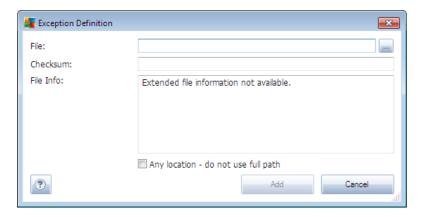
The **Potentially Unwanted Programs Exceptions** dialog displays a list of already defined and currently valid exceptions from potentially unwanted programs. You can edit the list, delete existing items, or add new exceptions. The following information can be found in the list for every single exception:

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

Control buttons

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



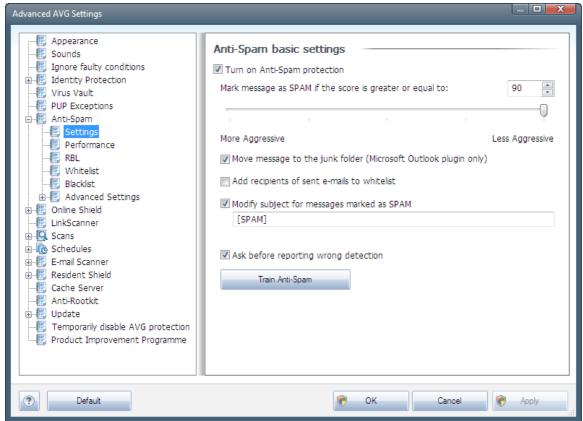


- o File type the full path to the file that you want to mark as an exception
- Checksum displays the unique 'signature' of the chosen file. This
 checksum is an automatically generated string of characters, which
 allows AVG to unequivocally distinguish the chosen file from other files.
 The checksum is generated and displayed after successful addition of the
 file.
- File Info displays any additional information available about the file (license/version information etc.)
- o 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).

9.7. Anti-Spam



9.7.1. Settings



In the *Anti-Spam basic settings* dialog you can check/uncheck the *Turn on Anti-Spam protection* checkbox to allow/forbid the anti-spam scanning of e-mail communication. This option is on by default, and as always, it is recommended to 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 <u>spam</u> 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 <u>spam</u> messages. This threshold range is not recommended for normal use.



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

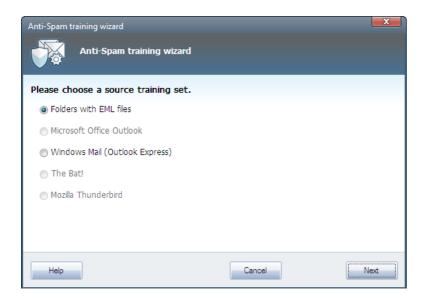
- Move message to the junk folder mark this check box to specify that each detected spam message should be automatically moved to the specific junk folder within your e-mail client;
- Add recipients of sent e-mails to whitelist tick this check box to confirm that all
 recipients of sent e-mails can be trusted, and all e-mail messages coming from their e-mail
 accounts can be delivered;
- Modify subject for messages marked as SPAM tick this check box if you
 would like all messages detected as <u>spam</u> 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 <u>Product Improvement Programme</u>. If so, you allowed reporting of detected threats to AVG. The reporting is taken care of automatically. However, you may mark this check box 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

Train Anti-Spam button open the **Anti-Spam training wizard** described in details in the <u>next</u> chapter.

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

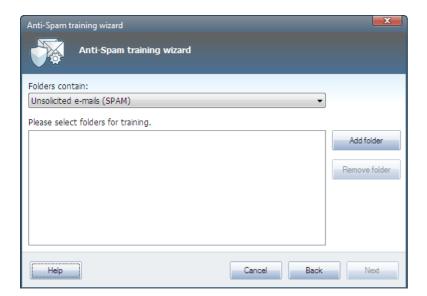
For faster and easier training process, it is a good idea to sort the e-mails in the folders beforehand, so that the folder you will use for training contains only the training messages (either wanted, or unwanted). However, it is not necessary, as you will be able to filter the e-mails later on.

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

Dialog displayed in this step depends on your previous selection.

Folders with EML files





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, new dialog will appear.

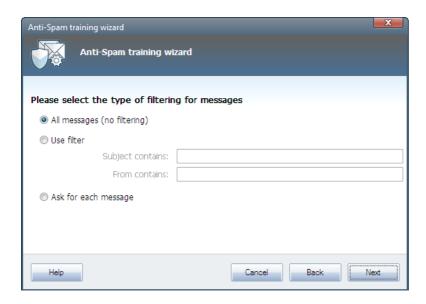




Note: In case of Microsoft Office Outlook, you will be prompted to select the MS Office Outlook profile first.

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**.



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

If you are sure that the selected folder contains only messages you want to use for training, select the *All messages (no filtering)* option.

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.

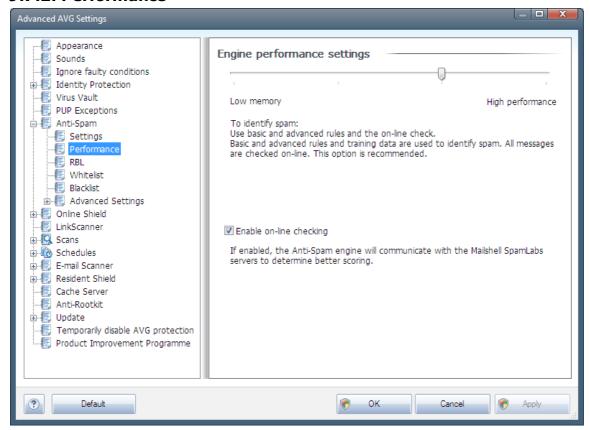
For more advanced filtering, select the *Use filter* option. You can fill in a word (*name*), part of a word, or phrase to be searched for in the e-mail subject and/or the sender's field. All messages matching exactly the entered criteria will be used for the training, without further prompting.

Attention!: When you fill in both text fields, addresses that match just one of the two conditions will be used, too!

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 previously selected conditions.



9.7.2. 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 large amount of memory. During the scanning process to identify <u>spam</u>, the following features will be used: rules and <u>spam</u> database cache, basic and advanced rules, spammer IP addresses and spammer databases.

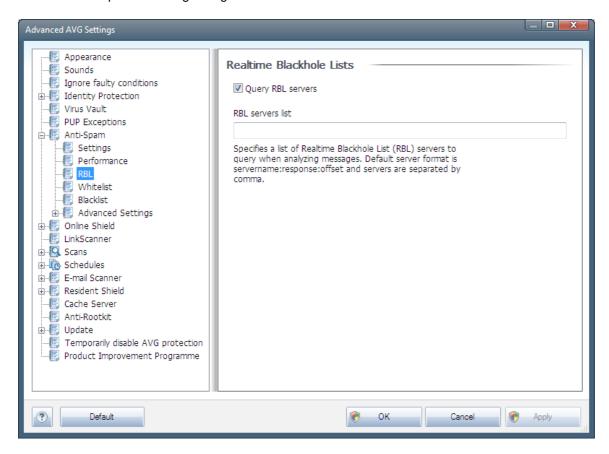
The *Enable on-line checking* item is on by default. It results in more precise <u>spam</u> detection via communication with the <u>Mailshell</u> servers, i.e. the scanned data will be compared with <u>Mailshell</u> databases online.

Generally it is recommended to 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 done by expert users!



9.7.3. RBL

The RBL item open an editing dialog called Realtime Blackhole Lists.



In this dialog you can switch on/off the Query RBL servers function.

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 <u>spam</u> 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 <u>spam</u> detection. This feature is especially useful for users who receive large amounts of spam that is not being normally detected by the <u>Anti-Spam</u> engine.

The RBL servers list allows you to define specific RBL server locations.

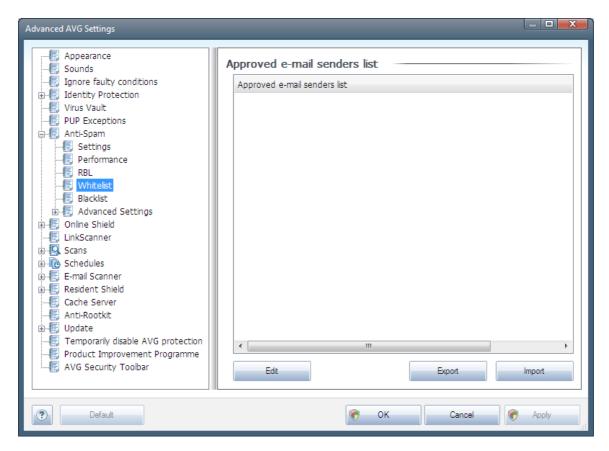
Note: Enabling this feature may, on some systems and configurations, slow down the e-mail receiving process, as every single message must be verified against the RBL server database.

No personal data is sent to the server!

9.7.4. 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 (<u>spam</u>). You can also compile a list of full domain names (*e.g. avg.com*), that you know do not generate spam messages.

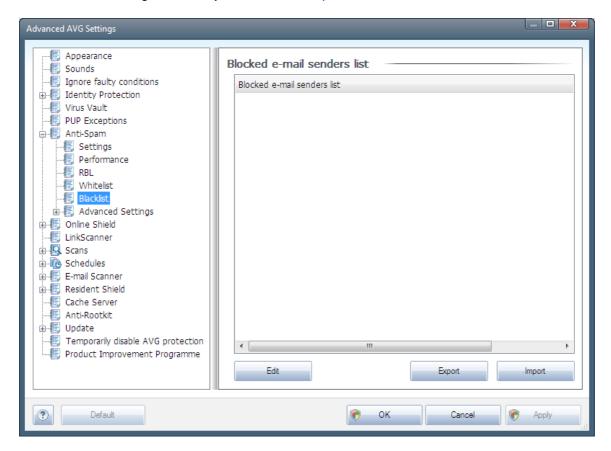
Once you have such a list of senders and/or domain names prepared, you can enter them by either of the following methods: by direct entry of each e-mail address or by importing the whole list of addresses at once. The following control buttons are available:

- *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.



9.7.5. 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 <u>spam</u>.



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 direct entry of each e-mail address or by importing the whole list of addresses at once. 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.



9.7.6. Advanced Settings

The Advanced Settings branch contains extensive setting options for the Anti-Spam component. These settings are intended 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.

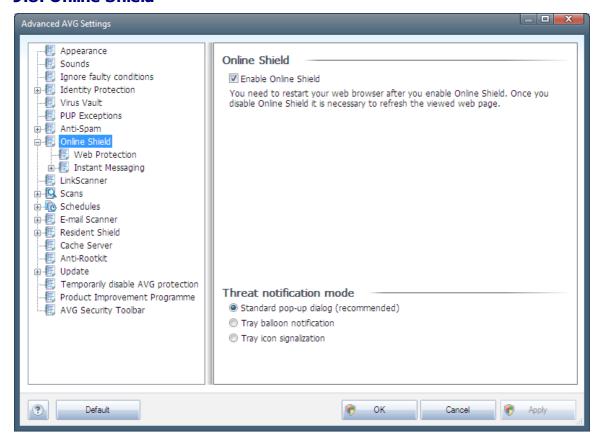
We strongly recommend not changing any settings unless you are fully familiar with advanced settings of Spamcatcher (MailShell Inc.). Any inappropriate changes may result in bad performance or incorrect component functionality.

