## **Avira AntiVir Professional**

**User Manual** 



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### 1 Introduction

Your AntiVir program protects your computer against viruses, worms, Trojans, adware and spyware and other risks. In this manual these are referred to as viruses or malware (harmful software) and unwanted programs.

The manual describes the program installation and operation.

For further options and information, please visit our website:

http://www.avira.com

The Avira website lets you.....

- access information on other AntiVir desktop programs
- download the latest AntiVir desktop programs
- download the latest product manuals in PDF format
- download free support and repair tools
- access our comprehensive knowledge database and FAQs for troubleshooting
- access country-specific support addresses.

Your Avira Team

## 2 Icons and emphases

The following icons are used:

Icon / designation	Explanation
1	Placed before a condition which must be fulfilled prior to execution of an action.
•	Placed before an action step that you perform.
<b>→</b>	Placed before an event that follows the previous action.
Warning	Placed before a warning of the danger of critical data loss.
Note	Placed before a link to particularly important information or a tip which makes your AntiVir program easier to use.

The following emphases are used:

Emphasis	Explanation
Cursive	File name or path data.
	Displayed software interface elements (e.g. window heading, window field or options box).
Bold	Clicked software interface elements (e.g. menu item, section or button).

### 3 Product information

This chapter contains all information relevant to the purchase and use of your AntiVir product:

see Chapter: Delivery scope

- see Chapter: System requirements

see Chapter: Licensing

see Chapter:

AntiVir programs are comprehensive and flexible tools you can rely on to protect your computer from viruses, malware, unwanted programs and other dangers.

▶ Please note the following information:

#### Note

Loss of valuable data usually has dramatic consequences. Even the best virus protection program cannot provide one hundred percent protection from data loss. Make regular copies (Backups) of your data for security purposes.

#### Note

A program can only provide reliable and effective protection from viruses, malware, unwanted programs and other dangers if it is up-to-date. Make sure your AntiVir program is up-to-date with automatic updates. Configure the program accordingly.

### 3.1 Delivery scope

Your AntiVir program has the following functions:

- Control Center for monitoring, managing and controlling the entire program
- Central configuration with user-friendly standard and advanced options and context-sensitive help
- Scanner (on-demand scan) with profile-controlled and configurable scan for all known types of virus and malware
- Integration into the Windows Vista User Account Control allows you to carry out tasks requiring administrator rights.
- Guard (on-access scan) for continuous monitoring of all file access attempts
- ProActiv component for the permanent monitoring of program actions (for 32-bit system only, not available under Windows 2000)
- MailGuard (POP3 Scanner, IMAP Scanner and SMTP Scanner) for the permanent checking of emails for viruses and malware. Checking of email attachments is included
- WebGuard for monitoring data and files transferred from the Internet using the HTTP protocol (monitoring of ports 80, 8080, 3128)
- Integrated quarantine management to isolate and process suspicious files

- Rootkit protection for detecting hidden malware installed in your computer system (rootkits)
  - (Not available under Windows XP 64 bit)
- Direct access to detailed information on the detected viruses and malware via the Internet
- Simple and quick updates to the program, virus definitions, and search engine through Single File Update and incremental VDF updates via a web server on the Internet or an intranet
- User-friendly licensing in License Manager
- Integrated Scheduler for planning one-off or recurring jobs such as updates or scans
- Extremely high virus and malware detection via innovative scanning technology (scan engine) including heuristic scanning method
- Detection of all conventional archive types including detection of nested archives and smart extension detection
- High-performance multithreading function (simultaneous high-speed scanning of multiple files)
- Avira FireWall for protecting your computer from unauthorized access from the Internet or another network and from unauthorized access to the Internet/network by unauthorized users

### 3.2 System requirements

The system requirements are as follows:

- Computer Pentium or later, at least 266 MHz
- Operating system
- Windows XP, SP2 (32 or 64 bit) or
- Windows Vista (32 or 64 bit, SP 1)
- Windows 7 (32 or 64 bit)
- At least 150 MB of free hard disk memory space (more if using quarantine for temporary storage)
- At least 256 MB RAM under Windows XP
- At least 1024 MB RAM under Windows Vista, Windows 7
- For the program installation: Administrator rights
- For all installations: Windows Internet Explorer 6.0 or higher
- Internet connection where appropriate (see Installation)

### 3.3 Licensing and Upgrade

In order to be able to use your AntiVir product, you require a license. You thereby accept the license terms.

The license is issued via a digital license code in the form of the file hbedv.key. This digital license code is the key to your personal license. It contains exact details of which programs are licensed to you and for what period of time. A digital license code can therefore also contain the license for more than one product.

If you purchased your AntiVir program on the Internet, or via a program CD/DVD, the digital license code is sent to you by email. You can load the license key during installation of the program or install it later in License Manager.

### 3.3.1 License Manager

The Avira AntiVir Professional License Manager enables very simple installation of the Avira AntiVir Professional license.

### Avira AntiVir Professional License Manager Avira AntiVir Professional The selected file is an Avira AntiVir Professional license key file. You can now install this license into your Avira AntiVir Professional product. Please select the apropriate Avira AntiVir Professional installation into which you would like to have this license installed and click OK. Note: only those local Avira AntiVir Professional products for which this license key file contains a valid license are displayed. Valid until License **Destination Directory** 💦 Avira AntiVir Professional 31.12.2010 C:\Program Files\Avira\AntiVir < > Cancel

#### Avira AntiVir Professional License Manager

You can install the license by selecting the license file in your file manager or in the activation email with a double click and following the relevant instructions on the screen.

#### Note

The Avira AntiVir Professional License Manager automatically copies the corresponding license in the relevant product folder. If a license already exists, a note appears as to whether the existing license file is to be replaced. In this case the existing file is overwritten by the new license file.

### 4 Installation and uninstallation

This chapter contains information relating to the installation and uninstallation of your AntiVir program.

- see Chapter Installation: Conditions, Installation types, Install
- see Chapter Installation modules
- see Chapter Modification installation
- Installation and uninstallation on the network
- see Chapter Uninstallation: Uninstall

#### 4.1 Installation

Before installation, check whether your computer fulfils all the minimum system requirements. If your computer satisfies all requirements, you can install the AntiVir program.

#### Note

During the installation process you have the option of creating a restore point. A purpose of a restore point is to reset the operating system to its pre-installation status. If you want to use this option, ensure that the operating system permits the creation of a restore point:

Windows XP: System properties -> System restore: Disable the option **Disable system restore**.

Windows Vista/Windows 7: System properties -> Computer protection: In the **Protection settings** area, highlight the drive on which the system is installed and click the **Configure** button. In the **System protection** window, enable the option **System settings and restore previous file versions**.

#### Installation types

During installation you can select a setup type in the installation wizard:

#### **Express**

 Not all program components are installed. The following components are not installed:

Avira AntiVir ProActiv

Avira FireWall

- The program files are installed into a specified default folder under
   C:\Program Files.
- Your AntiVir program is installed with default settings. You have the option of defining custom settings using the configuration wizard.

#### User-defined

- You can choose to install individual program components (see Chapter Installation and uninstallation::Installation modules).
- A target folder can be selected for the program files to be installed.
- You can disable Create a desktop icon and program group in the Start menu.
- Using the configuration wizard, you can define custom settings for your AntiVir program and initiate a short system scan that is performed automatically after installation.

#### Before starting installation

- ▶ Close your email program. It is also recommended to end all running applications.
- Make sure that no other virus protection solutions are installed. The automatic protection functions of various security solutions may interfere with each other.
- ► Establish an Internet connection: The Internet connection is necessary for performing the following installation steps:
- ▶ Downloading the current program file and scan engine as well as the latest virus definition files via the installation program (for Internet-based installation)
- ▶ Where appropriate, carrying out a update after completed installation
- ► Save the license file hbedv.key on your computer system if you want to activate your AntiVir program.

#### Note

Internet-based installation:

For the Internet-based installation of the program, an installation program is provided that loads the current program file prior to installation by the Avira GmbH web servers. This process ensures that your AntiVir program is installed with the latest virus definition file.

Installation with an installation package:

The installation package contains both the installation program and all necessary program files. No language selection for your AntiVir program is available for installation with an installation package. We recommend that you carry out an update of the virus definition file after installation.

#### Install

The installation program runs in self-explanatory dialog mode. Every window contains a certain selection of buttons to control the installation process.

The most important buttons are assigned the following functions:

- **OK:** Confirm action.

Abort: Abort action.

Next: Go to next step.

- **Back:** Go to previous step.

Installing your AntiVir program:

#### Note

The following actions for disabling the Windows FireWall only apply to the Windows XP operating system.

▶ Start the installation program by double-clicking the installation file you have downloaded from the Internet or insert the program CD.

#### Internet-based installation

The dialog box *Welcome*... appears.

Click **Next** to continue with the installation.

The dialog box *Language selection* appears.

Select the language you want to use to install your AntiVir program and confirm your language selection by clicking **Next**.

The dialog box *Download* appears. All files necessary for installation are downloaded from the Avira GmbH web servers. The *Download* window closes after conclusion of the download.

#### Installation with an installation package

The installation wizard opens with the dialog box Avira AntiVir Professional.

► Click *Accept* to begin the installation.

The installation file is extracted. The installation routine is started.

The dialog box Welcome... appears.

► Click **Next**.

#### Continuing Internet-based installation and installation with an installation package

The dialog box with the license agreement appears.

Confirm that you accept the license agreement and click Next.

The dialog box *Generate serial number* appears.

▶ Where appropriate, confirm that a random serial number has been generated and transmitted during update, and click **Next**.

The dialog box *Select installation type* appears.

► Enable the option **Express** or **User-defined**. If you want to create a restore point, enable the **Creating system restore point** option. Click **Next** to confirm your settings.

#### User-defined installation

The dialog box *Select destination directory* appears.

► Confirm the specified destination directory by clicking **Next**.

- OR -

Use the **Browse** button to select a different destination directory and confirm by clicking **Next**.

The dialog box *Install components* appears:

► Enable or disable the required components and confirm by clicking **Next**.

If you have chosen to install the ProActiv component, the AntiVir ProActiv Community window appears. You have the option of confirming participation in the Avira AntiVir ProActiv Community: If this option is enabled, Avira AntiVir ProActiv sends data on suspicious programs detected by the ProActiv component to the Avira Malware Research Center. The data is used only for an advanced online scan and to expand and refine detection technology. You can use the **further information** link to obtain more details on the expanded online scan.

Enable or disable participation in the AntiVir ProActiv Community and confirm by clicking Next.

In the following dialog box you can decide whether to create a desktop shortcut and/or a program group in the Start menu.

#### ► Click **Next**.

#### Resume: Express installation und user-defined installation

The dialog box *Install license* appears:

▶ Go to the directory in which you have saved the license file, read the message in the dialog box and confirm by clicking **Next**.

The license file is copied and the components are installed and started.

In the following dialog box you can choose whether to open the Readme file after installation is completed and whether to restart your computer.

Agree where appropriate and complete the installation by clicking Finish.

The installation wizard is closed.

#### Resume: User-defined installation Configuration wizard

If you choose user-defined installation, the configuration wizard is opened in the following step. The configuration wizard enables you to define custom settings for your AntiVir program.

Click **Next** in the welcome window of the configuration wizard to begin configuration of the program.

The *Configure AHeAD* dialog box enables you to select a detection level for the AHeAD technology. The detection level selected is used for the Scanner (On-demand scan) and Guard (On-access scan) AHeAD technology settings.

Select a detection level and continue the installation by clicking Next.

In the following dialog box *Select extended threat categories*, you can adapt the protective functions of your AntiVir program to the threat categories specified.

▶ Where appropriate, activate further threat categories and continue the installation by clicking *Next*.

If you have selected the AntiVir FireWall installation module, the *FireWall security level* dialog box appears. You can define whether the Avira FireWall should permit external access to enabled resources as well as network access by applications of trusted companies.

▶ Enable the required options and continue the configuration by clicking *Next*.

If you have selected the AntiVir Guard installation module, the *Guard start mode* dialog box appears. You can stipulate the Guard start time. At each computer reboot, the Guard will be started in the start mode specified.

#### Note

The specified Guard start mode is saved in the registry and cannot be changed via the Configuration.

▶ Enable the required option and continue the configuration by clicking *Next*.

In the following *Select email settings* dialog box, you can define the Server settings for sending emails. Your AntiVir program uses SMPT to send emails send email alerts.

▶ Where appropriate, make the necessary adjustments to the server settings and continue the configuration by clicking *Next*.

In the following *System scan* dialog box, a short system scan can be enabled or disabled. The short system scan is performed after the configuration has been completed and before the computer is rebooted, and scans running programs and the most important system files for viruses and malware.

► Enable or disable the *Short system scan* option and continue the configuration by clicking *Next*.

In the following dialog box, you can complete the configuration by clicking Finish

► Click *Finish* to complete the configuration.