If you still believe you need to change the <u>Anti-Spam</u> 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 and you can edit it - 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



9.8. Online Shield



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

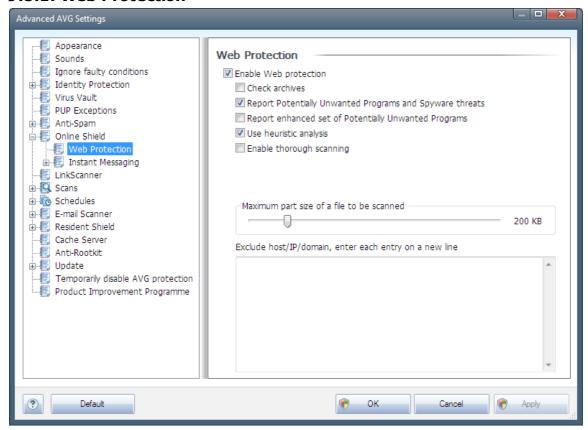
- Web Protection
- Instant Messaging

Threat notification mode

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



9.8.1. Web Protection



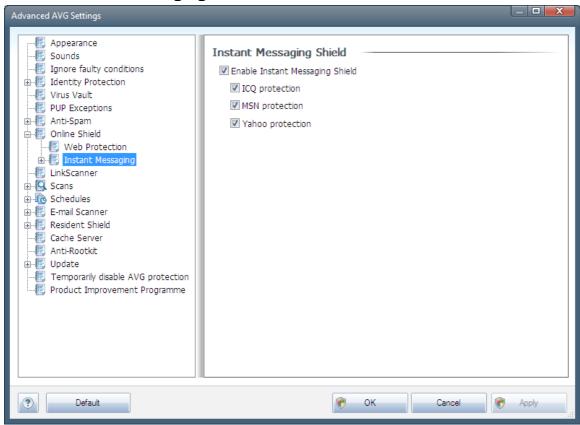
In the **Web Protection** dialog you can edit the component's configuration regarding the scan of the website content. The editing interface allows you to configure the following elementary options:

- Enable Web protection this option confirms that the <u>Online Shield</u> should perform scanning of the www pages content. Provided this option is on (by default), you can further switch on/off these items:
 - Check archives (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 <u>Anti-Spyware</u> engine, and scan for spyware as well as for
 viruses. <u>Spyware</u> represents a questionable malware category: even though it usually
 represents a security risk, some of these programs can be installed intentionally. We
 recommend to 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 can possibly 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 (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 can hardly get infected, just to be absolutely sure. Remember though that this method is rather time consuming.
- o 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 <u>Online Shield</u>. Even if the downloaded file is bigger than specified, and therefore will not be scanned with Online Shield, you are still protected: in case the file is infected, the <u>Resident Shield</u> will detect it immediately.
- Exclude host/IP/domain into the text field you can type the exact name of a server (host, IP address, IP address with mask, or URL) or a domain that should not be scanned by Online Shield. Therefore exclude only host that you can be absolutely sure would never provide dangerous website content.

9.8.2. Instant Messaging



In the Instant Messaging Shield dialog you can edit the Online Shield components settings



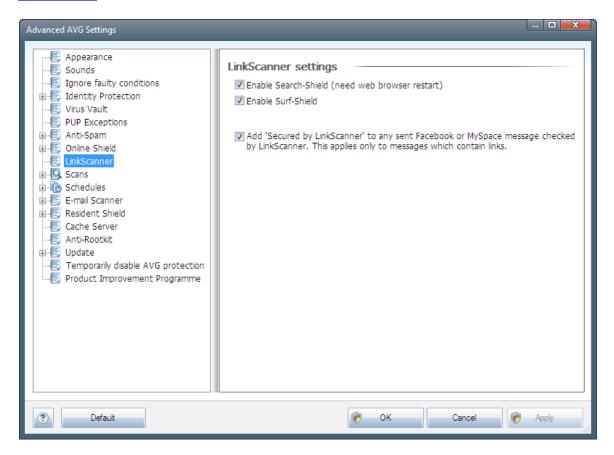
referring to instant messaging scanning. Currently the following three instant messaging programs are supported: *ICQ*, *MSN*, and *Yahoo* - tick the respective item for each of them if you want the *Online Shield* to verify the on-line communication is virus free.

For further specification of allowed/blocked users you can see and edit the respective dialog (

Advanced ICQ, Advanced MSN, Advanced Yahoo) and specify the Whitelist (list of users that will be allowed to communicate with you) and *Blacklist* (users that should be blocked*).

9.9. Link Scanner

The <u>LinkScanner</u> **settings** dialog allows you to switch on/off the elementary features of the **LinkScanner**.



- Enable Search-Shield (on by default): advisory notifying icons on searches performed with Google, Yahoo! JP, WebHledani, Yandex, Baidu, Bing, AOL, AltaVista, EarthLink, Ask, Seznam, eBay, Twitter, Digg, or SlashDot having checked ahead the content of sites returned by the search engine.
- **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).
- Add 'Secured by LinkScanner' ... mark this item to confirm you wish to enter the



certification notice on *Link Scanner* check into all messages containing active hyperlinks, that were sent from Facebook and MySpace social networks.

9.10. Scans

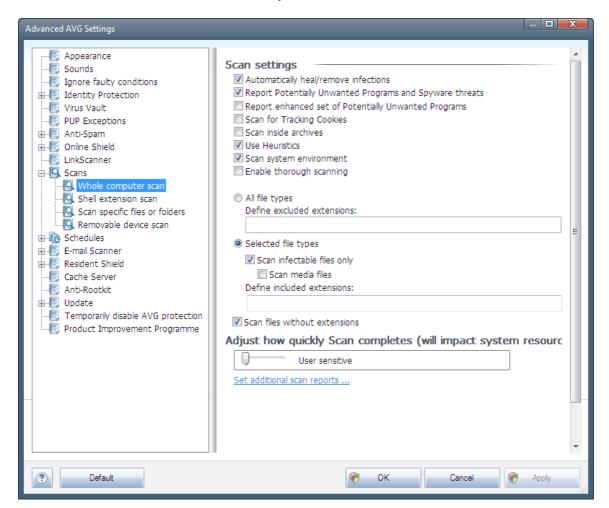
The advanced scan settings is divided into four categories referring to specific scan types as defined by the software vendor:

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



9.10.1. Scan Whole Computer

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



Scan settings

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

- Automatically heal/remove infection (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 <u>Virus Vault</u>.
- Report Potentially Unwanted Programs and Spyware threats (on by default) check to
 activate the <u>Anti-Spyware</u> engine, and scan for spyware as well as for viruses. <u>Spyware</u>
 represents a questionable malware category: even though it usually represents a security
 risk, some of these programs can be installed intentionally. We recommend to 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 <u>spyware</u>: 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 can
 possibly block legal programs, and is therefore switched off by default.
- Scan for Tracking Cookies (off by default) this parameter of the Anti-Spyware component defines that cookies should be detected; (HTTP cookies are used for authenticating, tracking, and maintaining specific information about users, such as site preferences or the contents of their electronic shopping carts)
- Scan inside archives (off 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** (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 can hardly get infected, just to be absolutely sure. Remember though that this method is rather time consuming.

Further you should decide whether you want to have scanned

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

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 system resources usage will increase significantly during the scan, and will slow down your



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

Set additional scan reports ...

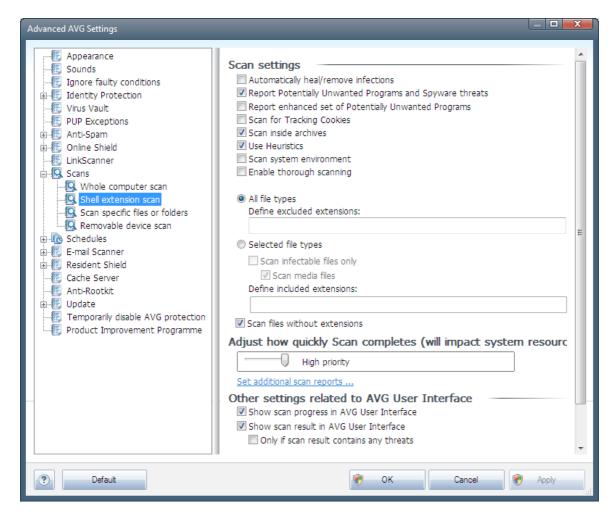
Click the **Set additional scan reports**... link to open a standalone dialog window called **Scan reports** where you can tick several items to define what scan findings should be reported:



9.10.2. Shell Extension Scan

Similar to the previous <u>Whole Computer scan</u> 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 <u>scanning of specific objects launched directly from the Windows Explorer</u> environment (*shell extension*), see chapter <u>Scanning in Windows Explorer</u>.





The list of parameters is identical to those available for the <u>Scan of the whole computer</u>. However, the default settings differ (for instance, Whole Computer scan by default does not check the archives but it does scan the system environment, while with the Shell Extension Scan it is the other way).

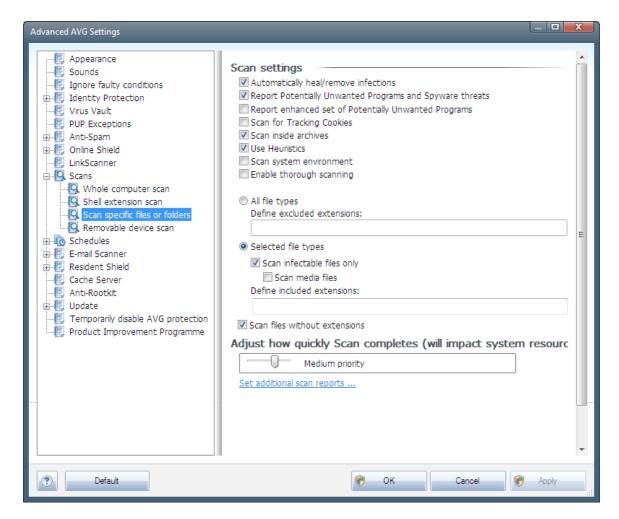
Note: For a description of specific parameters please consult the chapter <u>AVG Advanced</u> <u>Settings / Scans / Whole Computer scan</u>.

Compared to <u>Whole Computer scan</u> 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. Also, you can define that the scan result should only be displayed in case an infection is detected during scanning.

9.10.3. Scan Specific Files or Folders

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**:





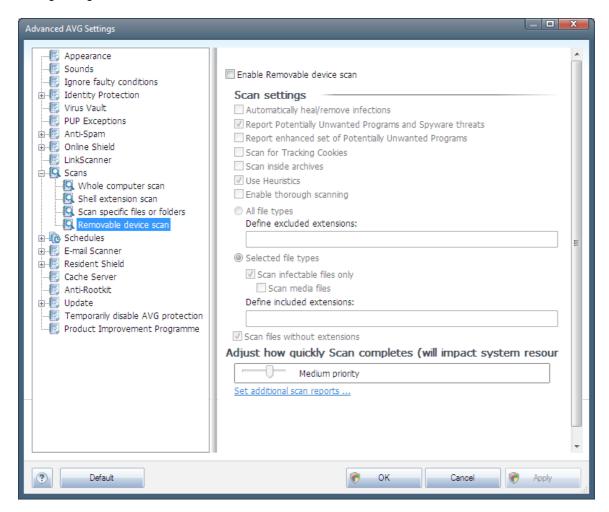
All parameters set up in this configuration dialog apply only to the areas selected for scanning with the **Scan of specific files or folders**!