The specified and selected settings are accepted.

If you have enabled the *Short system scan* option, the Luke Filewalker window opens. The Scanner performs a short system scan.

#### Resume: Express installation und user-defined installation

If you selected the **Restart computer** option in the final installation wizard, the computer reboots.

After the computer restart the Readme file is displayed if you selected the **Show Readme.txt** option in the installation wizard.

After a successful installation, we recommend that you check the program is up-to-date in the Control Center under *Overview::Status*.

- ▶ Where appropriate, perform an update to ensure the virus definition file is up-to-date
- ► Then perform a complete system scan.

### 4.2 Change installation

You have the option of adding or removing individual program components of the current AntiVir program installation (see Chapter Installation and uninstallation::Installation modules)

If you wish to add or remove modules of the current installation, you can use the option **Add or Remove Programs** in the **Windows control panel** to **Change/Remove** programs.

Select your AntiVir program and click **Change**. In the welcome dialog of the program, select the option **Modify**. You will be guided through the installation changes.

#### 4.3 Installation modules

In a user-defined installation or a change installation, the following installation modules can be selected, added or removed.

#### - AntiVir Professional

This module contains all components required for successful installation of your AntiVir program.

#### AntiVir Guard

The AntiVir Guard runs in the background. It monitors and repairs, if possible, files during operations such as open, write and copy in on-access mode. Whenever a user carries out a file operation (e.g. load document, execute, copy), the AntiVir program automatically scans the file. Renaming a file does not trigger a scan by AntiVir Guard.

#### AntiVir ProActiv

The ProActiv component monitors application actions and alerts users to suspicious application behavior. This behavior-based recognition enables you to protect yourself against unknown malware. The ProActiv component is integrated into AntiVir Guard.

#### - AntiVir MailGuard

MailGuard is the interface between your computer and the email server from which your email program (email client) downloads emails. MailGuard is connected as a so-called proxy between the email program and the email server. All incoming emails are routed through this proxy, scanned for viruses and unwanted programs and forwarded to your email program. Depending on the configuration, the program processes the affected emails automatically or asks the user for a certain action.

#### AntiVir WebGuard

When surfing the Internet, you are using your web browser to request data from a web server. The data transferred from the web server (HTML files, script and image files, Flash files, video and music streams, etc.) will normally be moved directly into the browser cache for display in the web browser, meaning that an on-access scan as performed by AntiVir Guard is not possible. This could allow viruses and unwanted programs to access your computer system. WebGuard is what is known as an HTTP proxy which monitors the ports used for data transfer (80, 8080, 3128) and scans the transferred data for viruses and unwanted programs. Depending on the configuration, the program may process the affected files automatically or prompt the user for a specific action.

#### – Avira FireWall:

Avira FireWall controls communication to and from your computer. It permits or denies communications based on security policies.

#### AntiVir Rootkit Protection

AntiVir Rootkit Protection checks whether software is already installed on your computer that can no longer be detected with conventional methods of malware protection after penetrating the computer system.

#### Shell Extension

The Shell Extension generates an entry 'Scan selected files with AntiVir' in the context menu of the Windows Explorer (right-hand mouse button). With this entry you can directly scan files or directories.

#### 4.4 Uninstallation

If you wish to remove the AntiVir program from your computer, you can use the option **Add or Remove Programs** to **Change/Remove** programs in the Windows Control Panel.

To uninstall your AntiVir program (e.g. in Windows XP and Windows Vista):

- ▶ Open the **Control Panel** via the Windows **Start** menu.
- ▶ Double click on **Programs** (Windows XP: **Software**).
- ► Select your AntiVir program in the list and click **Remove**.

You will be asked if you really want to remove the program.

Click **Yes** to confirm.

You will be asked if you want to re-enable Windows FireWall (the Avira FireWall is disabled).

► Click **Yes** to confirm.

All components of the program are removed.

▶ Click on **Finish** to complete uninstallation.

Where appropriate, a dialog box appears recommending that your computer be restarted.

▶ Click **Yes** to confirm.

The AntiVir program is uninstalled and all directories, files and registry entries for the program are deleted when your computer is restarted.

#### 4.5 Installation and uninstallation on the network

To simplify installation of AntiVir programs on a network of multiple client computers for the system administrator, your AntiVir program has a special procedure for the initial installation and the change installation.

For automatic installation, the setup program works with the control file setup.inf. The setup program (presetup.exe) is contained in the program's installation package. Installation is started with a script or batch file and all necessary information is obtained from the control file. The script commands therefore replace the usual manual inputs during installation.

#### Note

Please note that a license file is obligatory for initial installation on the network.

#### Note

Please note that an installation package for the AntiVir program is required for installation via a network. An installation file for Internet-based installation cannot be used.

AntiVir programs can be easily shared on the network with a server login script or via SMS.

For information on installation and uninstallation on the network:

- see Chapter: Command line parameter for the setup program
- see Chapter: Parameter of the file setup.inf
- see Chapter: Installation on the network
- see Chapter: Uninstallation on the network

#### Note

The AntiVir Security Management Center provides another easy option for the installation and uninstallation of AntiVir programs on the network. The AntiVir Security Management Center enables the remote installation and maintenance of AntiVir products on the network. For further information, please refer to our website . http://www.avira.com

#### 4.5.1 Installation on the network

The installation can be script-controlled in batch mode.

The setup is suitable for the following installations:

- Initial installation via the network (unattended setup)
- Installation on single-user computers
- ► Change installation and update

#### Note

We recommend that you test automatic installation before the installation routine is implemented on the network.

To install AntiVir programs on the network automatically:

You must have administrator rights (also required in batch mode)

- ► Configure the parameter of the file *setup.inf* and save the file.
- ▶ Begin installation with the parameter /inf or integrate the parameter into the login script of the server.
  - Examples: presetup.exe /inf="c:\temp\setup.inf"
    The installation starts automatically.

#### 4.5.2 Uninstallation on the network

To uninstall AntiVir programs on the network automatically:

You must have administrator rights (also required in batch mode)

► Start the uninstallation of with the parameter/remsilent or /remsilentaskreboot or integrate the parameter into the login script of the server.

You can also specify the parameter for the uninstallation log.

• Examples: preetup.exe /remsilent /unsetuplog="c:\logfiles\unsetup.log" The uninstallation starts automatically.

#### Note

The uninstallation setup program should be started on the PC on which the AntiVir program is to be uninstalled; do not start the setup program from a network drive.

### 4.5.3 Command line parameter for the setup program

All path or file data must be placed in "..."

The following parameter is possible for installation:

- /inf

The setup program starts with the script mentioned and retrieves all parameters required.

Example: presetup.exe /inf="c:\temp\setup.inf"

The following parameters are possible for the uninstallation:

- /remove

The setup program uninstalls the AntiVir program.

Example: presetup.exe /remove

- /remsilent

The setup program uninstalls the AntiVir program without displaying dialogs. The computer is restarted after uninstallation.

Example: presetup.exe /remsilent

- /remsilentaskreboot

The setup program uninstalls the AntiVir program without displaying dialogs and requests a computer restart after uninstallation.

Example: presetup.exe /remsilentaskreboot

The following parameter is available as an option for the uninstallation log:

- /unsetuplog

All actions during uninstallation are logged.

```
Example: presetup.exe /remsilent
/unsetuplog="c:\logfiles\unsetup.log"
```

### 4.5.4 Parameter of the file setup.inf

In the control file setup.inf, you can set the following parameters in the [DATA] field for the automatic installation of the AntiVir program. The sequence of the parameters is unimportant. If a parameter setting is missing or wrong, the setup routine is aborted and an error message is displayed.

- DestinationPath

Destination path in which the program is installed. It has to be included to the script. Please note that the setup includes company name and product name automatically. Environment variables can be used.

Example: DestinationPath=%PROGRAMFILES%
produces the installation path C:\Programme\Avira\AntiVir Desktop

- ProgramGroup

Creates a program group for all users of the computer in the Windows Start menu.

1: Create program group

0: Do not create program group

Example: ProgramGroup=1

#### - DesktopIcon

Creates a shortcut desktop icon for all users of the computer on the desktop.

- 1: Create desktop icon
- 0: Do not create desktop icon

Example: DesktopIcon=1

#### - ShellExtension

Registers the shell extension in the registry. With the shell extension, files or directories can be scanned for viruses and malware via the context menu of the right-hand mouse button.

- 1: Register shell extension
- 0: Do not register shell extension

Example: ShellExtension=1

#### - Guard

Installs the AntiVir Guard (on-access Scanner).

- 1: Install AntiVir Guard
- 0: Do not install AntiVir Guard

Example: Guard=1

#### - MailScanner

Installs the AntiVir MailGuard.

- 1: Install AntiVir MailGuard
- 0: Do not install MailGuard

Example: MailScanner=1

#### - KeyFile

Specify the path for the license file that is copied during installation. For initial installation: obligatory. The file name must be specified completely (fully qualified). (For a change installation: optional.)

Example: KeyFile=D:\inst\license\hbedv.key

#### - ShowReadMe

Displays the readme.txt file after installation.

- 1: Display file
- 0: Do not display file

Example: ShowReadMe=1

#### RestartWindows

Restarts the computer after installation. This entry has a higher priority than ShowRestartMessage.

1: Restart computer

0: Do not restart computer

Example: RestartWindows=1

#### ShowRestartMessage

Displays information during the setup before carrying out an automatic restart.

0: Do not display information

1: Display information

Example: ShowRestartMessage=1

#### - SetupMode

Not required for initial installation. The setup program knows if an initial installation has been performed. Specify the type of installation. If an installation is available already, it has to be indicated in the SetupMode whether this installation is an update only or a change installation (reconfiguration) or an uninstallation.

Update: Updates an existing installation. In this case configuration parameters, for example Guard, are ignored.

Modify: Modifies (reconfigures) an existing installation. In the process no files are copied into the destination path.

Remove: Uninstall your AntiVir program from the system.

Example: SetupMode=Update

#### - AVWinIni (optional)

Specifies the destination path for the configuration file that may be copied during installation. The file name must be specified completely (fully qualified).

Example: AVWinIni=d:\inst\config\avwin.ini

#### - Password

This option assigns the password that was set for the (modification) installation and uninstallation to the setup routine. The entry is only scanned by the setup routine when a password has been set. If a password has been set and the password parameter is missing or wrong, the setup routine is aborted.

Example: Password=Password123

#### - WebGuard

Installs the AntiVir WebGuard.

1: Install AntiVir WebGuard

0: Do not install AntiVir WebGuard

Example: WebGuard=1

#### - RootKit

Installs the AntiVir rootkit protection module. Without AntiVir rootkit protection the Scanner will not be able to scan for rootkits on the system!

- 1: Install AntiVir Rootkit Protection
- 0: Do not install AntiVir Rootkit Protection

Example: RootKit=1

#### - HIPS

Installs the AntiVir ProActiv component. AntiVir ProActiv is a pattern-based detection technology that enables as yet unknown malware to be detected.

- 1: Install ProActiv
- 0: Do not install ProActiv

Example: HIPS=1

#### - FireWall

Installs the Avira FireWall component. Avira FireWall monitors and controls the incoming and outgoing data traffic on your computer system and protects your computers from threats originating from the Internet or other network environments.

- 1: Install firewall
- 0: Do not install firewall

Example: FireWall=1

### 5 Overview of AntiVir Professional

This chapter contains an overview of the functionality and operation of your AntiVir program.

- see Chapter Interface and operation
- see Chapter How to…?

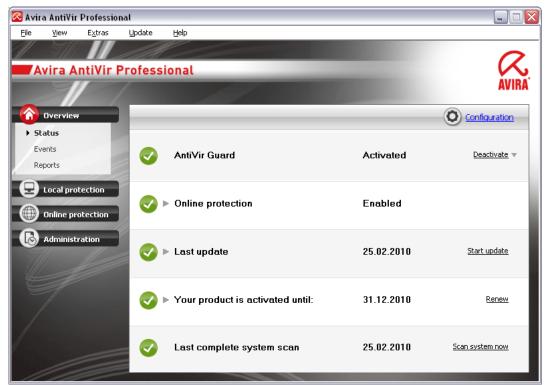
### 5.1 User interface and operation

You operate your AntiVir program via three program interface elements:

- Control Center: monitoring and controlling the AntiVir program
- Configuration: Configuring the AntiVir program
- Tray Icon in the system tray of the taskbar: Opening the Control Center and other functions

#### 5.1.1 Control Center

The Control Center is designed to monitor the protection status of your computer systems and control and operate the protection components and functions of your AntiVir program.



The Control Center window is divided into three areas: The **Menu bar**, the **Navigation bar** and the detail window **View**:

 Menu bar: In the Control Center menu bar, you can access general program functions and information on the program.

- Navigation area: In the navigation area, you can easily swap between the
  individual sections of the Control Center. The individual sections contain
  information and functions of the program components and are arranged in the
  navigation bar according to activity. Example: Activity Overview Section Status.
- View: This window shows the section selected in the navigation area. Depending
  on the section, you will find buttons to execute functions and actions in the
  upper bar of the detail window. Data or data objects are displayed in lists in the
  individual sections. You can sort the lists by clicking in the box defining how you
  wish to sort the list.

#### Starting and closing of Control Center

To start the Control Center the following options are available:

- Double-click the program icon on your desktop
- Via the program entry in the Start | Programs menu.
- Via the Tray Icon of your AntiVir program.

Close the Control Center via the menu command **Close** in the menu **File** or by clicking on the close tab in the Control Center.

#### **Operate Control Center**

To navigate in the Control Center

► Select an activity in the navigation bar.

The activity opens and other sections appear. The first section of the activity is selected and displayed in the view.

- ▶ If necessary, click another section to display this in the detail window.
  - OR -
- ▶ Select a section via the *View* menu.

#### Note

You can activate the keyboard navigation in the menu bar with the help of the [ALT] key. If navigation is activated, you can move within the menu with the arrow keys. With the Return key you activate the active menu item.

To open or close menus in the Control Center, or to navigate within the menus, you can also use the following key combinations: [Alt] + underlined letter in the menu or menu command. Hold down the [Alt] key if you want to access a menu, a menu command or a submenu.

To process data or objects displayed in the detail window:

- highlight the data or object you wish to edit.
  To highlight multiple elements (elements in columns), hold down the control key or the shift key while selecting the elements.
- Click the appropriate button in the upper bar of the detail window to edit the object.

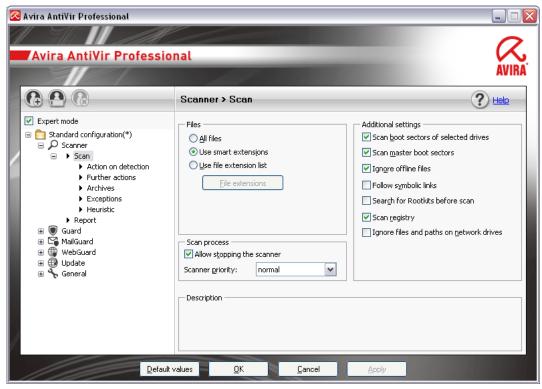
#### **Control Center overview**

 Overview: In Overview you will find all sections with which you can monitor the functioning of your AntiVir program.

- The **Status** section lets you see at a glance which program modules are active and provides information on the last update performed. You can also see whether you own a valid license.
- The Events section enables you to view events generated by certain program modules.
- Die Reports section enables you to view the results of actions performed.
- Local protection: InLocal protection you will find the components for checking the files on your computer system for viruses and malware.
- The Scan section enables you to easily configure and start an on-demand scan. Predefined profiles enable you to run a scan with already adapted standard options. In the same way it is possible to adapt the scan for viruses and unwanted programs to your personal requirements with the help of manual selection (not saved) or by creating user-defined profiles.
- The Guard section displays information on scanned files, as well as other statistical data, which can be reset at any time, and enables access to the report file. More detailed information on the last virus or unwanted program detected can be obtained practically "at the push of a button".
- Online protection: In Online protection you will find the components to protect your computer system against viruses and malware from the Internet, and against unauthorized network access.
- The MailGuard section shows you all the emails scanned by MailGuard, their properties and other statistical data.
- The WebGuard section displays information on scanned URLs and detected viruses, as well as other statistical data, which can be reset at any time and enables access to the report file. More detailed information on the last virus or unwanted program detected can be obtained practically "at the push of a button".
- The FireWall section enables you to configure the basic settings for the Avira FireWall. In addition, the current data transfer rate and all active applications using a network connection are displayed.
- Management: In Management you will find tools for isolating and managing suspicious or infected files, and for planning recurring tasks.
- The Quarantine section contains the so-called quarantine manager. This is the
  central point for files already placed in quarantine or for suspect files that you
  would like to place in quarantine. It is also possible to send a selected file to the
  Avira Malware Research Center by email.
- The Scheduler section enables you to configure scheduled scanning and update jobs and to adapt or delete existing jobs.

### 5.1.2 Configuration

You can define settings for your AntiVir program in the Configuration. After installation, your AntiVir program is configured with standard settings, ensuring optimal protection for your computer system. However, your computer system or your specific requirements for your AntiVir program may mean you need to adapt the protective components of the program.



The Configuration opens a dialog box: You can save your configuration settings via the OK or Apply buttons, delete your settings by clicking the Cancel button or restore your default configuration settings using the Default values button. You can select individual configuration sections in the left-hand navigation bar.

#### Accessing the Configuration

You have several options for accessing the configuration:

- via the Windows control panel.
- via the Windows Security Center from Windows XP Service Pack 2.
- Via the Tray Icon of your AntiVir program.
- in the Control Center via the menu item Extras | Configuration.
- in the Control Center via the Configuration button.

#### Note

If you are accessing configuration via the **Configuration** button in the Control Center, go to the Configuration register of the section which is active in the Control Center. Expert mode must be activated to select individual configuration registers. In this case, a dialog appears asking you to activate expert mode.

#### Configuration operation

Navigate in the configuration window as you would in Windows Explorer:

- ► Click an entry in the tree structure to display this configuration section in the detail window.
- ▶ Click the plus symbol in front of an entry to expand the configuration section and display configuration subsections in the tree structure.
- ► To hide configuration subsections, click on the minus symbol in front of the expanded configuration section.

#### Note

To enable or disable Configuration options and use the buttons, you can also use the following key combinations: [Alt] + underlined letter in the option name or button description.

#### Note

All configuration sections are only displayed in expert mode. Activate expert mode to view all configuration sections. Expert mode can be protected by a password that must be defined during activation.

If you want to confirm your Configuration settings:

#### Click **OK**.

The configuration window is closed and the settings are accepted.

- OR -

#### ► Click **Accept**.

The settings are applied. The configuration window remains open.

If you want to finish configuration without confirming your settings:

#### Click Cancel.

The configuration window is closed and the settings are discarded.

If you want to restore all configuration settings to default values:

#### Click Restore defaults.

All settings of the configuration are restored to default values. All amendments and custom entries are lost when default settings are restored.

#### Configuration profiles

You have the option of saving your configuration settings as configuration profiles. In the configuration profile, i.e. of a configuration, all configuration options are saved in a group. The configuration is displayed in the navigation bar as a node. You can add other configurations to the default configuration. You also have the option of defining rules for switching to a specific configuration:

When switching configuration using a rule-based procedure, the configuration can be linked to the use of a LAN or Internet connection (identification via default gateway). In this way, configuration profiles can be created for different laptop usage scenarios:

- Use on company networks: Update via intranet server, WebGuard disabled
- Use at home: Update via default Avira GmbH web server, WebGuard enabled

If no switching rules have been defined, you can switch to a configuration manually in the context menu of the tray icon. You can add, rename, delete, copy or restore configurations and define rules for switching configurations using the buttons in the navigation bar, or using commands from the context menu in the configuration section.

#### Note

Automatic switching to another configuration is not supported in Windows 2000. No rules for switching configurations can be defined in Windows 2000.

#### Overview of configuration options

The following configuration options are available:

Scanner: Configuration of on-demand scan

Scan options

Action on detection

File scan options

On-demand scan exceptions

On-demand scan heuristics

Report function setting

- **Guard**: Configuration of on-access scan

Scan options

Action on detection

On-access scan exceptions

On-access scan heuristics

Report function setting

- **MailGuard**: Configuration of MailGuard

Scan options: Enable the monitoring of POP3 accounts, IMAP accounts, outgoing emails (SMTP)

Actions on malware

MailGuard scan heuristics

MailGuard scan exceptions

Configuration of cache, empty cache

Configuration of a footer in sent emails

Report function setting

- **WebGuard**: Configuration of WebGuard

Scan options, enabling and disabling the WebGuard

Action on detection

Blocked access: Unwanted file types and MIME types, Web filter for known unwanted URLS (malware, phishing, etc.)

WebGuard scan exceptions: URLs, file types, MIME types

WebGuard heuristics

Report function setting

- **FireWall**: Configuration of the FireWall

Adapter rule setting

User-defined application rule settings

List of trusted providers (exceptions for network access by applications)

Expanded settings: Timeout for rules, lock Windows host file, stop Windows FireWall, notifications

Popup settings (alerts for network access by applications)

#### – General:

Configuration of email using SMTP

Extended risk categories for on-demand and on-access scan

Password protection for access to the Control Center and the Configuration

Security: Update status display, complete system scan status display, product protection

WMI: Enable WMI support

Event log configuration

Configuration of report functions

Setting of directories used

Update: Configuration of connection to download server, download via Web server or fileserver), set-up of product updates

Alerts: Configuration of email alerts for component(s):

Scanner Guard Updater

Configuration of network alerts for the component(s) Scanner, Guard

Configuration of acoustic alerts when malware is detected

#### 5.1.3 Tray icon

After installation, you will see the tray icon of your AntiVir program in the system tray of the taskbar:

Icon	Description
R	AntiVir Guard is enabled and the FireWall is enabled
R	AntiVir Guard is disabled and the FireWall is disabled

The tray icon displays the status of the Guard and the FireWall service.

Central functions of your AntiVir program can be quickly accessed via the context menu of the tray icon. To open the context menu, click the tray icon with the right-hand mouse button.

#### Entries in the context menu

- Activate AntiVir Guard: Enables or disables the AntiVir Guard.
- **Enable AntiVir MailGuard**:. Enables or disables the AntiVir MailGuard.
- **Enable AntiVir WebGuard**: Enables or disables the AntiVir WebGuard.
- FireWall:
- Enable FireWall: Enables or disables the FireWall
- Block all traffic: Enabled: Blocks all data transfers except transfers to the host computer system (Local Host/IP 127.0.0.1).
- Enable game mode: Enables or disables the mode:
   Enabled: When activated, all defined adapter and application rules apply.
   Applications for which no rule is defined are permitted network access and no pop-up window is opened.
- Start AntiVir: Opens the Control Center.

- **Configure AntiVir**: Opens the Configuration
- **Start update** Starts an update.
- Select configuration: Opens a submenu with the available configuration
  profiles. Click on a configuration to activate this configuration. The menu
  command is disabled if you have already defined rules for automatic switching to
  a configuration.
- Help: opens the Online Help.
- About AntiVir Professional: Opens a dialog box with information on your AntiVir program: Product information, Version information, License information.
- Avira on the Internet: Opens the Avira web portal on the Internet. The
  condition for this is that you have an active connection to the Internet.

#### 5.2 How to...?

#### 5.2.1 Activate license

#### To activate your AntiVir program's license:

Activate your license for your AntiVir product with the license file hbedv.key. You can obtain the license file by email from Avira GmbH. The license file contains the license for all products that you have ordered in one order process.

If you have not yet installed your AntiVir program:

- ▶ Save the license file to a local directory on your computer.
- ► Install your AntiVir program.
- ▶ During installation, enter the save location of the license file.

If you have already installed your AntiVir program:

- ▶ Double-click the license file in File Manager or in the activation email and follow the on-screen instructions when License Manager opens.
  - OR -
- ► In your AntiVir program's Control Center, select the menu item Help / Load license file...

#### Note

In Windows Vista the User Account Control dialog box appears. Log in as administrator if appropriate. Click **Continue**.

► Highlight the license file and click **Open**.

A message appears.

Click **OK** to confirm.

The license is activated.

► If necessary, restart your system.

### 5.2.2 Perform automatic updates

To create a job with the AntiVir Scheduler to update your AntiVir program automatically:

- ▶ In the Control Center, select the section **Management :: Scheduler**.
- ► Click the \*\*Create new job with the wizard icon.

The dialog box  $\it Name\ and\ description\ of\ job\ appears.$ 

- Give the job a name and, where appropriate, a description.
- ► Click **Next**.

The dialog box *Type of job* is displayed.

- ► Select **Update job** from the list.
- Click Next.

The dialog box *Time of job* appears.

- ► Select a time for the update:
  - Immediately
  - Daily
  - Weekly
  - Interval
  - Single
  - Login

#### Note

We recommend regular and frequent updates. The recommended update interval is: 60 minutes.

- ▶ Where appropriate, specify a date according to the selection.
- ▶ Where appropriate, select additional options (availability depends on type of job):
  - Also start job when Internet connection is established

In addition to the defined frequency, the job is performed when an Internet connection is set up.

• Repeat job if the time has already expired

Past jobs are performed that could not be performed at the required time, for example because the computer was switched off.

Click **Next**.

The dialog box *Select display mode* appears.

- Select the display mode of the job window:
  - **Minimize**: progress bar only
  - Maximize: Entire job window
  - **Hide**: No job window
- Click Finish.