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



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

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

9.11. Schedules

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

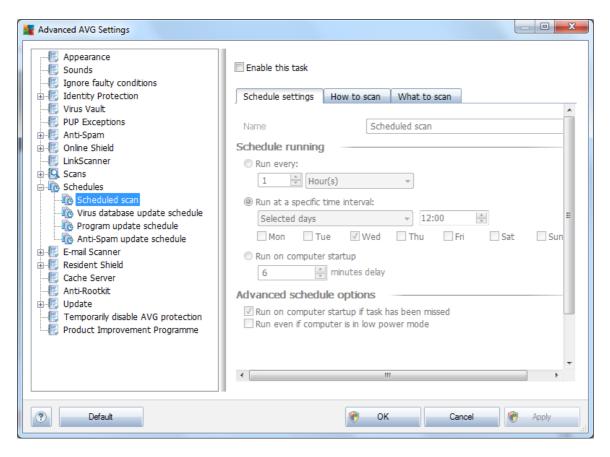
- Scheduled scan
- Virus database update schedule



- Program update schedule
- Anti-Spam update schedule

9.11.1. Scheduled Scan

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:



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

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



Schedule running

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

Advanced schedule options

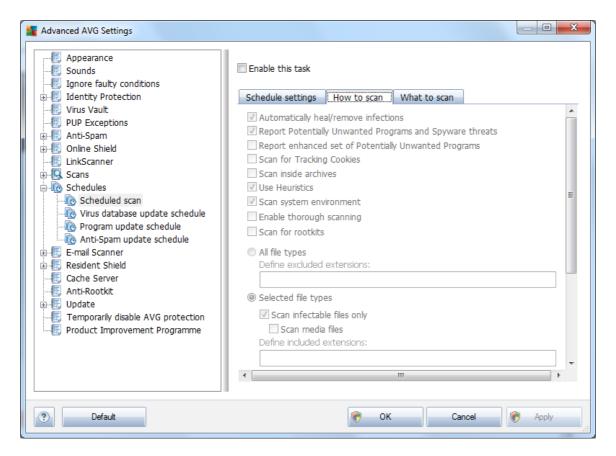
This section allows you to define under which conditions the scan should/should not be launched if the computer is in low power mode or switched off completely.

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



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.





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

- Automatically heal/remove infection (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 <u>Anti-Spyware</u> engine, and scan for spyware as well as for viruses. <u>Spyware</u>
 represents a questionable malware category: even though it usually represents a security
 risk, some of these programs can be installed intentionally. We recommend to 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 can
 possibly block legal programs, and is therefore switched off by default.
- Scan for Tracking Cookies (off by default): this parameter of the <u>Anti-Spyware</u> component defines that cookies should be detected during scanning; (HTTP cookies are



used for authenticating, tracking, and maintaining specific information about users, such as site preferences or the contents of their electronic shopping carts)

- **Scan inside archives** (off by default): this parameter defines the scanning should check all files even if they are stored inside an archive, e.g. ZIP, RAR, ...
- **Use Heuristics** (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 can hardly get infected, just to be absolutely sure. Remember though that this method is rather time consuming.
- Scan for rootkits (off by default): tick this item if you want to include the rootkit detection into scanning of the entire computer. The rootkit detection is also available on its own within the Anti-Rootkit component;

Further you should decide whether you want to have scanned

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

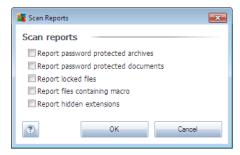
Adjust how quickly Scan completes

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



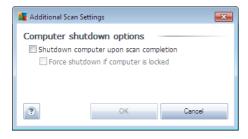
Set additional scan reports

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:

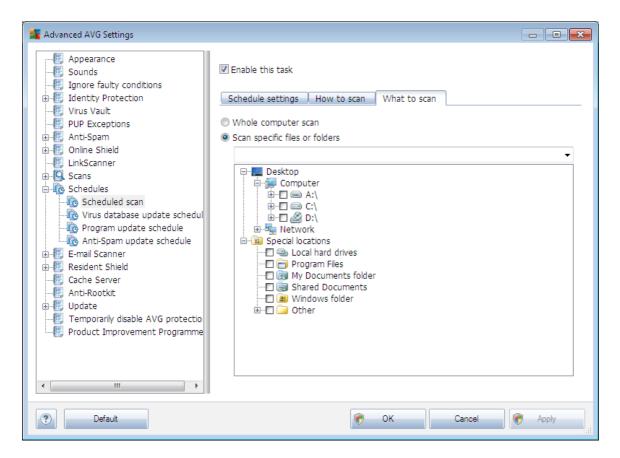


Additional scan settings

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*).





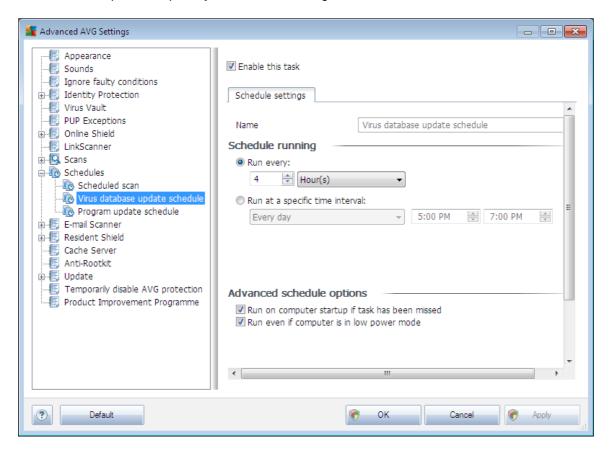


On the *What to scan* tab you can define whether you want to schedule <u>scanning of the whole</u> <u>computer</u> or <u>scanning of specific files or folders</u>. If you select scanning of specific files or folders, in the bottom part of this dialog the displayed tree structure activates and you can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



9.11.2. Virus Database Update Schedule

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



The basic virus database update scheduling is covered within the <u>Update Manager</u> component. Within this dialog you can set up some detailed parameters of the virus database update schedule. In the text field called **Name** (deactivated for all default schedules) there is the name assigned to this very schedule by the program vendor.

Schedule running

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

Advanced schedule options

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



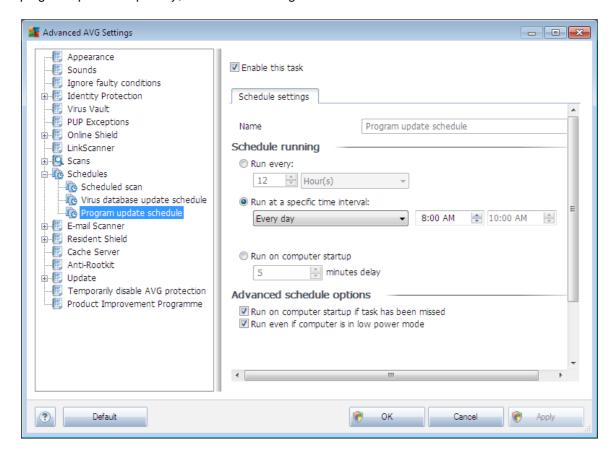
Other update settings

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

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

9.11.3. 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:



In the text field called *Name* (deactivated for all default schedules) there is 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 than if the internet connection gets corrupted and the update process fails, it will be launched again immediately after the internet connection is restored.

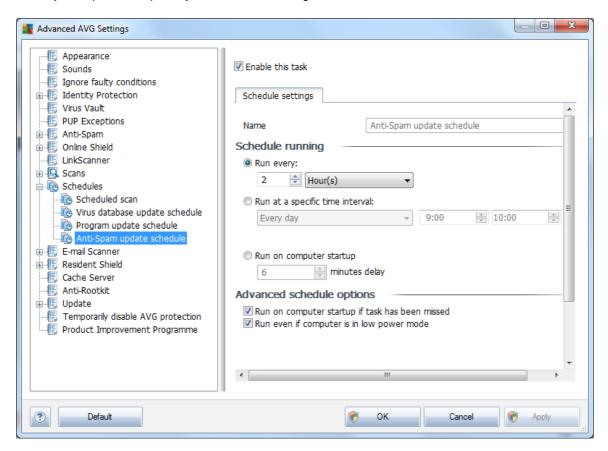
Once the scheduled update is launched in the time you have specified, you will be informed on this fact via a pop-up window opened over the <u>AVG system tray icon</u> (provided that you have kept the default configuration of the the <u>Advanced Settings/Appearance</u> dialog).

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



9.11.4. 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:



Basic <u>Anti-Spam</u> update scheduling is covered within the <u>Update Manager</u> component. Within this dialog you can set up some detailed parameters of the update schedule. In the text field called **Name** (deactivated for all default schedules) there is the name assigned to this very schedule by the program vendor.

Schedule running

Here, specify the time intervals for the newly scheduled <u>Anti-Spam</u> update launch. The timing can either be defined by the repeated <u>Anti-Spam</u> 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 <u>Anti-Spam</u> update should/should not be launched if the computer is in low power mode or switched off completely.



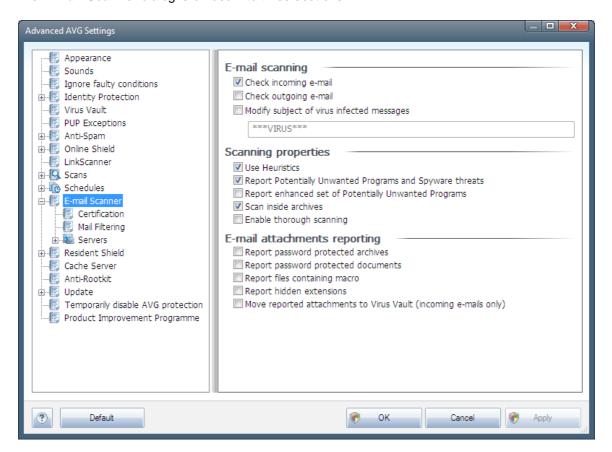
Other update settings

Check the *Run the update again as soon as the Internet connection is available* option to make sure than if the internet connection gets corrupted and the <u>Anti-Spam</u> 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 on this fact via a pop-up window opened over the <u>AVG system tray icon</u> (provided that you have kept the default configuration of the the <u>Advanced Settings/Appearance</u> dialog).

9.12. 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 the
scanned e-mail message was detected as infectious, 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 email message for easier identification and filtering. The default value is ***VIRUS*** which
we recommend to 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 heuristics detection method when scanning email messages. When this option is on, you can filter e-mail attachments not only by extension but also the actual contents of the attachment will 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 <u>Anti-Spyware</u> engine, and scan for spyware as well as for viruses. <u>Spyware</u>
 represents a questionable malware category: even though it usually represents a security
 risk, some of these programs can be installed intentionally. We recommend to 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 can
 possibly block legal programs, and is therefore switched off by default.
- Scan inside archives (on by default) check to scan contents of archives attached to email messages.
- Enable thorough scanning (off by default) in specific situations (e.g. suspicious of your computer being infected by an virus or exploit) you may check this option to activate the most thorough scanning algorithms that will scan even those areas of your computer that can hardly 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, only a certification text will be added to the end of the e-mail message, and all such reports will be listed in the <u>E-mail Scanner detection</u> dialog:

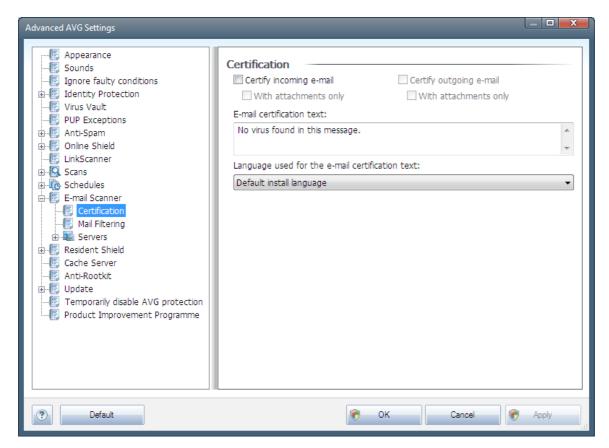
- Report password protected archives archives (ZIP, RAR etc.) that are protected by password are not possible to scan for viruses; check the box to report these as potentially dangerous.
- Report password protected documents documents protected by password are not possible to scan for viruses; check the box to report these as potentially dangerous.