Your newly created job appears on the start page of the **Manager :: Scan** section with the status activated (check mark).

▶ Where appropriate, deactivate jobs that are not to be performed.

Use the following icons to further define your jobs:



View properties of a job



Modify job
Delete job





Start job



Stop job

#### 5.2.3 Start a manual update

You have various options for starting an update manually: When an update is started manually, the virus definition file and scan engine are always updated. A product update can only take place if you have activated the option Download and automatically install product updates in the configuration under General:: Update

To start an update of your AntiVir program manually:

With the right-hand mouse button, click the AntiVir tray icon in the taskbar. A context menu appears.

Select **Start update**.

The *Updater* dialog box appears.

- OR -
- In the Control Center, select the section **Overview** :: **Status**.
- In the *Last update* field, click on the **Start update** link.

The Updater dialog box appears.

- OR -
- In the Control Center, in the **Update** menu, select the menu command *Start update*. The Updater dialog box appears.

#### Note

We recommend regular automatic updates. The recommended update interval is: 60 minutes.

#### Note

You can also carry out a manual update directly via the Windows security center.

#### 5.2.4 On-demand scan: Using a scan profile to scan for viruses and malware

A scan profile is a set of drives and directories to be scanned.

The following options are available for scanning via a scan profile:

Use predefined scan profile

if the predefined scan profile corresponds to your requirements.

Customize and apply scan profile (manual selection)

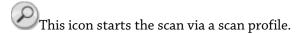
if you want to scan with a customized scan profile.

Create and apply new scan profile

if you want to create your own scan profile.

Depending on the operating system, various icons are available for starting a scan profile:

- In Windows XP and 2000:



#### In Windows Vista:

In Microsoft Windows Vista, the Control Center only has limited rights at the moment, e.g. for access to directories and files. Certain actions and file accesses can only be performed in the Control Center with extended administrator rights. These extended administrator rights must be granted at the start of each scan via a scan profile.

This icon starts a limited scan via a scan profile. Only directories and files that Windows Vista has granted access rights to are scanned.

This icon starts the scan with extended administrator rights. After confirmation, all directories and files in the selected scan profile are scanned.

To scan for viruses and malware with a scan profile:

- ► Go to Control Center and select the section **Local protection::Scan**.
  - Predefined scan profiles appear.
- ► Select one of the predefined scan profiles.
  - -OR-
- ▶ Adapt the scan profile *Manual selection*.
  - -OR-
- ► Create a new scan profile
- Click the icon (Windows XP: or Windows Vista: ).
- ▶ The *Luke Filewalker* window appears and an on-demand scan is started.

When the scan is completed, the results are displayed.

If you want to adapt a scan profile:

- ▶ In the scan profile, expand **Manual Selection** the file tree so that all the drives and directories you want to scan are open.
  - Click the + icon: The next directory level is displayed.
  - Click the icon: The next directory level is hidden.
- ► Highlight the nodes and directories you want to scan by clicking on the relevantboxof the appropriate directory level.

The following options are available for selecting directories:

- Directory, including sub-directories (black check mark)
- Directory excluding sub-directories (green check mark)
- Sub-directories of one directory only (grey check mark, sub-directories have black check marks)

• No directory (no check mark)

If you want to create a new scan profile:

Click the icon Create new profile.

The profile New profile appears below the profiles previously created.



- lacktriangle Where appropriate, rename the scan profile by clicking on the icon lacktriangle
- ► Highlight the nodes and directories to be saved by clicking the check box of the respective directory level.

The following options are available for selecting directories:

- Directory, including sub-directories (black check mark)
- Directory excluding sub-directories (green check mark)
- Sub-directories of one directory only (grey check mark, sub-directories have black check marks)
- No directory (no check mark)

# 5.2.5 On-demand scan: Scan for viruses and malware using Dragamp; Drop

To scan for viruses and malware systematically using Drag&Drop:

The Control Center of your AntiVir program has been opened.

- ► Highlight the file or directory you want to scan.
- Use the left-hand mouse button to drag the highlighted file or directory into the Control Center.

The Luke Filewalker window appears and an on-demand scan is started.

When the scan is completed, the results are displayed.

# 5.2.6 On-demand scan: Scan for viruses and malware via the context menu

To scan for viruses and malware systematically via the context menu:

Click with the right-hand mouse button (e.g. in Windows Explorer, on the desktop or in an open Windows directory) on the file or directory you want to scan.

The Windows Explorer context menu appears.

▶ Select **Scan selected files with AntiVir** in the context menu.

The Luke Filewalker window appears and an on-demand scan is started.

When the scan is completed, the results are displayed.

### 5.2.7 On-demand scan: Automatically scan for viruses and malware

#### Note

After installation, the scan job *Full system scan* is created in the Scheduler: A complete system scan is automatically performed at a recommended interval.

To create a job to automatically scan for viruses and malware:

- ▶ In the Control Center, select the section **Management:: Scheduler**.
- Click the icon 🔐 .

The dialog box *Name and description of job* appears.

- ▶ Give the job a name and, where appropriate, a description.
- ► Click **Next**.

The dialog box *Type of job* appears.

- ▶ Select **Scan job**.
- Click Next.

The dialog box *Select profile* appears.

- Select the profile to be scanned.
- ► Click **Next**.

The dialog box *Time of job* appears.

- ► Select a time for the scan:
  - Immediately
  - Daily
  - Weekly
  - Interval
  - Single
  - Login
- ▶ Where appropriate, specify a date according to the selection.
- ► Where appropriate, select the following additional options (availability depends on job type):

#### • Repeat job if the time has already expired

Past jobs are performed that could not be performed at the required time, for example because the computer was switched off.

Click Next.

The dialog box *Select display mode* appears.

- ► Select the display mode of the job window:
  - Minimize: progress bar only
  - Maximize: Entire job window
  - **Hide**: No job window
- ▶ Select the *Shut down computer* option if you want the computer to shut down automatically when the scan is finished. This option is only available if the display mode is set to minimized or maximized.
- ► Click Finish.

Your newly created job appears on the start page of the *Manager* :: *Scheduler* section with the status activated (check mark).

▶ Where appropriate, deactivate jobs that are not to be performed.

Use the following icons to further define your jobs:



View properties of a job



Modify job



Delete job



Start job



Stop job

### 5.2.8 On-demand scan: Targeted scan for Rootkits and active malware

To scan for active rootkits, use the predefined scan profile Scan for Rootkits and active malware.

To scan for active rootkits systematically:

- Go to Control Center and select the section **Local protection:: Scanner**. Predefined scan profiles appear.
- Select the predefined scan profile **Scan for Rootkits and active malware**.
- Where appropriate, highlight other nodes and directories to be scanned by clicking the check box of the directory level.
- ► Click the icon (Windows XP: or Windows Vista: ).





The Luke Filewalker window appears and an on-demand scan is started.

When the scan is completed, the results are displayed.

#### 5.2.9 React to detected viruses and malware

For the individual protection components of your AntiVir program, you can define how your AntiVir program reacts to a detected virus or unwanted program in the Configuration under the section Action on detection.

No configurable action options are available for the ProActiv component of the Guard: Notification of a detection is always given in the Guard: Suspicious application behavior window.

Action options for the Scanner:

#### Interactive

In interactive action mode, the results of the Scanner scan are displayed in a dialog box. This option is enabled as the default setting.

In the case of **Scanner scan**, you will receive an alert with a list of the affected files when the scan is complete. You can use the content-sensitive menu to select an action to be executed for the various infected files. You can execute the standard actions for all infected files or cancel the Scanner.

#### Automatic

In automatic action mode, when a virus or unwanted program is detected the action you selected in this area is executed automatically. If you enable the option *Display alert*, you will receive an alert whenever a virus is detected, indicating the action performed.

Action options for the Guard:

#### - Interactive

In interactive action mode, data access is denied and a desktop notification is displayed. In the desktop notification you can remove the malware detected or transfer the malware to the Scanner component using the Details button for further virus management. The Scanner opens a window containing notification of the detection, which gives you various options for managing the affected file via a context menu (see Detection::Scanner):

#### Automatic

In automatic action mode, when a virus or unwanted program is detected, the action you selected in this area is executed automatically. If you enable the option *Display alert*, you will receive a desktop notification whenever a virus is detected.

Action options for MailGuard, WebGuard:

#### Interactive

In interactive action mode, if a virus or unwanted program is detected, a dialog box appears in which you can select what to do with the infected object. This option is enabled as the default setting.

#### Automatic

In automatic action mode, when a virus or unwanted program is detected the action you selected in this area is executed automatically. If you enable the *Display alert* option, you will receive an alert when a virus is detected. The alert will allow you to confirm the action to be performed.

In interactive action mode, you can react to detected viruses and unwanted programs by selecting an action for the infected object in the alert and executing the selected action by clicking Confirm.

The following actions for handling infected objects are available for selection:

#### Note

Which actions are available for selection depends on the operating system, the protection components (AntiVir Guard, AntiVir Scanner, AntiVir MailGuard, AntiVir WebGuard) reporting the detection, and the type of malware detected.

### Actions of the Scanner and the Guard (not ProActiv detections):

#### - Repair

The file is repaired.

This option is only available if the infected file can be repaired.

#### Move to quarantine

The file is packaged into a special format (\*.qua) and moved to the Quarantine directory *INFECTED* on your hard disk, so that direct access is no longer possible. Files in this directory can be repaired in Quarantine at a later data or, if necessary, sent to Avira GmbH.

#### Delete

The file will be deleted. This process is much quicker than *overwrite* and delete. If a boot sector virus is detected, this can be deleted by deleting the boot sector. A new boot sector is written.

#### - Overwrite and delete

The file is overwritten with a default template and then deleted. It cannot be restored.

#### Rename

The file is renamed with a \*.vir extension. Direct access to these files (e.g. with double-click) is therefore no longer possible. Files can be repaired and given their original name at a later time.

#### - Ignore

No further action is taken. The infected file remains active on your computer.

#### Warning

This could result in loss of data and damage to the operating system! Only select the *Ignore* option in exceptional cases.

### - Always ignore

Action option for Guard detections: No further action is taken by Guard. Access to the file is permitted. All further access to this file is permitted and no further notifications will be provided until the computer is restarted or the virus definition file is updated.

#### - Copy to quarantine

Action option for a rootkit detection: The detection is copied to quarantine.

#### - Repair boot sector | Download repair tool

Action options when infected boot sectors are detected: A number of options are available for repairing infected diskette drives. If your AntiVir program is unable to perform the repair, you can download a special tool for detecting and removing boot sector viruses.

#### Note

If you carry out actions on running processes, the processes in question are terminated before the actions are performed.

# Actions of the Guard for detections made by the ProActiv component (notification of suspicious actions of an application):

#### - Trusted program

The application continues to run. The program is added to the list of permitted applications and is excluded from monitoring by the ProActiv component. When adding to the list of permitted applications, the monitoring type is set to *Content*. This means that the application is only excluded from monitoring by the ProActiv component if the content remains unchanged (see

Configuration::Guard::ProActiv::Application filter: Permitted applications).

#### - Block program once

The application is blocked, i.e. the application is terminated. The actions of the application continue to be monitored by the ProActiv component.

### Always block this program

The application is blocked, i.e. the application is terminated. The program is added to list of blocked applications and can no longer be run (see Configuration::Guard::ProActiv::Application filter: Applications to be blocked).

#### - Ignore

The application continues to run. The actions of the application continue to be monitored by the ProActiv component.

#### MailGuard actions: Incoming emails

#### Move to quarantine

The email including all attachments is moved to quarantine. The affected email is deleted. The body of the text and any attachments of the email are replaced by a default text.

#### Delete

The affected email is deleted. The body of the text and any attachments of the email are replaced by a default text.

#### Delete attachment

The infected attachment is replaced by a default text. If the body of the email is affected, it is deleted and also replaced by a default text. The email itself is delivered.

#### - Move attachment to quarantine

The infected attachment is placed in quarantine and then deleted (replaced by a default text). The body of the email is delivered. The affected attachment can later be delivered via the quarantine manager.

#### - Ignore

The affected email is delivered.

#### Warning

This could allow viruses and unwanted programs to access your computer system. Only select the **Ignore**option in exceptional cases. Disable the preview in your mail client, never open any attachments with a double click!

#### MailGuard actions: Outgoing emails

#### Move mail to quarantine (do not send)

The email, together with all attachments, is copied to Quarantine and is not sent. The email remains in the outbox of your email client. You receive an error message in your email program. All other emails sent from your email account will be scanned for malware.

#### Block sending of mails (do not send)

The email is not sent and remains in the outbox of your email client. You receive an error message in your email program. All other emails sent from your email account will be scanned for malware.

### Ignore

The affected email is sent.

#### Warning

Viruses and unwanted programs can penetrate the computer system of the email recipient in this way.

#### WebGuard actions:

#### - Deny access

The website requested from the web server and/or any data or files transferred are not sent to your web browser. An error message to notify you that access has been denied is displayed in the web browser.

#### Move to quarantine

The website requested from the web server and/or any data or files transferred are moved to quarantine. The affected file can be recovered from quarantine manager if it has an informative value or - if necessary - sent to the Avira Malware Research Center.

#### Ignore

The website requested from the web server and/or the data and files that were transferred are forwarded on by WebGuard to your web browser.

#### Warning

This could allow viruses and unwanted programs to access your computer system. Only select the **Ignore**option in exceptional cases.

#### Note

We recommend that you move any suspicious file that cannot be repaired to quarantine.

#### Note

You can also send files reported by the heuristic to us for analysis.

For example, you can upload these files to our website:http://www.avira.com/sample-upload

You can identify files reported by the heuristic from the designation *HEUR*/ or *HEURISTIC*/ that prefixes the file name, e.g.: *HEUR/testfile*.\*.

# 5.2.10 Quarantine: Handling quarantined files (\*.qua)

To handle quarantined files:

- ▶ In the Control Center, select the section **Management :: Quarantine** section.
- Check which files are involved, so that, if necessary, you can reload the original back onto your computer from another location.

If you want to see more information on a file:

► Highlight the file and click on



The dialog box *Properties* appears with more information on the file.

If you want to rescan a file:

Scanning a file is recommended if the virus definition file of your AntiVir program has been updated and a false positive report is suspected. This enables you to confirm a false positive with a rescan and restore the file.

▶ Highlight the file and click on



The file is scanned for viruses and malware using the on-demand scan settings.

After the scan, the dialog *Scan statistics* appears which displays statistics on the status of the file before and after the rescan.

To delete a file:

► Highlight the file and click on .



If you want to upload the file to a Avira Malware Research Center web server for analysis:

- Highlight the file you want to upload.
- Click on

A dialog opens with a form for inputting your contact data.

- Enter all the required data.
- Select a type: Suspicious file or False positive.
- Click OK.

The file is uploaded to a Avira Malware Research Center web server in compressed form.

#### Note

In the following cases, analysis by the Avira Malware Research Center is recommended: Heuristic hits (Suspicious file): During a scan, a file has been classified as suspicious by your AntiVir program and moved to quarantine: Analysis of the file by the Avira Malware Research Center has been recommended in the virus detection dialog box or in the report file generated by the scan.

Suspicious file: You consider a file to be suspicious and have therefore moved this file to quarantine, but a scan of the file for viruses and malware is negative.

**False positive:** You assume that a virus detection is a false positive: Your AntiVir program reports a detection in a file, which is very unlikely to have been infected by malware.

#### Note

The size of the files you upload is limited to 20 MB uncompressed or 8 MB compressed.

You can upload several files at once by selecting all the files you want to upload and then clicking the **Send Object** button.

If you want to copy a quarantined object from quarantine to another directory:

Highlight the quarantined object and click on



A scan dialog opens from which you can select a directory.

Select a directory where you want to save a copy of the quarantined object and confirm your selection.

The selected quarantined object is saved to the selected directory.

### Note

The quarantined object is not identical to the restored file. The quarantined object is encrypted and cannot be executed or read in its original format.

If you want to export the properties of a quarantined object to a text file:

Highlight the quarantined object and click on



A text file opens containing the data from the selected quarantined object.

Save the text file.

You can also restore the files in quarantine:

see Chapter: Quarantine: Restoring files in quarantine

### 5.2.11 Quarantine: Restore the files in quarantine

Different icons control the restore procedure, depending on the operating system:

In Windows XP and 2000:



This icon restores the files to a directory of your choice.

In Windows Vista:

In Microsoft Windows Vista, the Control Center only has limited rights at the moment, e.g. for access to directories and files. Certain actions and file accesses can only be performed in the Control Center with extended administrator rights. These extended administrator rights must be granted at the start of each scan via a scan profile.

This icon restores the files to a directory of your choice.

This icon restores the files to their original directory. If extended administrator rights are necessary to access this directory, a corresponding request appears.

To restore files in quarantine:

### Warning

This could result in loss of data and damage to the operating system of the computer! Only use the function Restore selected object in exceptional cases. Only restore files that could be repaired by a new scan.

File rescanned and repaired.

In the Control Center, select the section **Management :: Quarantine** section.

#### Note

Emails and email attachments can only be restored using the option if the file extension is \*.eml.



To restore a file to its original location:

Highlight the file and click the icon (Windows 2000/XP: 🖤 , Windows Vista 🗣 ). This option is not available for emails.

#### Note

Emails and email attachments can only be restored using the option extension is \*.eml.

A message appears asking if you want to restore the file.

Click **Yes**.

The file is restored to the directory it was in before it was moved to quarantine.

To restore a file to a specified directory:

► Highlight the file and click on

A message appears asking if you want to restore the file.

► Click **Yes**.

The Windows default window for selecting the directory appears.

Select the directory to restore the file to and confirm.

The file is restored to the selected directory.

### 5.2.12 Quarantine: Move suspicious files to quarantine

To move a suspect file to quarantine manually:

- ▶ In the Control Center, select the section **Management :: Quarantine** section.
- ► Click on .

The Windows default window for selecting a file appears.

▶ Select the file and confirm.

The file is moved to quarantine.

You can scan files in quarantine with the AntiVir Scanner:

• see Chapter: Quarantine: Handling quarantined files (\*.qua)

### 5.2.13 Scan profile: Amend or delete file type in a scan profile

To stipulate additional file types to be scanned or exclude specific file types from the scan in a scan profile (only possible for manual selection and customized scan profiles):

In the Control Center, go to the **Local protection:** *Scan* section.

▶ With the right-hand mouse button, click on the scan profile you want to edit.

A context menu appears.

- Select File filter.
- Expand the context menu further by clicking on the small triangle on the right-hand side of the context menu.

The entries Default, Scan all files and User-defined appear.

► Select **User-defined**.

The *File extensions* dialog box appears with a list of all file types to be scanned with the scan profile.

If you want to exclude a file type from the scan:

► Highlight the file type and click **Delete**.

If you want to add a file type to the scan:

- ► Highlight the file type.
- Click Add and enter the file extension of file type into the input box.

Use a maximum of 10 characters and do not enter the leading dot. Wildcards (\* and?) are allowed as replacements.

## 5.2.14 Scan profile: Create desktop shortcut for scan profile

You can start an on-demand scan directly from your desktop via a desktop shortcut to a scan profile without accessing your AntiVir program's Control Center.

To create a desktop shortcut to the scan profile:

In the Control Center, go to the **Local protection:** *Scan* section.

- ▶ Select the scan profile for which you want to create a shortcut.
- Click the icon .

The desktop shortcut is created.

#### 5.2.15 Events: Filter events

Events that have been generated by program components of your AntiVir program are displayed in the Control Center under **Overview::Events** (analogous to the event display of your Windows operating system). The program components are:

- Updater
- Scheduler
- Guard
- MailGuard
- Scanner
- FireWall
- WebGuard
- Helper Service
- ProActiv

The following event types are displayed:

- Information
- Warning
- Error
- Detection

To filter displayed events:

- ► In the Control Center, select the section **Overview** :: **Events**.
- ► Check the box of the program components to display the events of the activated components.
  - OR -

Uncheck the box of the program components to hide the events of the deactivated components.

- ► Check the event type box to display these events.
  - OR -

Uncheck the event type box to hide these events.

### 5.2.16 MailGuard: Exclude email addresses from scan

To define which email addresses (senders) are excluded from the MailGuard scan (white listing):

► Go to Control Center and select the section **Online protection :: MailGuard**.

The list shows incoming emails.

- ▶ Highlight the email you want to exclude from the MailGuard scan.
- Click the appropriate icon to exclude the email from the MailGuard scan:

In future, the selected email address will no longer be scanned for viruses and unwanted programs.

The email sender address is included in the exclusion list and no longer scanned for viruses, malware .

#### Warning

Only exclude email addresses from the MailGuard scan if the senders are completely trustworthy.

#### Note

In the Configuration, under MailGuard :: Exceptions, you can add other email addresses to the exclusion list or remove email addresses from the exclusion list.

### 5.2.17 FireWall: Select the security level for the FireWall

There are various security levels to choose from. Depending on which you choose, you have different adapter rule configuration options.

The following security levels are available:

- Low
- Flooding and port scan are detected.
- Medium
- Suspicious TCP and UDP packages are discarded.
- Flooding and port scan are prevented.
- High
- Computer is not visible on the network.
- Connections from outside are blocked.
- Flooding and port scan are prevented.
- User
- User-defined rules: If this security level is selected, the program automatically recognizes that the adapter rules have been modified.

#### Note

The default security level setting for all predefined rules of the Avira FireWall is High

To define the security level for the FireWall:

- ▶ Go to the Control Center and select the section Online **protection** :: **FireWall**.
- ▶ Move the slider to the required security level.

The selected security level is applied immediately.

# 6 Scanner

With the Scanner component, you can carry out targeted scans (on-demand scans) for viruses and unwanted programs. The following options are available for scanning for infected files:

#### - On-demand scan via context menu

The on-demand-scan via the context menu (right-hand mouse button - entry **Scan selected files with AntiVir**) is recommended if, for example, you wish to scan individual files and directories. Another advantage is that it is not necessary to first start the Control Center for an on-demand scan via the context menu.

### - On-demand scan via drag & drop

When a file or directory is dragged into the program window of the Control Center, the Scanner scans the file or directory and all sub-directories it contains. This procedure is recommended if you wish to scan individual files and directories that you have saved, for example, on your desktop.

On-demand scan via profiles This procedure is recommended if you wish to regularly scan certain directories and drives (e.g. your work directory or drives on which you regularly store new files). You do not then need to select these directories and drives again for every new scan, you simply select using the relevant profile.

#### - On-demand scan via the Scheduler

The Scheduler enables you to carry out time-controlled scans.

Special processes are required when scanning for rootkits, boot sector viruses, and when scanning active processes. The following options are available:

- Scan for rootkits via the scan profile Scan for Rootkits and active malware
- Scan active processes via the scan profile Active processes
- Scan for boot sector viruses via the menu command Scan for boot sector
   viruses in the Extras menu

# 7 Updates

The effectiveness of anti-virus software depends on how up-to-date the program is, in particular the virus definition file and the scan engine. To carry out regular updates, the Updater component is integrated into your AntiVir. The Updater ensures that your AntiVir program is always up-to-date and able to deal with the new viruses that appear every day. Updater updates the following components:

Virus definition file:

The virus definition file contains the virus patterns of the harmful programs which are used by your AntiVir program to scan for viruses and malware and repair infected objects.

- Scan engine:

The scan engine contains the methods used by your AntiVir program to scan for viruses and malware.

Program files (product update):

Update packages for product updates make extra functions available to the individual program components.

An update checks whether the virus definition file and scan engine are up-to-date and if necessary implements an update. Depending on the settings in the configuration, the Updater also carries out a product update or informs you of the product updates available. After a product update, you may have to restart your computer system. If only the virus definition file and scan engine are updated, the computer does not have to be restarted.

#### Note

For security reasons, the Updater checks whether the Windows hosts file of your computer was altered, whether the Update URL, for example, was manipulated by malware and is diverting the Updater to unwanted download sites. If the Windows hosts file has been manipulated, this is shown in the Updater report file.

An update is automatically performed in the following interval: 60 minutes. You can edit or disable the automatic update through the configuration (Configuration::Update).

In the Control Center under Scheduler, you can create additional update jobs that are performed by Updater at the specified intervals. You also have the option to start an update manually:

- In the Control Center: in the Update menu and in the Status section
- via the context menu of the tray icon

Updates can be obtained from the Internet via a proprietary web server or via a web or file server on an intranet which downloads the update files from the Internet and makes them available to other computers on the network. This is useful if you want to update AntiVir programs on more than one computer in a network. A download server on an intranet can be used to ensure AntiVir programs are up-to-date on the protected computers using a minimum of resources. To set up a functioning download server on an intranet, you need a server that is compatible with the update structure of your AntiVir program.

#### Note

You can use AntiVir Internet Update Manager (file server or web server in Windows) as a web server or file server in the intranet. AntiVir Internet Update Manager mirrors the download servers of Avira AntiVir products and can be obtained from the Avira website on the Internet.

http://www.avira.com

When a web server is used, the HTTP protocol is used for the download. When using a file server, access to the update file is provided via the network. You can configure the connection to the web server or file server in the Configuration under General :: Update. The default configuration uses the existing Internet connection as the connection to the Avira GmbH web servers.