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

9.12.1. Certification

In the *Certification* dialog you can specify the text and language of the certification for both incoming mail and outgoing mail:



The certification text consists of two parts, user part and system part - see the following example: the first line represents the user part, the rest is generated automatically:

No virus found in this message.

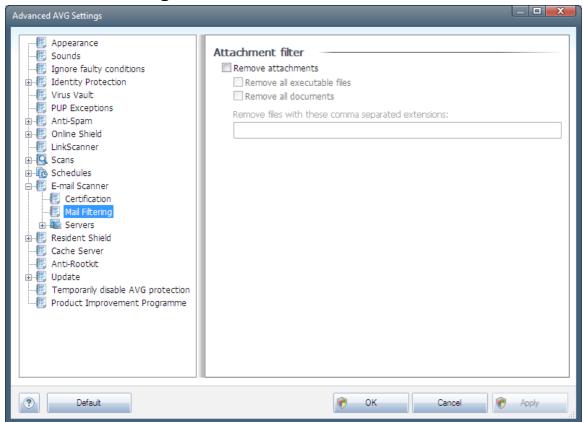


Checked by AVG.

Version: x.y.zz / Virus Database: xx.y.z - Release Date: 12/9/2010

If you decide to use certification of either incoming or outgoing e-mail messages, further in this dialog you can specify the exact wording of the user part of the certification text (*E-mail* certification text), and chose what language should be used for the automatically generated system part of the certification (*Language used for the e-mail certification text*).

9.12.2. Mail Filtering



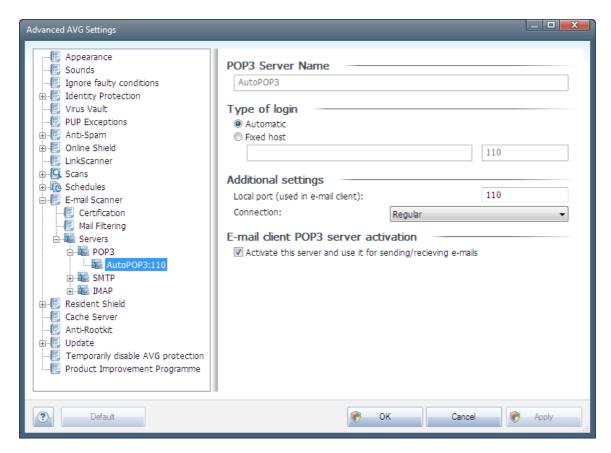
The **Attachment filter** dialog allows you to set up parameters for e-mail messages attachment scanning. By default, the **Remove attachments** option is switched off. If you decide to activate it, all e-mail message attachments detected as infectious or potentially dangerous will be removed automatically.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

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



9.12.3. Servers

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



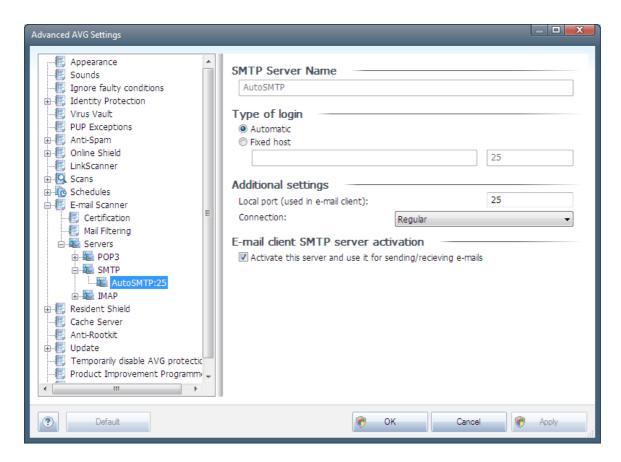
In this dialog (*opened via Servers / POP3*) you can set up a new <u>E-mail Scanner</u> server using the POP3 protocol for incoming mail:

- **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" server 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 by using a colon as the delimiter (for example, pop.acme.com:8200). The standard port for POP3



communication is 110.

- Additional settings specifies more detailed parameters:
 - Local port specifies the port on which the communication from your mail application should be expected. You must then specify in your mail application this port as the port for POP3 communication.
 - 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



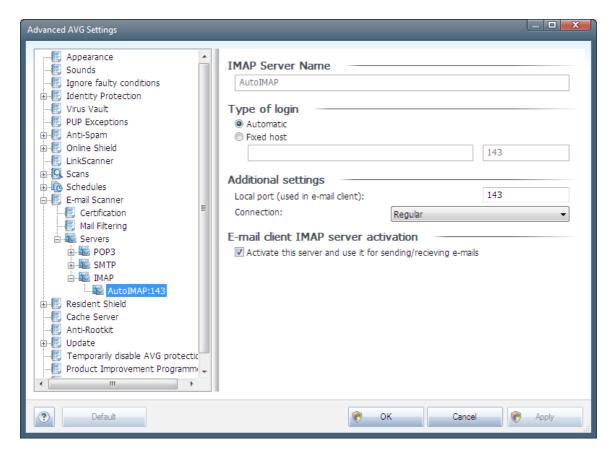
In this dialog (opened via **Servers / SMTP**) you can set up a new **<u>E-mail Scanner</u>** server using the SMTP protocol for outgoing mail:

• **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" server 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 above specified SMTP server





In this dialog (opened via **Servers / IMAP**) you can set up a new **<u>E-mail Scanner</u>** 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" server 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:
 - o Local port specifies the port on which the communication from your mail

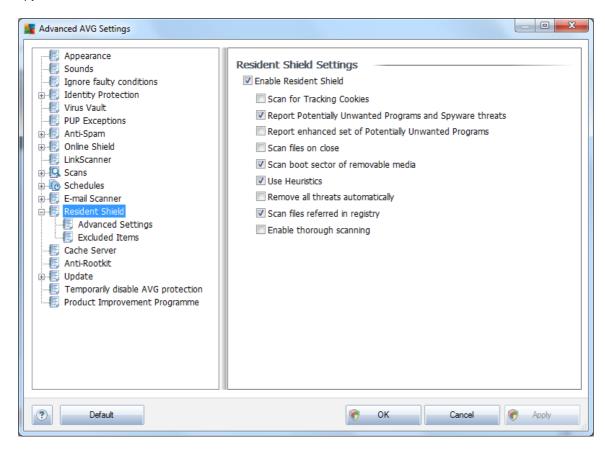


application should be expected. You must then specify in your mail application this port as the port for IMAP communication.

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

9.13. Resident Shield

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



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

• Scan for Tracking cookies (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)

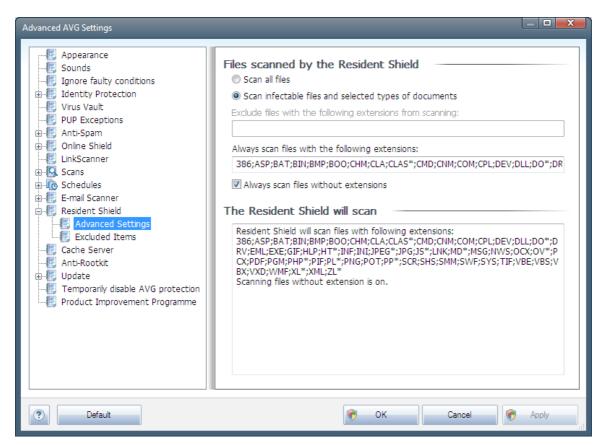


- Report Potentially Unwanted Programs and Spyware threats (on by default): check to
 activate the <u>Anti-Spyware</u> engine, and scan for spyware as well as for viruses. <u>Spyware</u>
 represents a questionable malware category: even though it usually represents a security
 risk, some of these programs can be installed intentionally. We recommend to 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 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 you protect your computer against some types of sophisticated virus
- Scan boot sector of removable media (on by default)
- **Use Heuristics** (on by default) <u>heuristic analysis</u> will be used for detection (*dynamic emulation of the scanned object's instructions in a virtual computer environment*)
- Remove all threats automatically (off by default) any detected infection will be healed automatically if there is a cure available, and all infection that cannot be cured will be removed.
- Scan files referred in registry (on by default) this parameter defines that AVG will scan all executable files added to 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 into the deep. Remember though that this method is rather time consuming.



9.13.1. Advanced Settings

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

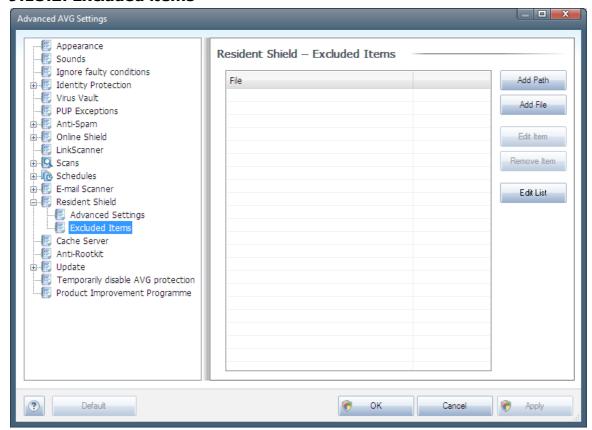


Decide whether you want all files to be scanned or just infectable files - if so, you can further specify a list of extensions defining files that should be excluded from scanning, and also a list of file extensions defining files that must be scanned under all circumstances.

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



9.13.2. Excluded items



The **Resident Shield - Excluded Items** dialog offers the possibility 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!

The dialog provides the following control buttons:

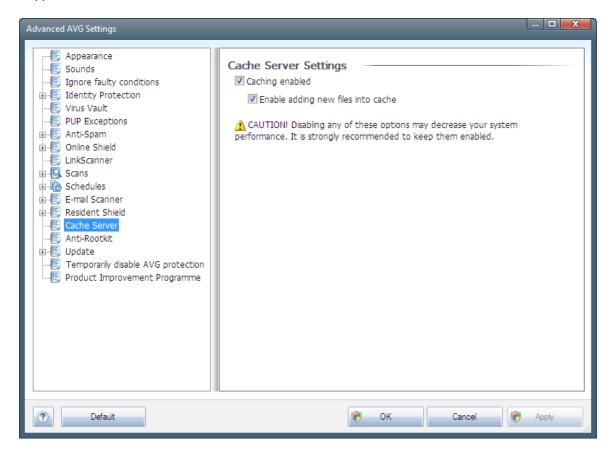
- Add Path specify a directory (directories) to be excluded from the scanning by selecting them one by one from the local disk navigation tree
- Add File specify files to be excluded from the scanning by selecting them one by one from the local disk navigation tree
- *Edit Item* allows you to edit the specified path to a selected file or folder
- Remove Item allows you to delete the path to a selected item from the list

9.14. Cache Server

The **Cache Server** is a process designed to speed up any scan (*on-demand scan, scheduled whole computer scan, Resident Shield scan*). It gathers and keeps information of trustworthy files (*system files with digital signature etc.*): These files are then considered safe, and during scanning are



skipped.