## 8 Avira FireWall :: Overview

Avira FireWall monitors and regulates incoming and outgoing data traffic on your computer system and protects you from a wide range of attacks and threats from the Internet: Incoming or outgoing data traffic or listening to ports will be allowed or denied based on security guidelines. You will receive a desktop notification if Avira FireWall denies network activity and thus blocks network connections. The following options are available for Avira FireWall settings:

by setting a security level in the Control Center

You can define a security level in the Control Center. The *low*, *medium* and *high* security levels each contain several complementary security rules based on packet filters. These security rules are saved as predefined adapter rules in the Configuration under FireWall::Adapter rules.

by saving actions in the Network event window

When an application first tries to create a network or Internet connection, the *Network Event* popup window appears. The *Network Event* window allows the user to choose whether the network activity of the application is allowed or denied. If the **Save Action for this application** option is enabled, the action is created as an application rule and is saved in the configuration under FireWall::Application Rules. Saving the actions in the Network event window gives you a set of rules for the network activities of applications.

#### Note

For applications from trusted providers, network access is allowed by default unless an adapter rule prohibits network access. You have the option of removing providers from the list of trusted providers.

by creating adapter and application rules in the Configuration

You can alter predefined adapter rules or create new adapter rules in the Configuration. The security level of the FireWall is automatically set to the value *User* if you add or change adapter rules.

Application rules allow you to define monitoring rules specified for applications: You can use simple application rules to define whether all network activities of a software application are to be denied or allowed or whether they are to be handled by means of the *Network Event* popup window.

In the advanced configuration of the *Application rules setting* you can define different packet filters for an application, which are executed as specified application rules.

#### Note

There are two different modes for application rules: *Privileged* and *Filtered*. For application rules in *filtered* mode, the relevant adapter rules are prioritized, i.e. relevant adapter rules are executed after the application rule. It is therefore possible that network access may be denied due to a high security level or corresponding adapter rules. For application rules in *privileged* mode, adapter rules are ignored. If applications are allowed in *privileged* mode, the application is always granted network access.

# 9 FAQ, Tips

This chapter contains important information on troubleshooting and further tips on using your AntiVir program.

see Chapter Troubleshooting see Chapter Keyboard commands see Chapter Windows Security Center

# 9.1 Help in case of a problem

Here you will find information on causes and solutions of possible problems.

- The error message The license file cannot be opened appears.
- AntiVir MailGuard does not work.
- There is no network connection available in a virtual machine (e.g. VMWare, Virtual PC, ...) if Avira FireWall is installed on the host machine and the security level of Avira FireWall is set to medium or high.
- Virtual Private Network (VPN) Connection is blocked, if the security level of Avira FireWall is set to medium or high.
- An email sent via a TSL connection has been blocked by MailGuard.
- Webchat is not operational: Chat messages will not be displayed

#### The error message *The license file cannot be opened* appears.

Reason: The file is encrypted.

▶ To activate the license, you do not need to open the file, but rather you save it in the program directory. See also ChapterLicense Manager.

# The error message *Connection failed while downloading the file* ... appears when attempting to start an update.

Reason: Your Internet connection is inactive. No connection to the web server on the Internet can therefore be established.

Test whether other Internet services such as WWW or email work. If not, reestablish the Internet connection.

Reason: The proxy server cannot be reached.

• Check whether the login for the proxy server has changed and adapt it to your configuration if necessary.

Reason: The update.exe file is not fully approved by your personal firewall.

Ensure that the update.exe file is fully approved by your personal firewall.

Otherwise:

• Check your settings in the Configuration (expert mode) under General::UpdateYour settings.

#### Viruses and malware cannot be moved or deleted.

Reason: The file was loaded by windows and is active.

- Update your AntiVir product.
- If you use the Windows XP operating system, deactivate System Restore.
- Start the computer in Safe Mode.
- **Start** the AntiVir program and the Configuration (expert mode).
- **Select** Scanner::Scan::Files::All files and confirm the window with **OK**.
- Start a scan of all local drives.
- Start the computer in Normal Mode.
- Carry out a scan in Normal Mode.
- If no other viruses or malware have been found, activate System Restore if it is available and to be used.

#### The status of the tray icon is disabled.

Reason: AntiVir Guard is disabled.

In the Control Center in the section Overview::Status in the AntiVir Guard area, click on the **Enable** link.

Reason: AntiVir Guard is blocked by a firewall.

Define a general approval for AntiVir Guard in the configuration of your firewall. AntiVir Guard only works with the address 127.0.0.1 (localhost). An Internet connection is not established. The same applies to AntiVir MailGuard.

#### Otherwise:

Check the startup type of the AntiVir Guard service. If necessary, enable the service: In the taskbar, select "Start | Settings | Control Panel". Start the configuration panel "Services" with a double-click (under Windows 2000 and Windows XP the services applet is located in the sub-directory "Administrative Tools"). Find the entry *Avira AntiVir Guard*. "Automatic" must be entered as the startup type and "Started" as the status. If necessary, start the service manually by selecting the relevant line and the button "Start". If an error message appears, please check the event display.

#### The computer is extremely slow when I perform a data back-up.

Reason: During the backup procedure, AntiVir Guard scans all files being used by the backup procedure.

▶ Select Guard::Scan::Exceptions in the Configuration (expert mode) and enter the process names of the back-up software.

# My firewall reports AntiVir Guard and AntiVir MailGuard immediately after activation.

Reason: Communication with AntiVir Guardand AntiVir MailGuardoccurs via the TCP/IP Internet protocol. A firewall monitors all connections via this protocol.

Define a general approval for AntiVir Guard and AntiVir MailGuard. AntiVir Guard only works with the address 127.0.0.1 (localhost). An Internet connection is not established. The same applies to AntiVir MailGuard.

#### AntiVir MailGuard does not work.

Please check correct functioning of AntiVir MailGuard with the aid of the following checklists if problems occur with AntiVir MailGuard.

#### Checklist

- Check whether your mail client logs in on the server via Kerberos, APOP or RPA. These verification methods are currently <u>not</u> supported.
- Check whether your mail client reports to the server through SSL (also often called TSL Transport Layer Security). AntiVir MailGuard does not support SSL and therefore terminates any encrypted SSL connections. If you want to use encrypted SSL connections without having them protected by MailGuard, you will have to use a port that is not monitored by MailGuard for the connection. The ports monitored by MailGuard can be configured in the configuration under MailGuard::Scan.
- Is the AntiVir MailGuard service active? If necessary, enable the service: In the taskbar, select "Start | Settings | Control Panel". Start the configuration panel "Services" with a double-click (under Windows 2000 and Windows XP the services applet is located in the sub-directory "Administrative Tools"). Find the entry *Avira AntiVir MailGuard*. "Automatic" must be entered as the startup type and "Started" as the status. If necessary, start the service manually by selecting the relevant line and the button "Start". If an error message appears, please check the event display. If this is not successful, you may have to completely uninstall the AntiVir program via "Start | Settings | Control Panel | Add or Remove Programs", restart the computer and then reinstall your AntiVir program.

#### **General**

- POP3 connections encrypted via SSL (Secure Sockets Layer, also frequently referred to as TLS (Transport Layer Security)) cannot currently be protected and are ignored.
- Verification to the mail server is currently only supported via "passwords". "Kerberos" and "RPA" are not currently supported.
- Your AntiVir program does not check outgoing emails for viruses and unwanted programs.

#### Note

We recommend regularly installing Microsoft updates to close any gaps in security.

There is no network connection available in a virtual machine (e.g. VMWare, Virtual PC, ...) if Avira FireWall is installed on the host machine and the security level of Avira FireWall is set to medium or high.

If Avira FireWall is installed on a computer on which a virtual machine (for example VMWare, virtual PC, etc.) is also running, the firewall will block all network connections for the virtual machine when the security level of the Avira FireWall is set to medium or high. If the security level is set to low, the FireWall works as expected.

Reason: The virtual machine emulates a network card by means of software. This emulation encapsulates the data packages of the guest system in special packages (UDP packages) and routes them via the external gateway back to the host system. Avira FireWall rejects these packages coming from outside, starting from security level medium.

To avoid this behavior do the following:

- Go to Control Center and select the section **Online protection :: FireWall**.
- Click the Configuration link.
- The Configuration dialog box is displayed. You are in the configuration section Application rules.
- Activate the Expert mode option.
- Select the configuration section Adapter rules.
- Click add rule.
- Select **UDP** in the section *Incoming rules*.
- Type the **name** of the rule in the Section Name of the rule .
- Click **OK**.
- Check if the rule is directly above the rule **Deny all IP packets**.

#### Warning

This rule is potentially dangerous because it will allow UDP packets without any filtering! After working with the virtual machine change to your previous security level.

# Virtual Private Network (VPN) Connection is blocked, if the security level of Avira FireWall is set to medium or high.

Reason: This problem is caused by the last rule **Deny all IP packets** which discards all packets that do not comply with any of the rules above it. The type of packages dispatched by the VPN software (so-called GRE packets) do not fit into the other categories and therefore they are filtered by this rule.

Replace the rule **Deny all IP packets** with two new rules which will deny the TCP and UPD packets. In this way there is the possibility to allow packets of other protocols.

#### An email sent via a TSL connection has been blocked by MailGuard.

Reason: Transport Layer Security (TLS: encryption protocol for data transfers on the Internet) is not supported by MailGuard at this time. The following options are available for sending the email:

- Use a different port from port 25, which is used by SMTP. This will bypass monitoring by MailGuard.
- Turn off the TSL encrypted connection and disable TSL support in your email client.
- ▶ Disable (temporarily) monitoring of outgoing emails by MailGuard in the configuration under MailGuard::Scan.

Webchat is not operational: Chat messages are not displayed; data are being loaded in the browser.

This phenomenon may occur during chats, which are based on the HTTP protocol with 'transfer-encoding= chunked'.

Reason: WebGuard checks the data sent completely for viruses and undesired programs first of all, before the data are loaded into the web browser. During a data transfer with 'transfer-encoding= chunked', WebGuard cannot determine the message length or the data volume.

▶ Enter the configuration of the URL of the web chats as an exception (see Configuration: WebGuard::Exceptions).

# 9.2 Shortcuts

Keyboard commands - also called shortcuts - offer a fast possibility to navigate through the program, to retrieve individual modules and to start actions.

Below we provide you with an overview of the available keyboard commands. Please find further indications regarding the functionality in the corresponding chapter of the help.

### 9.2.1 In dialog boxes

Shortcut	Description
Ctrl + Tab Ctrl + Page down	Navigation in the Control Center Go to next section.
Ctrl + Shift + Tab Ctrl + Page up	Navigation in the Control Center Go to previous section.
$\leftarrow \uparrow \rightarrow \downarrow$	Navigation in the configuration sections First, use the mouse to set the focus on a configuration section.
Tab	Change to the next option or options group.
Shift + Tab	Change to the previous option or options group.
$\leftarrow \uparrow \rightarrow \downarrow$	Change between the options in a marked drop-down list or between several options in a group of options.
Space	Activate or deactivate a check box, if the active option is a check box.
Alt + underlined letter	Select option or start command.
Alt + ↓ F4	Open selected drop-down list.
Esc	Close selected drop-down list. Cancel command and close dialog.

Enter	Start command for the active option or button.
-------	--

# 9.2.2 In the help

Shortcut	Description
Alt + Space	Display system menu.
Alt + Tab	Shift between the help and the other opened windows.
Alt + F4	Close help.
Shift + F10	Display context menu of the help.
Ctrl + Tab	Go to next section in the navigation window.
Ctrl + Shift + Tab	Go to previous section in the navigation window.
Page up	Change to the subject, which is displayed above in the contents, in the index or in the list of the search results.
Page down	Change to the subject, which is displayed below the current subject in the contents, in the index or in the list of the search results.
Page up Page down	Browse through a subject.

# 9.2.3 In the Control Center

### General

Shortcut	Description
F1	Display help
Alt + F4	Close Control Center
F5	Refresh
F8	Open configuration
F9	Start update

### Scan section

Shortcut	Description
F2	Rename selected profile
F3	Start scan with the selected profile
F4	Create desktop link for the selected profile
Ins	Create new profile
Del	Delete selected profile

### FireWall section

Shortcut	Description
Return	Properties

### Quarantine section

Shortcut	Description
F2	Rescan object
F3	Restore object
F4	Send object
F6	Restore object to
Return	Properties
Ins	Add file
Del	Delete object

### Scheduler section

Shortcut	Description
F2	Edit job
Return	Properties
Ins	Insert new job
Del	Delete job

# Reports section

Shortcut	Description
F3	Display report file
F4	Print report file
Return	Display report
Del	Delete report(s)

### **Events section**

Shortcut	Description
F3	Export event(s)
Return	Show event
Del	Delete event(s)

# 9.3 Windows Security Center

- Windows XP Service Pack 2 or higher -

### 9.3.1 General

The Windows Security Center checks the status of a computer for important security aspects.

If a problem is detected with one of these important points (e.g. an outdated anti-virus program), the Security Center issues an alert and gives recommendations on how to protect your computer better.