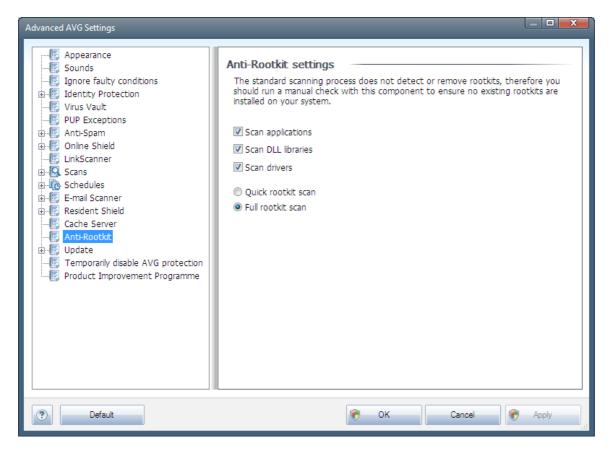
The settings dialog offers two options:

- 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.



9.15. Anti-Rootkit

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



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

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

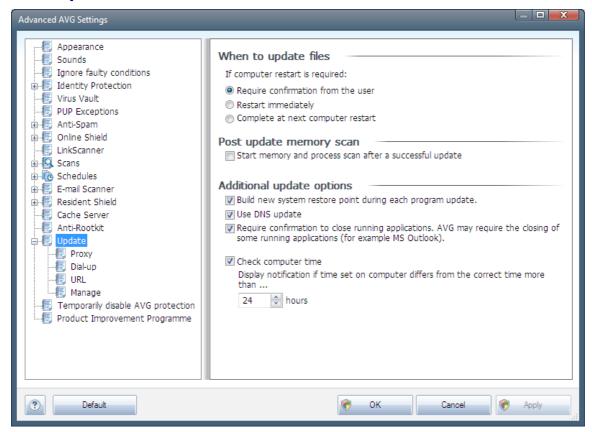
- · Scan applications
- Scan DLL libraries
- Scan drivers

Further you can pick the rootkit scanning mode:

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



9.16. 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 among three alternative options to be used in case the update process requires your PC 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 <u>update process</u>
- **Restart immediately** the computer will be restarted automatically immediately after the <u>update process</u> has finished, and your approval will not be required
- Complete at next computer restart the <u>update process</u> finalization will be postponed until the next computer restart. Please keep in mind that this option is only recommended if you are sure the computer gets restarted regularly, at least once a day!



Post update memory scan

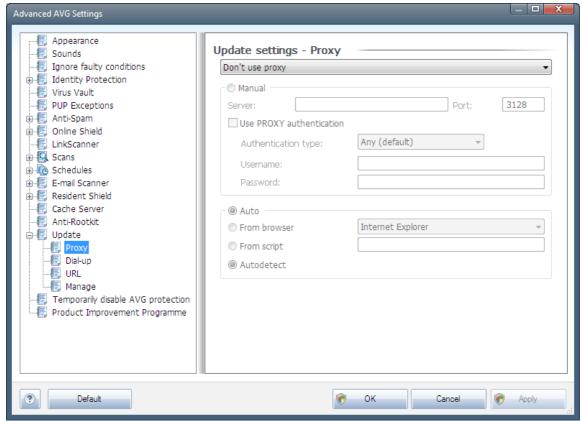
Mark this check box to define you want to launch a new memory scan after each successfully completed update. The latest downloaded update might have contained new virus definitions, and these could be applied in the scanning immediately.

Additional update options

- Build new system restore point 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 in its original configuration from this point. This option is accessible via Start / All Programs / Accessories / System tools / System Restore, but any changes can be recommended to experienced users only! Keep this check-box ticked if you want to make use of this functionality.
- Use DNS update (on by default) with this item marked, once the update is launched, your AVG
 Internet Security 2011 looks up the 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) will help you make sure no currently running applications will be closed without your permission if required for the update process to be finalized;
 - **Check computer time** mark this option to declare you wish to have notification displayed in case the computer time differs from the correct time more than specified number of hours.



9.16.1. Proxy



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

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

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

Manual configuration

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

• Server - specify the server's IP address or the name of the server



Port – specify the number of the port that enables Internet access (by default, this number
is set to 3128 but can be set differently – if you are not sure, contact your network
administrator)

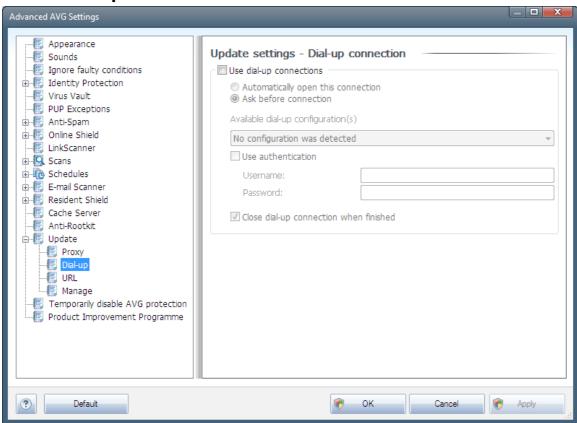
The proxy server can also have configured specific rules for each user. If your proxy server is set up this way, check the **Use PROXY authentication** option to verify that your user name and password are valid for connecting to the Internet via the proxy server.

Automatic configuration

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

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

9.16.2. Dial-up



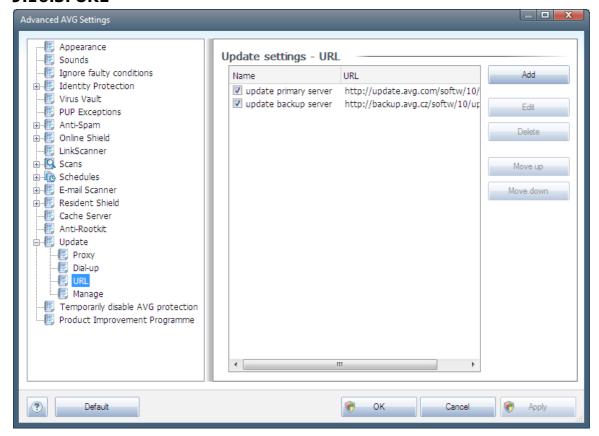
All parameters optionally defined in the *Update settings - Dial-Up connection* dialog refer to the



dial-up connection to the Internet. The dialog's fields are inactive until you check the *Use dial-up connections* option that activates the fields.

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

9.16.3. URL



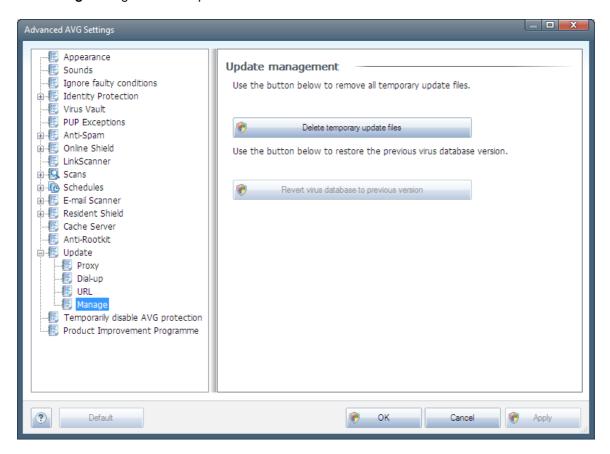
The *URL* dialog offers a list of Internet addresses from which the update files can be downloaded. The list and its items can be modified using the following control buttons:

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



9.16.4. Manage

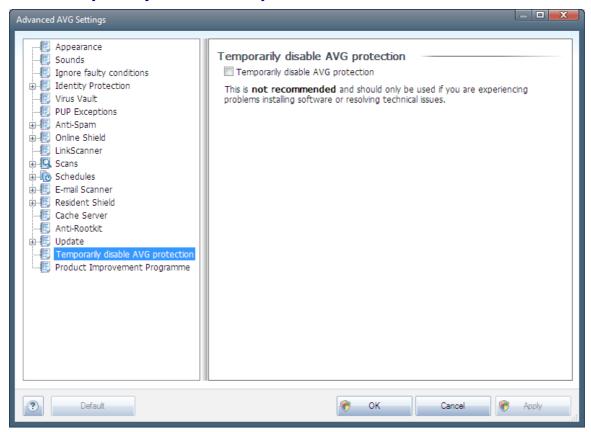
The *Manage* dialog offers two options accessible via two buttons:



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



9.17. 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 2011** at once.

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

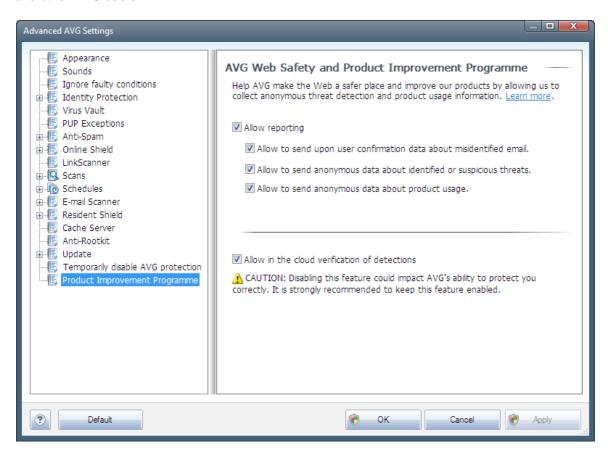
In most cases, it is *not necessary* to disable AVG before installing new software or drivers, not even if the installer or software wizard suggests that running programs and applications be shut down first to make sure there are no unwanted interruptions during the installation process. Should you really experience problem during installation, try to deactivate the *Resident Shield* component first. If you do have to temporarily disable AVG, 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.

9.18. Product Improvement Programme

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



The reporting is taken care of automatically, therefore does not cause you any inconvenience, and no personal data is included in the reports. Reporting of detected threats is optional, however, we do ask you to switch this feature on, too, as it helps us improve protection for both you and other AVG users.



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:

- A 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.
- A 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 be may but not
 necessarily have to 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 includes these specialized components:

- Anti-Virus to protect your computer from viruses,
- Anti-Spyware to protect your computer from spyware,
- Online Shield to protect you from both viruses and spyware when surfing the Internet,
- <u>LinkScanner</u> to protect you from other online threats mentioned in this chapter.

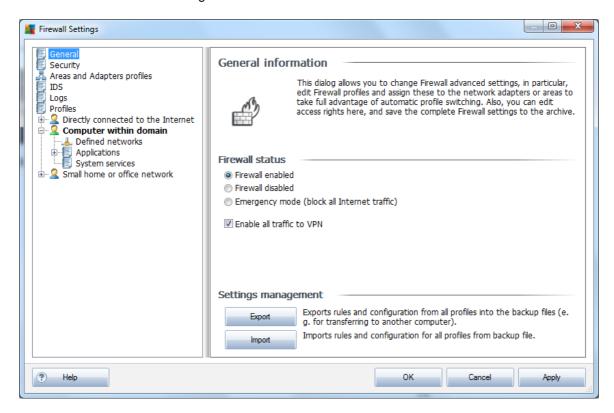


10. Firewall Settings

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

10.1. General

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 selected *Firewall profile*
- Firewall disabled this option switches <u>Firewall</u> off completely, all network traffic is allowed but not checked!
- **Emergency mode** (block all Internet traffic) select this option to block all traffic on every single network port; **Firewall** is still running but all network traffic is stopped
- Enable all traffic to VPN if you use a VPN (Virtual Private Network) connection, e.g. to connect to your office from home, we recommend to check the box. AVG Firewall will



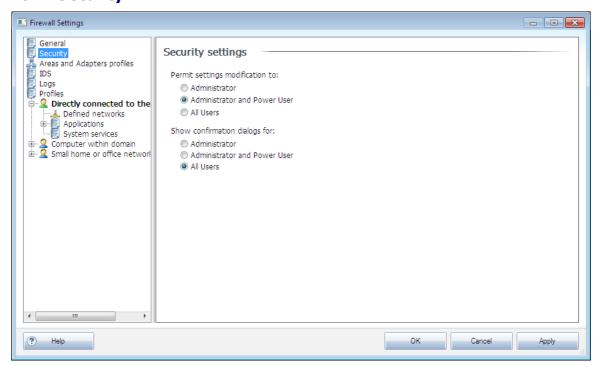
automatically search through your network adapters, find those used for VPN connection, and allow all applications to connect to the target network (only applies to applications with no specific Firewall rule assigned). On a standard system with common network adapters, this simple step should save you from having to set up a detailed rule for each application that you need to use over VPN.