### 9.3.2 The Windows Security Center and your AntiVir program

#### FireWall

You may receive the following information from the Security Center with regard to your firewall:

- FireWall ACTIVE / FireWall on
- FireWall INACTIVE / FireWall off

#### FireWall ACTIVE / FireWall off

After installing your AntiVir program and turning off Windows Firewall, you will receive the following message:



#### FireWall INACTIVE / FireWall off

You will receive the following message as soon as you disable the Avira FireWall:



#### Note

You can enable or disable the Avira FireWall via the Status tab in the Control Center.

#### Warning

If you turn the Avira FireWall off, your computer is no longer prevented by unauthorized users from gaining access to it through a network or the Internet.

Virus protection software / Protection against malicious software

You may receive the following information from the Windows Security Center with regard to your virus protection:

Virus protection NOT FOUND

Virus protection OUT OF DATE

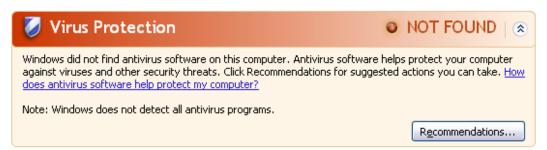
Virus protection ON

Virus protection OFF

Virus protection NOT MONITORED

#### Virus protection NOT FOUND

This information of the Windows Security Center appears when the Windows Security Center has not found any anti-virus software on your computer.



#### Note

Install your AntiVir program on your computer to protect it against viruses and other unwanted programs!

#### Virus protection OUT OF DATE

If you have already installed Windows XP Service Pack 2 or Windows Vista and then install your AntiVir program or you install Windows XP Service Pack 2 or Windows Vista on a system on which your AntiVir program has already been installed, you will receive the following message:



#### Note

In order for the Windows Security Center to recognize your AntiVir program as up-todate, an update must be performed after installation. Update your system by carrying out an update.

#### Virus protection ON

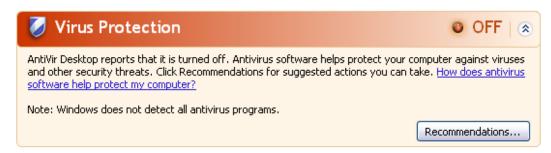
After installation of your AntiVir program and a subsequent update, you will receive the following message:



Your AntiVir program is now up-to-date and the AntiVir Guard is enabled.

#### Virus protection OFF

You receive the following message if you disable the AntiVir Guard or stop the Guard service.



#### Note

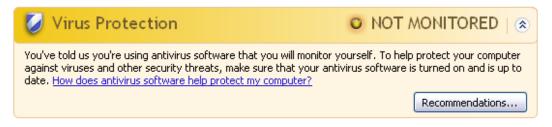
You can enable or disabled AntiVir Guard in the Overview::Status section of the Control Center. You can also see that the AntiVir Guard is enabled if the red umbrella in your taskbar is open.

#### Virus protection NOT MONITORED

If you receive the following message from the Windows Security Center, you have decided that you want to monitor your anti-virus software yourself.

#### Note

This function is not supported by Windows Vista.



#### Note

The Windows Security Center is supported by your AntiVir program. You can enable this option at any time via the "Recommendations...." button.

#### Note

Even if you have installed Windows XP Service Pack 2 or Windows Vista, you still require a virus protection solution. Although Windows XP Service Pack 2 monitors your antivirus software, it does not contain any anti-virus functions itself. Therefore you would not be protected against viruses and other malware without an additional anti-virus solution!

### 10 Viruses and more

# 10.1 Extended threat categories

#### Dialer (DIALER)

Certain services available in the Internet have to be paid for. They are invoiced in Germany via dialers with 0190/0900 numbers (or via 09x0 numbers in Austria and Switzerland; in Germany, the number is set to change to 09x0 in the medium term). Once installed on the computer, these programs guarantee a connection via a suitable premium rate number whose scale of charges can vary widely.

The marketing of online content via your telephone bill is legal and can be of advantage to the user. Genuine dialers leave no room for doubt that they are used deliberately and intentionally by the user. They are only installed on the user's computer subject to the user's consent, which must be given via a completely unambiguous and clearly visible labeling or request. The dial-up process of genuine dialers is clearly displayed. Moreover, genuine dialers tell you the incurred costs exactly and unmistakably.

Unfortunately there are also dialers which install themselves on computers unnoticed, by dubious means or even with deceptive intent. For example they replace the Internet user's default data communication link to the ISP (Internet Service Provider) and dial a cost-incurring and often horrendously expensive 0190/0900 number every time a connection is made. The affected user will probably not notice until his next phone bill that an unwanted 0190/0900 dialer program on his computer has dialed a premium rate number with every connection, resulting in dramatically increased costs.

We recommend that you ask your telephone provider to block this number range directly for immediate protection against undesired dialers (0190/0900 dialers).

Your AntiVir program can detect the familiar dialers by default.

If the option **Dialers** is enabled with a check mark in the configuration under Extended threat categories, you receive a corresponding alert if a dialer is detected. You can now simply delete the potentially unwanted 0190/0900 dialer. However, if it is a wanted dialup program, you can declare it an exceptional file and this file is then no longer scanned in future.

#### Games (GAMES)

There is a place for computer games - but it is not necessarily at work (except perhaps in the lunch hour). Nevertheless, with the wealth of games downloadable from the Internet, a fair bit of mine sweeping and Patience playing goes on among company employees and civil servants. You can download a whole array of games via the Internet. Email games have also become more popular: numerous variants are circulating, ranging from simple chess to "fleet exercises" (including torpedo combats): The corresponding moves are sent to partners via email programs, who answer them.

Studies have shown that the number of working hours devoted to computer games has long reached economically significant proportions. It is therefore not surprising that more and more companies are considering ways of banning computer games from workplace computers.

Your AntiVir program recognizes computer games. If the **Games** option is enabled with a check mark in the configuration under Threat categories, you receive a corresponding alert if your AntiVir program detects a game. The game is now over in the truest sense of the word, because you can simply delete it.

#### Jokes (JOKES)

Jokes are merely intended to give someone a fright or provide general amusement without causing harm or reproducing. When a joke program is loaded, the computer will usually start at some point to play a tune or display something unusual on the screen. Examples of jokes are the washing machine in the disk drive (DRAIN.COM) or the screen eater (BUGSRES.COM).

But beware! All symptoms of joke programs may also originate from a virus or Trojan. At the very least users will get quite a shock or be thrown into such a panic that they themselves may cause real damage.

Thanks to the extension of its scanning and identification routines, your AntiVir program is able to detect joke programs and eliminate them as unwanted programs if required. If the option **Jokes** is enabled with a check mark in the configuration under Threat categories, a corresponding alert is issued if a joke program is detected.

### Security Privacy Risk (SPR)

Software that may be able to compromise the security of your system, initiate unwanted program activities, damage your privacy or spy on your user behavior and could therefore be unwanted.

Your AntiVir program detects "Security Privacy Risk" software. If the option **Security Privacy Risk** is enabled with a check mark in the configuration under Extended threat categories, you receive a corresponding alert if your AntiVir program detects such software.

#### Backdoor Clients (BDC)

In order to steal data or manipulate computers, a backdoor server program is smuggled in unknown to the user. This program can be controlled by a third party using backdoor control software (client) via the Internet or a network.

Your AntiVir program recognizes "Backdoor control software". If the **Backdoor control software (BDC)** option is enabled with a check mark in the configuration under Extended threat categories, you receive a corresponding alert if your AntiVir program detects such software.

#### Adware/Spyware (ADSPY)

Software that displays advertising or software that sends the user's personal data to a third party, often without their knowledge or consent, and for this reason may be unwanted.

Your AntiVir program recognizes "Adware/Spyware". If the option **Adware/Spyware** (**ADSPY**) is enabled with a check mark in the configuration under Extended threat categories, you receive a corresponding alert if your AntiVir program detects adware or spyware.

### Unusual Runtime Packers (PCK)

Files that have been compressed with an unusual runtime packer and that can therefore be classified as potentially suspicious.

Your AntiVir program recognizes "Unusual runtime packers". If the option **Unusual runtime packers** is enabled with a check mark in the configuration under Extended threat categories, you receive a corresponding alert if your AntiVir program detects such packers.

#### Double Extension Files (HEUR-DBLEXT)

Executable files that hide their real file extension in a suspicious way. This camouflage method is often used by malware.

Your AntiVir program recognizes "Double Extension Files". If the option **Double Extension files** (HEUR-DBLEXT) is enabled with a check mark in the configuration under Extended threat categories, you receive a corresponding alert if your AntiVir program detects such files.

### Phishing

Phishing, also known as *brand spoofing* is a clever form of data theft aimed at customers or potential customers of Internet service providers, banks, online banking services, registration authorities.

When submitting your email address on the Internet, filling in online forms, accessing newsgroups or websites, your data can be stolen by "Internet crawling spiders" and then used without your permission to commit fraud or other crimes.

Your AntiVir program recognizes "Phishing". If the option **Phishing** is enabled with a check mark in the configuration under Extended threat categories, you receive a corresponding alert if your AntiVir program detects such behavior.

#### Application (APPL)

The term APPL refers to an application which may involve a risk when used or is of dubious origin.

Your AntiVir program recognizes "Application (APPL)". If the option **Application** (**APPL**) is enabled with a check mark in the configuration under Extended threat categories, you receive a corresponding alert if your AntiVir program detects such behavior.

### 10.2 Viruses and other malware

#### Adware

Adware is software that presents banner ads or in pop-up windows through a bar that appears on a computer screen. These advertisements usually cannot be removed and are consequently always visible. The connection data allow many conclusions on the usage behavior and are problematic in terms of data security.

#### **Backdoors**

A backdoor can gain access to a computer by bypassing the computer access security mechanisms.

A program that is being executed in the background generally enables the attacker almost unlimited rights. User's personal data can be spied with the backdoor's help.. But are mainly used to install further computer viruses or worms on the relevant system.

#### **Boot viruses**

The boot or master boot sector of hard disks is mainly infected by boot sector viruses. They overwrite important information necessary for the system execution. One of the awkward consequences: the computer system cannot be loaded any more...

#### **Bot-Net**

A bot-net is defined as a remote network of PCs (on the Internet) that is composed of bots that communicate with each other. A bot-net can comprise a collection of cracked machines running programs (usually referred to as worms, Trojans) under a common command and control infrastructure. Bot-nets serve various purposes, including denial-of-service attacks etc., usually without the affected PC user's knowledge. The main potential of bot-nets is that the networks can achieve grow to thousands of computers and their total bandwidth exceeds most conventional Internet accesses.

#### Exploit

An exploit (security gap) is a computer program or script that takes advantage of a bug, glitch or vulnerability leading to privilege escalation or denial of service on a computer system. One form of exploitation for example is an attack from the Internet with the help of manipulated data packages. Programs can be infiltrated in order to obtain higher access.

#### Hoaxes

For several years, Internet and other network users have received alerts about viruses that are purportedly spread via email. These alerts are spread via email with the request that they should be sent to the highest possible number of colleagues and to other users, in order to warn everyone against the "danger".

#### Honeypot

A honeypot is a service (program or server) installed in a network. Its function is to monitor a network and log attacks. This service is unknown to the legitimate user - because of this reason he is never addressed. If an attacker examines a network for the weak points and uses the services which are offered by a honeypot, it is logged and an alert is triggered.

#### Macro viruses

Macroviruses are small programs that are written in the macro language of an application (e.g. WordBasic under WinWord 6.0) and that can normally only spread within documents of this application. Because of this, they are also called document viruses. In order to be active, they need that the corresponding applications are activated and that one of the infected macros has been executed. Unlike "normal" viruses, macro viruses consequently do not attack executable files but they do attack the documents of the corresponding host application.

#### **Pharming**

Pharming is a manipulation of the host file of web browsers to divert enquiries to spoofed websites. This is a further development of classic phishing. Pharming fraudsters operate their own large server farms on which fake websites are stored. Pharming has established itself as an umbrella term for various types of DNS attacks. In the case of a manipulation of the host file, a specific manipulation of a system is carried out with the aid of a Trojan or virus. The result is that the system can now only access fake websites, even if the correct web address is entered.

### **Phishing**

Phishing means angling for personal details of the Internet user. Phishers generally send their victims apparently official letters such as emails that are intended to induce them to reveal confidential information to the culprits in good faith, in particular user names and passwords or PINs and TANs of online banking accounts. With the stolen access details, the phishers can assume the identities of the victims and carry out transactions in their name. What is clear is that: banks and insurance companies never ask for credit card numbers, PINs, TANs or other access details by email, SMS or telephone.

#### Polymorph viruses

Polymorph viruses are the real masters of disguise. They change their own programming codes - and are therefore very hard to detect.