Note: To enable 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** / **Import** <u>Firewall</u> configuration; i.e. export the defined <u>Firewall</u> rules and settings to the back-up files, or on the other hand to import the entire back up file.

10.2. Security



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

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

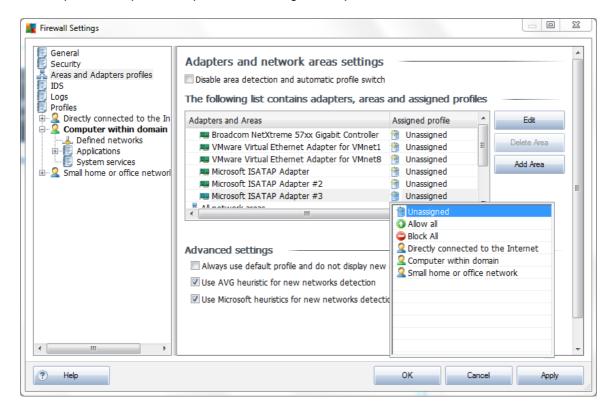


In both cases you can assign the specific right to one of the following user groups:

- Administrator controls the PC completely and has the right of assigning every user into groups with specifically defined authorities
- Administrator and Power User the administrator can assign any user into a specified group (Power User) and define authorities of the group members
- All Users other users not assigned into any specific group

10.3. Areas and Adapters Profiles

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



- Disable area detection and automatic profile switch one of the defined profiles can be
 assigned to each network interface type, respectively to each area. If you do not wish to
 define specific profiles, one common profile will be used. However, if you decide to
 distinguish profiles and assign them to specific adapters and areas, and later on for some
 reason you want to switch this arrangement temporarily, tick the Disable area detection
 and automatic profile switch option.
- List of adapters, areas and assigned profiles in this list you can find an overview of detected adapters and areas. To each of them you can assign a specific profile from the



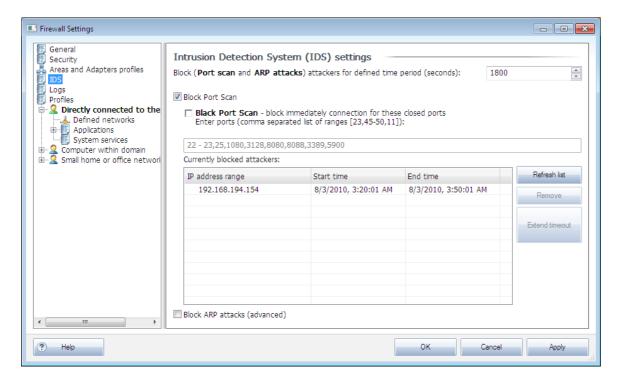
menu of defined profiles. To open this menu, click the respective item in the list of adapters, and select the profile.

Advanced settings

- Always use default profile and do not display new network detection dialog whenever your computer connects to a new network, <u>Firewall</u> will alert you and display a dialog prompting you to select a type of network connection, and assign it a <u>Firewall profile</u>. If you do not want the dialog to be displayed, check this box.
- Use AVG heuristic for new networks detection enables gathering information 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 taking information about a newly detected network from the Windows service (this option is only available on Windows Vista and higher).

10.4. IDS

The *Intrusion Detection System* is a special behaviour analysis feature designed to identify and block suspicious communication attempts over specific ports of your computer. You can configure the IDS parameters within the following interface:



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

• Block attackers for defined time period - here you can specify for how many seconds



should 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*).

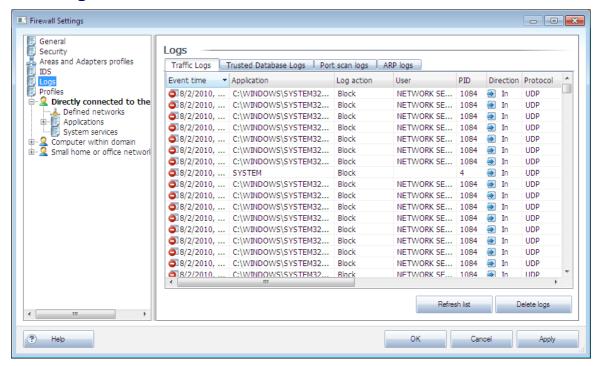
- Block Port Scan check the box to block communication attempts over all TCP and UDP ports coming to the computer from outside. For any such connection, five attempts are allowed, and the sixth is blocked.
 - Black Port Scan check the box to immediately block any communication attempts over ports specified 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 <u>Firewall</u>. Complete history of blocked attempts
 can be viewed in the <u>Logs</u> dialog (tab Port scan logs).
- Block ARP attacks activates 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 specific time and date, or unlimited duration.



10.5. 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 activity of all application that have tried to connect to the network.
- Trusted Database Logs Trusted database is AVG internal database collecting information on certified and trusted applications that can always be allowed to communicate online. The first time a new application tries to connect to the network (i.e. where there is yet no firewall rule specified for this application), it is necessary to find out whether the network communication should be allowed for the respective application. First, AVG searches the Trusted database, and if the application is listed, it will be automatically granted access to the network. Only after that, provided there are no information on the application available in the database, you will be asked in a stand-alone dialog whether you want to allow the application to access network.
- Port scan logs provides logging of all <u>Intrusion Detection System</u> activity.
- ARP logs logging info on blocking of special kinds of communication attempts inside a
 local network (<u>Block ARP attacks</u> option) detected by <u>Intrusion Detection System</u> as
 potentialy 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.
- Empty list delete all entries in the chart.

10.6. Profiles

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



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

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



trusted and certified applications that can always be allowed to communicate online.)

- **Export profile** records the selected profile's configuration into a file that will be saved for possible further use
- *Import profile* configures the selected profile's settings based on the data exported from the backup configuration file

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

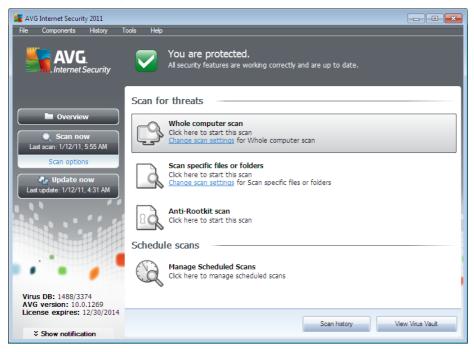
Based on the number of defined profiles that are mentioned in the list within the *Profile* dialog, the left navigation menu structure will change accordingly. Each defined profile creates a specific branch under the *Profile* item. Specific profiles can then be edited in the following dialogs (*that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



11. AVG Scanning

Scanning is a crucial part of **AVG Internet Security 2011** functionality. You can run on-demand tests or <u>schedule them to run periodically</u> at convenient times.

11.1. Scanning Interface



The AVG scanning interface is accessible via the **Scan options** <u>quick link</u>. Click this link to switch to the **Scan for threats** dialog. In this dialog you will find the following:

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

Control buttons

Control buttons available within the testing interface are the following:

 Scan history - displays the <u>Scan results overview</u> dialog with the entire history of scanning



• View Virus Vault - opens a new window with the <u>Virus Vault</u> - a space where detected infections are quarantined

11.2. Predefined Scans

One of the main features of **AVG Internet Security 2011** is on-demand scanning. On-demand tests are designed to scan various parts of your computer whenever suspicion of possible virus infection arises. Anyway, it is strongly recommended to carry out such tests regularly even if you think that no virus can be found on your computer.

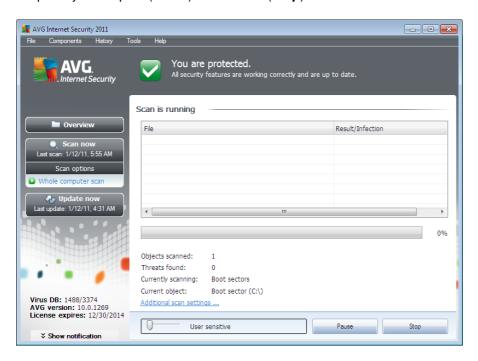
In the AVG Internet Security 2011 you will find the following types of scanning predefined by the software vendor:

11.2.1. 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 of your computer, will detect and heal any virus found, or remove the detected infection to the <u>Virus Vault</u>. Scanning of 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 <u>scanning interface</u> by clicking on the scan's icon. No further specific settings have to be configured for this type of scan, the scanning will start immediately within the **Scan is running** dialog (see screenshot). The scanning can be temporarily interrupted (**Pause**) or canceled (**Stop**) if needed.





Scan configuration editing

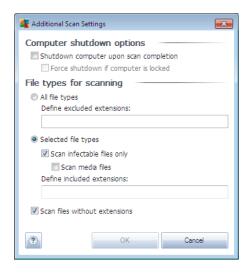
You have the option of editing the predefined default settings of the *Whole computer scan*. Press the *Change scan settings* link to get to the *Change scan settings for Whole Computer scan* dialog (accessible from the <u>scanning interface</u> via the Change scan settings link for the <u>Whole computer scan</u>). It is recommended to keep to the default settings unless you have a valid reason to change them!



- **Scanning parameters** in the list of scanning parameters you can switch on/off specific parameters as needed:
 - Automatically heal/remove infection (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 <u>Anti-Spyware</u> engine, and scan for spyware as well as for
 viruses. <u>Spyware</u> represents a questionable malware category: even though it usually
 represents a security risk, some of these programs can be installed intentionally. We
 recommend to 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 can possibly block legal programs, and is therefore switched
 off by default.



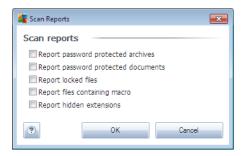
- Scan for Tracking Cookies (off by default) this parameter of the <u>Anti-Spyware</u> component defines that cookies should be detected; (HTTP cookies are used for authenticating, tracking, and maintaining specific information about users, such as site preferences or the contents of their electronic shopping carts).
- Scan inside archives (off 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 (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 can hardly 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).
- Define file types for scanning further you should decide whether you want to have scanned:
 - ➤ All file types with the possibility of defining exceptions from scanning by providing a list of comma separated file extensions that should not be scanned;



- > Selected file types you can specify that you want to scan only files that are possibly infectable (files that cannot get infected will not be scanned, for instance some plain text files, or some other non-executable files), including media files (video, audio files if you leave this box unchecked, it will reduce the scanning time even more, because these files are often quite large and are not too likely to be infected by a virus). Again, you can specify by extensions which files are those that should always be scanned.
- ➤ Optionally, you can decide you want to **Scan files without extension** this option is on by default, and it is recommended that you keep it so unless you have a real reason to change it. Files with no extension are rather suspicious and should be scanned at all times.
- Adjust how quickly Scan completes you can use the slider to change the scanning process priority. By default, this option value is set to 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:



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

11.2.2. Scan Specific Files or Folders

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

Scan launch

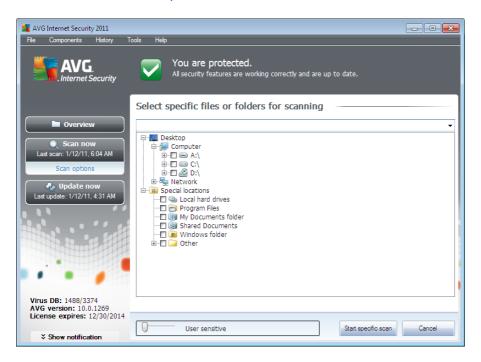
The **Scan of specific files or folders** can be launched directly from the <u>scanning interface</u> by clicking on the scan's icon. A new dialog called **Select specific files or folders for scanning**



opens. In the tree structure of your computer select those folders you want to have scanned. The path to each selected folder will generate automatically and appear in the text box in the upper part of this dialog.

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

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



Scan configuration editing

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



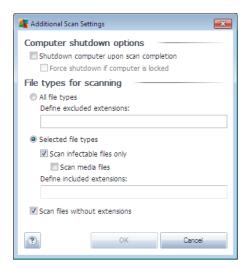


- **Scanning parameters** in the list of scanning parameters you can switch on/off specific parameters as needed:
 - Automatically heal/remove infection (on by default) if a virus is identified during scanning it can be healed automatically if a cure is available. If the infected file cannot be healed automatically, the infected object will be moved to the <u>Virus Vault</u>.
 - Report Potentially Unwanted Programs and Spyware threats (on by default) check to activate the <u>Anti-Spyware</u> engine, and scan for spyware as well as for
 viruses. <u>Spyware</u> represents a questionable malware category: even though it usually
 represents a security risk, some of these programs can be installed intentionally. We
 recommend to 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 can possibly block legal programs, and is therefore switched
 off by default.
 - Scan for Tracking Cookies (off by default) this parameter of the <u>Anti-Spyware</u> component defines that cookies should be detected; (HTTP cookies are used for authenticating, tracking, and maintaining specific information about users, such as site preferences or the contents of their electronic shopping carts).
 - o **Scan inside archives** (on by default) this parameters defines that scanning should check all files stored inside archives, e.g. ZIP, RAR, ...
 - Use Heuristics (off 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 (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 can hardly 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:

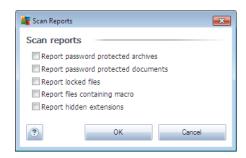


- Computer shutdown options decide whether the computer should be shut down
 automatically once the running scanning process is over. Having confirmed this
 option (Shutdown computer upon scan completion), a new option activates that
 allows the computer to shut down even if it is currently locked (Force shutdown if
 computer is locked).
- Define file types for scanning further you should decide whether you want to have scanned:
 - ➤ **All file types** with the possibility of defining exceptions from scanning by providing a list of comma separated file extensions that should not be scanned;
 - > Selected file types you can specify that you want to scan only files that are possibly infectable (files that cannot get infected will not be scanned, for instance some plain text files, or some other non-executable files), including media files (video, audio files if you leave this box unchecked, it will reduce the scanning time even more, because these files are often quite large and are not too likely to be infected by a virus). Again, you can specify by extensions which files are those that should always be scanned.
 - > Optionally, you can decide you want to Scan files without extension this



option is on by default, and it is recommended that you keep it so unless you have a real reason to change it. Files with no extension are rather suspicious and should be scanned at all times.

- Scan process priority you can use the slider to change the scanning process priority. By default, this option value is set to 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:



Warning: These scan settings are identical to the parameters of a newly defined scan - as described in the chapter <u>AVG Scanning</u> / <u>Scan scheduling</u> / <u>How to Scan</u>. 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 (<u>all customized</u> scans are based on the current configuration of the Scan of selected files or folders).

11.2.3. Anti-Rootkit Scan

Anti-Rootkit scan searches your computer for possible rootkit (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.

Scan launch

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

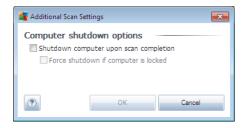




Scan configuration editing

Anti-Rootkit scan is always launched in the default settings, and editing of the scan parameters is only accessible within the <u>AVG Advanced Settings / Anti-Rootkit</u> dialog. In the scanning interface, the following configuration is available but only while the scan is running:

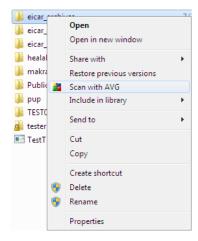
- Automatic scan you can use the slider to change the scanning process priority. By
 default, this option value is set to user sensitive level of automatic resource usage.
 Alternatively, you can run the scanning process slower which means the system resources
 load will be minimized (useful when you 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).
- Additional scan settings this link opens a new Additional scan settings dialog where
 you can define possible computer shutdown conditions related to the Anti-Rootkit scan (
 Shutdown computer upon scan completion, possibly Force shutdown if computer is
 locked):





11.3. Scanning in Windows Explorer

Besides the pre-defined scans launched for the entire computer or its selected areas, **AVG Internet Security 2011** also offers the option of quick scanning of a specific object directly in the Windows Explorer environment. If you want to open an unknown file and you cannot be sure of its content, you may want to have it checked on demand. Follow these steps:



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

11.4. Command Line Scanning

Within **AVG Internet Security 2011** there is the option of running the scan from the command line. You can use this option for instance on servers, or when creating a batch script to be launched automatically after the computer boot. From the command line, you can launch the scanning with most parameters as offered in AVG graphical user interface.

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

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

Syntax of the command

The syntax of the command follows:

- avgscanx /parameter ... e.g. avgscanx /comp for scanning the whole computer
- avgscanx /parameter /parameter .. with multiple parameters these should be lined in a



row and separated by a space and a slash character

• if a parameters requires specific value to be provided (e.g. the /scan parameter that requires information on what are the selected areas of your computer that are to be scanned, and you have to provide an exact path to the selected section), the values are divided by semicolons, for instance: avgscanx /scan=C:\;D:\

Scanning parameters

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

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

CMD scanning launched from graphic interface

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

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

11.4.1. CMD Scan Parameters

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

• /SCAN Scan specific files or folders /SCAN=path;path (e.g. /SCAN=C:\;D:\)

• /COMP Whole Computer scan

• /HEUR Use heuristic analyse

• /EXCLUDE Exclude path or files from scan

• /@ Command file /file name/

• /EXT Scan these extensions /for example EXT=EXE,DLL/

/NOEXT Do not scan these extensions /for example NOEXT=JPG/

• /ARC Scan archives

• /CLEAN Clean automatically

• /TRASH Move infected files to the Virus Vault



• /QT Quick test

/MACROW Report macros

/PWDW Report password-protected files

• /IGNLOCKED Ignore locked files

• /REPORT Report to file /file name/

• /REPAPPEND Append to the report file

• /REPOK Report uninfected files as OK

• /NOBREAK Do not allow CTRL-BREAK to abort

• /BOOT Enable MBR/BOOT check

• /PROC Scan active processes

• /PUP Report "Potentially unwanted programs"

• /REG Scan registry

/COO Scan cookies

• /? Display help on this topic

• /HELP Display help on this topic

/PRIORITY Set scan priority /Low, Auto, High/ (see <u>Advanced settings / Scans</u>)

• /SHUTDOWN Shutdown computer upon scan completion

• /FORCESHUTDOWN Force computer shutdown upon scan completion

• /ADS Scan Alternate Data Streams (NTFS only)

• /ARCBOMBSW Report re-compressed archive files

11.5. Scan Scheduling

With **AVG Internet Security 2011** you can run scanning on demand (for instance when you suspect an infection has been dragged to your computer) or based on a scheduled plan. It is highly recommended to run the scans based on a schedule: this way you can make sure your computer is protected from any possibility of getting infected, and you will not have to worry about if and when to launch the scan.

You should launch the *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 <u>on a computer</u> <u>start-up when the task has been missed</u>.

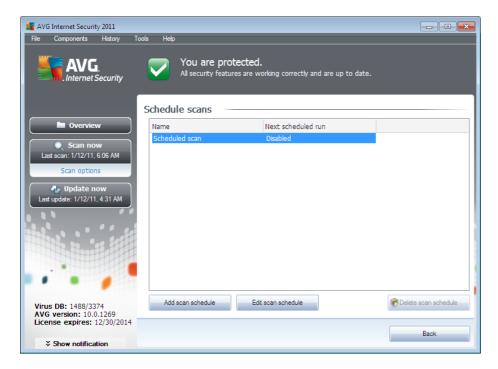
To create new scan schedules, see the <u>AVG scanning interface</u> and find the bottom section called **Schedule scans**.



Schedule scans

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





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

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

11.5.1. Schedule Settings

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





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

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

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

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

- Schedule running specify the time intervals for the newly scheduled scan launch. The timing can either be defined by the repeated scan launch after a certain period of time (Run every ...) or by defining an exact date and time (Run at specific time ...), or possibly by defining an event that the scan launch should be associated with (Action based on computer startup).
- Advanced schedule options this section allows you to define under which conditions the scan should/should not be launched if the computer is in low power mode or switched off completely.

Control buttons of the Settings for scheduled scan dialog

There are two control buttons available on all three tabs of the Settings for scheduled scan dialog (



Schedule settings, <u>How to scan</u> and <u>What to scan</u>) and these have the same functionality no matter on which tab you currently are:

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

11.5.2. How to Scan



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

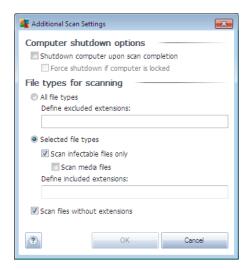
- Automatically heal/remove infection (on by default): if a virus is identified during scanning it can be healed automatically if a cure is available. In case the infected file cannot be healed automatically, or if you decide to switch off this option, you will be notified upon a virus detection and 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 <u>Anti-Spyware</u> engine, and scan for spyware as well as for viruses. <u>Spyware</u>
 represents a questionable malware category: even though it usually represents a security
 risk, some of these programs can be installed intentionally. We recommend to 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 <u>spyware</u>: 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 can
 possibly block legal programs, and is therefore switched off by default.
- Scan for Tracking Cookies (off by default): this parameter of the Anti-Spyware component defines that cookies should be detected during scanning (HTTP cookies are used for authenticating, tracking, and maintaining specific information about users, such as site preferences or the contents of their electronic shopping carts).
- **Scan inside archives** (off by default): this parameters defines that the scanning should check all files even if these are packed inside some type of archive, e.g. ZIP, RAR, ...
- Use Heuristics (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 can hardly get infected, just to be absolutely sure. Remember though that this method is rather time consuming.

Then, you can change the scan configuration as follows:

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

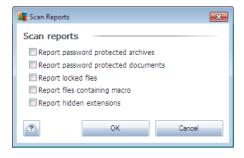


 Computer shutdown options - decide whether the computer should be shut down automatically once the running scanning process is over. Having confirmed this option (Shutdown computer upon scan completion), a new option activates that allows the computer to shut down even if it is currently locked (Force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



computer is locked).

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



Note: By default, the scanning configuration is set up for optimum performance. Unless you have a valid reason to change the scanning settings it is highly recommended to stick to the predefined configuration. Any configuration changes should be performed by experienced users only. For further scanning configuration options see the <u>Advanced settings</u> dialog accessible via the **File** / **Advanced setting** system menu item.

Control buttons

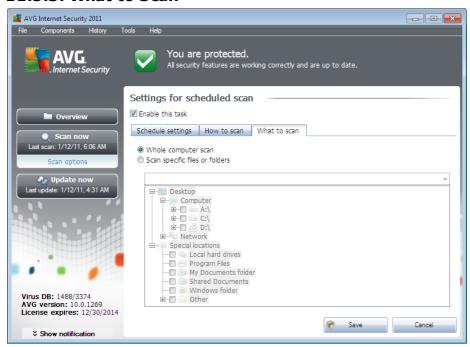
There are two control buttons available on all three tabs of the Settings for scheduled scan dialog (



<u>Schedule settings</u>, **How to scan** and <u>What to scan</u>) and these have the same functionality no matter on which tab you currently are:

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

11.5.3. What to Scan



On the *What to scan* tab you can define whether you want to schedule <u>scanning of the whole computer</u> or <u>scanning of specific files or folders</u>.

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

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

- Local hard drives all hard drives of your computer
- Program files



- o C:\Program Files\
- o in 64-bit version C:\Program Files (x86)

• My Documents folder

- o for Win XP: C:\Documents and Settings\Default User\My Documents\
- o for Windows Vista/7: C:\Users\user\Documents\

· Shared Documents

- o for Win XP: C:\Documents and Settings\All Users\Documents\
- o for Windows Vista/7: C:\Users\Public\Documents\
- Windows folder C:\Windows\

Other

- o 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)

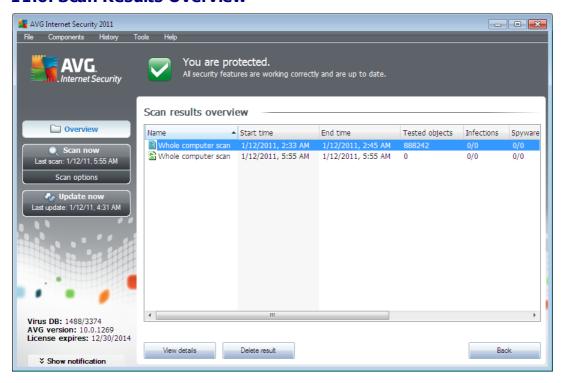
Control buttons of the Settings for scheduled scan dialog

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

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



11.6. Scan Results Overview



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

- *Name* scan designation; it can either be the name of one of the <u>predefined scans</u>, or a name you have given to your <u>own scheduled scan</u>. Every name includes an icon indicating the scan result:
 - 🖹 green icon informs there was no infection detected during the scan
 - a blue icon announces there was an infection detected during the scan but the infected object was removed automatically
 - are red icon warns there was an infection detected during the scan and it could not be removed!

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

Note: For detailed information on each scan please see the <u>Scan Results</u> 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 course and result (typically on its finalization or interruption)

Control buttons

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

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

11.7. Scan Results Details

If in the <u>Scan Results Overview</u> 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:

- <u>Results Overview</u> 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 on the finding. Also, you will find here information on objects that could not be scanned (e.g. password protected archives).



11.7.1. Results Overview Tab



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

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

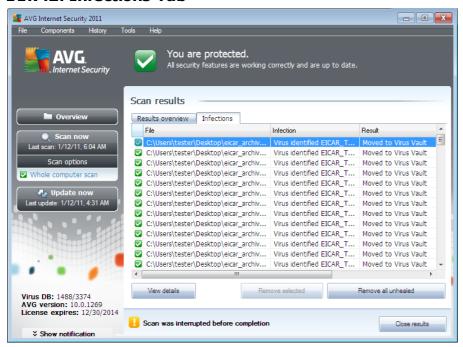
In addition you will find information on the date and exact time of the scan launch, on the total number of scanned objects, on the scanning duration and the number of errors that have occurred during scanning.

Control buttons

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



11.7.2. Infections Tab



The *Infections* tab is only displayed in the *Scan results* dialog if a <u>virus infection</u> 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 <u>virus</u> (for details on specific viruses please consult the <u>Virus Encyclopedia</u> 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 <u>switched off the automatic healing option</u> in a specific scan settings)
 - o Healed the infected object was healed automatically and left in its original location
 - Moved to Virus Vault the infected object was moved to the <u>Virus Vault</u> 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 <u>PUP Exceptions</u> dialog of the advanced settings)
 - Locked file not tested the respective object is locked and AVG is therefore unable to scan it

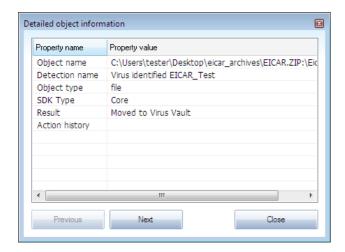


- Potentially dangerous object the object was detected as potentially dangerous but not infected (it can contain macros, for instance); the information should be taken as a warning only
- Reboot is required to finish the action the infected object cannot be removed, to remove it completely you have to restart your computer

Control buttons

There are three control buttons available in this dialog:

• View details - the button opens a new dialog window named Detailed object information:

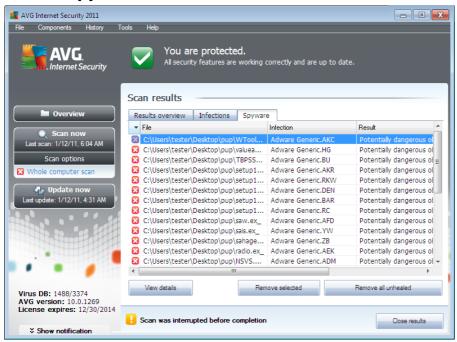


In this dialog you can find detailed information on the detected infectious object (e.g. infected object name and location, object type, SDK type, detection result and history of actions related to the detected object). Using the **Previous / Next** buttons you can view information on specific findings.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



11.7.3. Spyware Tab



The **Spyware** tab is only displayed in the **Scan results** dialog in if <u>spyware</u> 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 <u>spyware</u> (for details on specific viruses please consult the <u>Virus Encyclopedia</u> 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 <u>switched off the automatic healing option</u> in a specific scan settings)
 - o Healed the infected object was healed automatically and left in its original location
 - Moved to Virus Vault the infected object was moved to the <u>Virus Vault</u> 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 <u>PUP Exceptions</u> dialog of the advanced settings)
 - Locked file not tested the respective object is locked and AVG is therefore unable to scan it

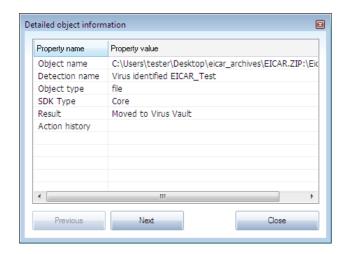


- Potentially dangerous object the object was detected as potentially dangerous but not infected (it can contain macros, for instance); the information is a warning only
- Reboot is required to finish the action the infected object cannot be removed, to remove it completely you have to restart your computer

Control buttons

There are three control buttons available in this dialog:

• View details - the button opens a new dialog window named Detailed 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 <u>Scan results</u> <u>overview</u> dialog

11.7.4. Warnings Tab

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



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

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

11.7.5. Rootkits Tab

The **Rootkits** tab displays information on rootkits detected during scanning if you have launched the **Anti-Rootkit scan**.

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

The structure of this tab is basically the same as the <u>Infections tab</u> or the <u>Spyware tab</u>.

11.7.6. Information Tab

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

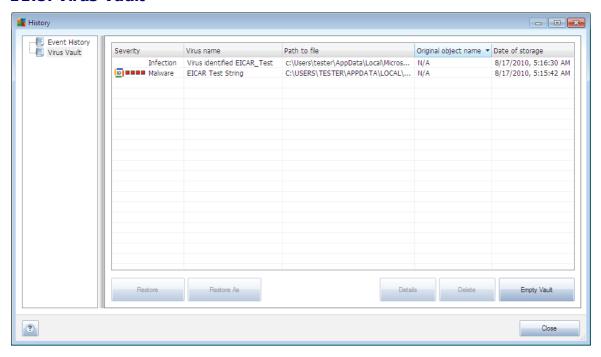
The severity *Information* can be reported for one of the following reasons:

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



- Hidden extension Files with hidden extension may appear to be e.g. pictures, but in fact
 they are executable files (e.g. picture.jpg.exe). The second extension is not visible in
 Windows by default, and AVG reports such files to prevent their accidental opening.
- *Improper file path* If some important system file is running from other than default path (e.g. winlogon.exe running from other than Windows folder), AVG reports this discrepancy. In some cases, viruses use names of standard system processes to make their presence less apparent in the system.
- **Locked file** The reported file is locked, thus cannot be scanned by AVG. This usually means that some file is constantly being used by the system (e.g. swap file).

11.8. Virus Vault



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

Severity - in case you decided to install the <u>Identity Protection</u> component within your AVG Internet Security 2011, a graphical identification of the respective finding severity on a four-levels scale from unobjectionable (u u u) up to very dangerous (u) will be



provided in this section; and the information on the infection type (based on their infective level - all listed objects can be positively or potentially infected)

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

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 synoptic overview of the threat details (what files/processes have been affected, characteristics of the process etc.). Please note that for all other items than detected by IDP, this button is greyed 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).



12. AVG Updates

Keeping your AVG up-to-date is crucial to ensure that all newly discovered viruses will be detected as soon as possible.

Since AVG updates are not released according to any fixed schedule but rather in reaction to amount and severity of new threats, it is recommended to check for new updates at least once a day or even more often. Only this way you can be sure your **AVG Internet Security 2011** is kept up-to-date also during the day.

12.1. Update Levels

AVG offers two update levels to select from:

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

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

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

12.2. Update Types

You can distinguish between two types of update:

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

12.3. Update Process

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

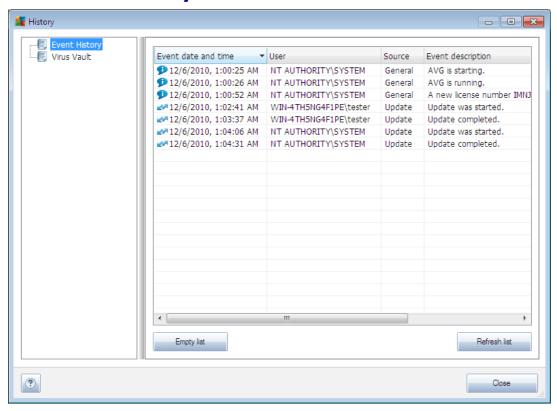
Once you start the update, AVG will first verify whether there are new update files available. If so, AVG starts their downloading and launches the update process itself. During the update process you will get redirected to the **Update** interface where you can view the process progressing in its graphical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



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



13. Event History



The *History* dialog is accessible from the <u>system menu</u> via the *History/Event History Log* item. Within this dialog you can find a summary of important events that occurred during **AVG Internet Security 2011** operation. *History* records the following types of events:

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

For each event, the following information are listed:

- Event date and time gives exact date and time the event occured
- User states who initiated the event
- **Source** gives the source component or other part of the AVG system that triggered the event



• Event description gives brief summary of what actually happened

Control buttons

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



14. FAQ and Technical Support

Should you have any sales or technical trouble with your **AVG Internet Security 2011** application, there are several ways to look for help. Please chose from the following options:

- **Get help online**: Right within the AVG application you can reach a dedicated customer support page on AVG website (http://www.avg.com/). Select the **Help / Get Help Online** main menu item to get redirected to AVG website with available support avenues. To proceed, please follow the instruction in the web page.
- AVG website Support Center. Alternatively, you can look up the solution to your problem
 on 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 Support Center / FAQ menu option. Again, all questions are divided in a well arranged way into sales, technical, and virus categories.
- About viruses & threats. A specific chapter 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 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.