#### Program viruses

A computer virus is a program that is capable of attaching itself to other programs after being executed and cause an infection. Viruses multiply themselves unlike logic bombs and Trojans. In contrast to a worm, a virus always requires a program as host, where the virus deposits its virulent code. The program execution of the host itself is not changed as a rule.

#### Rootkit

A rootkit is a collection of software tools that are installed after a computer system has been infiltrated to conceal logins of the infiltrator, hide processes and record data - generally speaking: to make themselves invisible. They attempt to update already installed spy programs and reinstall deleted spyware.

#### Script viruses and worms

Such viruses are extremely easy to program and they can spread - if the required technology is on hand - within a few hours via email round the globe.

Script viruses and worms use one of the script languages, such as Javascript, VBScript etc., to insert themselves in other, new scripts or to spread themselves by calling operating system functions. This frequently happens via email or through the exchange of files (documents).

A worm is a program that multiplies itself but that does not infect the host. Worms cannot consequently form part of other program sequences. Worms are often the only possibility to infiltrate any kind of damaging programs on systems with restrictive security measures.

#### **Spyware**

Spyware are so called spy programs that intercept or take partial control of a computer's operation without the user's informed consent. Spyware is designed to exploit infected computers for commercial gain.

### Trojan horses (short Trojans)

Trojans are pretty common nowadays. Trojans include programs that pretend to have a particular function, but that show their real image after execution and carry out a different function that, in most cases, is destructive. Trojan horses cannot multiply themselves, which differentiates them from viruses and worms. Most of them have an interesting name (SEX.EXE or STARTME.EXE) with the intention to induce the user to start the Trojan. Immediately after execution they become active and can, for example, format the hard disk. A dropper is a special form of Trojan that 'drops' viruses, i.e. embeds viruses on the computer system.

#### Zombie

A zombie PC is a computer that is infected with malware programs and that enables hackers to abuse computers via remote control for criminal purposes. On command, the affected PC starts denial-of-service (DoS) attacks, for example, or sends spam and phishing emails.

# 11 Info and Service

This chapter contains information on how to contact us.

see Chapter Contact address

see Chapter Technical support

see Chapter Suspicious files

see Chapter Report false positives

see Chapter Your feedback for more security

### 11.1 Contact address

If you have any questions or requests concerning the AntiVir product range, we will be pleased to help you. For our contact addresses, please refer to the Control Center under Help:: About Avira AntiVir Professional.

# 11.2 Technical support

Avira support provides reliable assistance in answering your questions or solving a technical problem.

All necessary information on our comprehensive support service can be obtained from our website:

http://www.avira.com/professional-support

So that we can provide you with fast, reliable help, you should have the following information ready:

- License information. You can find the program interface under the menu item
   Help:: About Avira AntiVir Professional:: License information
- Version information. You can find the program interface under the menu item
   Help:: About Avira AntiVir Professional:: Version information.
- Operating system version and any Service Packs installed.
- **Installed software packages**, e.g. anti-virus software of other vendors.
- **Exact messages** of the program or of the report file.

# 11.3 Suspicious file

Viruses that may not yet be detected or removed by our products or suspect files can be sent to us. We provide you with several ways of doing this.

- Identify the file in the quarantine manager of the Control Center and select the item Send file via the context menu or the corresponding button.
- Send the required file packed (WinZIP, PKZip, Arj etc.) in the attachment of an email to the following address:
   virus-professional@avira.com
   As some email gateways work with anti-virus software, you should also provide the file(s) with a password (please remember to tell us the password).

You can also send us the suspicious file via our website: http://www.avira.com/sample-upload

## 11.4 Reporting false positives

If you believe that your AntiVir program is reporting a detection in a file that is most likely "clean", send the relevant file packed (WinZIP, PKZip, Arj etc.) as an email attachment to the following address:

virus-professional@avira.com

As some email gateways work with anti-virus software, you should also provide the file(s) with a password (please remember to tell us the password).

# 11.5 Your feedback for more security

At Avira, our customers' security is paramount. For this reason, we don't just have an inhouse expert team that tests the quality and security of every Avira GmbH solution before the product is released. We also attach great importance to the indications regarding security relevant gaps that could develop and we treat those seriously.

If you think you have detected a security gap in one of our products, please send us an email to the following address:

vulnerabilities-professional@avira.com

# 12 Reference: Configuration options

The configuration reference documents all available configuration options.

### 12.1 Scanner

The Scanner section of the Configuration is responsible for the configuration of the ondemand scan.

#### 12.1.1 Scan

Here you define the basic behavior of the scan routine for an on-demand scan. If you select certain directories to be scanned with an on-demand scan, depending on the configuration the Scanner scans:

- with a certain scanning power (priority),
- also boot sectors and main memory,
- certain or all boot sectors and the main memory,
- all or selected files in the directory.

#### **Files**

The Scanner can use a filter to scan only those files with a certain extension (type).

#### All files

If this option is enabled, all files are scanned for viruses or unwanted programs, irrespective of their content and file extension. The filter is not used.

#### Note

If All files is enabled, the button File extensions cannot be selected.

#### **Smart Extensions**

If this option is enabled, the selection of the files scanned for viruses or unwanted programs is automatically chosen by the program. This means that your AntiVir program decides whether the files are scanned or not based on their content. This procedure is somewhat slower than Use file extension list, but more secure, since not only on the basis of the file extension is scanned. This option is enabled as the default setting and is recommended.

#### Note

If Smart Extensions is enabled, the button File extensions cannot be selected.

### Use file extension list

If this option is enabled, only files with a specified extension are scanned. All file types that may contain viruses and unwanted programs are preset. The list can be edited manually via the button "File extension".

#### Note

If this option is enabled and you have deleted all entries from the list with file extensions, this is indicated with the text "No file extensions" under the button <u>File extensions</u>.

#### File extensions

With the aid of this button, a dialog box is opened in which all file extensions are displayed that are scanned in "**Use file extension list**" mode. Default entries are set for the extensions, but entries can be added or deleted.

#### Note

Please note that the default list may vary from version to version.

### Additional settings

#### Scan boot sectors of selected drives

If this option is enabled, the Scanner scans the boot sectors of the drives selected for the on-demand scan. This option is enabled as the default setting.

#### Scan master boot sectors

If this option is enabled, the Scanner scans the master boot sectors of the hard disk(s) used in the system.

#### Ignore offline files

If this option is enabled, the direct scan ignores so-called offline files completely during a scan. This means that these files are not scanned for viruses and unwanted programs. Offline files are files that were physically moved by a so-called Hierarchical Storage Management System (HSMS) from the hard disk onto a tape, for example. This option is enabled as the default setting.

#### Integrity checking of system files

When this option is enabled, the most important Windows system files are subjected to a particularly secure check for changes by malware during every on-demand scan. If an amended file is detected, this is reported as suspect. This function uses a lot of computer capacity. That is why the option is disabled as the default setting.

#### **Important**

This option is only available with Windows Vista and higher. The option is not available if you are managing the AntiVir program under SMC.

#### Note

This option should not be used if you are using third-party tools that modify system files and adapt the boot or start screen to your own requirements. Examples of such tools are skinpacks, TuneUp utilities or Vista Customization.

#### Optimized scan

When the option is enabled, the processor capacity is optimally utilized during a Scanner scan. For performance reasons, an optimized scan is only logged on standard level.

### Note

This option is only available on multi-processor systems. If your AntiVir program is managed with SMC, the option is always displayed and can be enabled: If the managed system does not have more than one processor, the Scanner option is not used.

#### Follow symbolic links

If this option is enabled, Scanner performs a scan that follows all symbolic links in the scan profile or selected directory and scans the linked files for viruses and malware. This option is not supported by Windows 2000 and has been deactivated.

#### **Important**

The option does not include any shortcuts, but refers exclusively to symbolic links (generated by mklink.exe) or Junction Points (generated by junction.exe) that are transparent in the file system.

#### Search for Rootkits before scan

If this option is enabled and a scan is started, the Scanner scans the Windows system directory for active rootkits in a so-called shortcut. This process does not scan your computer for active rootkits as comprehensively as the scan profile "**Scan for rootkits**", but it is significantly quicker to perform.

#### **Important**

The rootkit scan is not available for Windows XP 64 bit!

#### Scan Registry

If this option is enabled, the Registry is scanned for references to malware.

#### Do not scan files and paths on network drives

If this option is enabled, network drives connected to the computer are excluded from the on-demand scan. This option is recommended when the servers or other workstations are themselves protected with anti-virus software. This option is disabled as the default setting.

#### Scan process

#### Allow stopping the Scanner

If this option is enabled, the scan for viruses or unwanted programs can be terminated at any time with the button "Stop" in the "Luke Filewalker" window. If you have disabled this setting, the Stop button in the "Luke Filewalker" window has a gray background. Premature ending of a scan process is thus not possible! This option is enabled as the default setting.

#### **Scanner priority**

With the on-demand scan, the Scanner distinguishes between priority levels. This is only effective if several processes are running simultaneously on the workstation. The selection affects the scanning speed.

#### Low

The Scanner is only allocated processor time by the operating system if no other process requires computation time, i.e. as long as only the Scanner is running, the speed is maximum. All in all, work with other programs is optimal: The computer responds more quickly if other programs require computation time while the Scanner continues running in the background. This option is enabled as the default setting and is recommended.

#### <u>Medium</u>

The Scanner is executed with normal priority. All processes are allocated the same amount of processor time by the operating system. Under certain circumstances, work with other applications may be affected.

#### High

The Scanner has the highest priority. Simultaneous work with other applications is almost impossible. However, the Scanner completes its scan at maximum speed.

#### 12.1.1.1. Action on detection

#### Action on detection

You can define the actions to be performed by Scanner when a virus or unwanted program is detected.

#### Interactive

If this option is enabled, the results of the Scanner scan are displayed in a dialog box. When carrying out a scan with the Scanner, you will receive an alert with a list of the affected files at the end of the scan. You can use the content-sensitive menu to select an action to be executed for the various infected files. You can execute the standard actions for all infected files or cancel the Scanner.

#### Note

In the Scanner dialog, the action 'Move to quarantine' is displayed as the default action.

#### Permitted actions

In this box actions can be specified, which can be selected in individual or expert notification mode in case of a virus detection. You must activate the corresponding options for this.

#### Repair

The Scanner repairs the infected file if possible.

#### <u>rename</u>

The Scanner renames the file. Direct access to these files (e.g. with double-click) is therefore no longer possible. The file can be repaired at a later time and renamed again.

#### **Quarantine**

The Scanner moves the file to Quarantine. The file can be recovered from quarantine manager if it has an informative value or - if necessary - sent to the Avira Malware Research Center. Depending on the file, further selection options are available in the quarantine manager.

#### <u>delete</u>

The file will be deleted. This process is much faster than "overwrite and delete".

#### <u>Ignore</u>

The file is to be ignored.

#### overwrite and delete

The Scanner overwrites the file with a default pattern and then deletes it. It cannot be restored.

#### **Default**

The button is used to define a default action by the Scanner to handle the files encountered. Highlight an action and click the "**Default**" button. Only the selected default action for the relevant files can be executed in combined notification mode. The selected default action for the relevant files is preselected in individual and expert notification mode.

#### Note

The action **repair** cannot be selected as the default action.

#### Note

If you have selected *Delete* or *Overwrite* and *Delete* as the default action and wish to set the notification mode to combined, please note the following: In the case of heuristic hits, the affected files are not deleted, but are instead moved to quarantine.

Click here for more information.

#### **Automatic**

If this option is enabled, no dialog box in case of a virus detection appears. The Scanner reacts according to the settings you predefine in this section as primary and secondary action

## Backup to quarantine

If this option is enabled, the Scanner creates a backup copy before carrying out the requested primary or secondary action. The back-up copy is saved in Quarantine, where the file can be restored if it is of informative value. You can also send the backup copy to the Avira Malware Research Center for further investigation.

## Display detection alerts

If this option is activated, then for each detection of a virus or unwanted program an alert appears showing the actions being executed.

## **Primary** action

Primary action is the action performed when the Scanner finds a virus or an unwanted program. If the option "**repair**" is selected but the affected file cannot be repaired, the action selected under "**Secondary action**" is performed.

### Note

The option <u>Secondary action</u> can only be selected if the setting **repair** was selected under <u>Primary action</u>.

#### Repair

If this option is enabled, the Scanner repairs affected files automatically. If the Scanner cannot repair an affected file, it carries out the action selected under Secondary action.

## Note

An automatic repair is recommended, but means that the Scanner modifies files on the workstation.

#### delete

If this option is enabled, the file is deleted. This process is much faster than "overwrite and delete".

# overwrite and delete

If this option is enabled, the Scanner overwrites the file with a default pattern and then deletes it. It cannot be restored.

#### rename

If this option is enabled, the Scanner renames the file. Direct access to these files (e.g. with double-click) is therefore no longer possible. Files can later be repaired and given their original names again.

## *Ignore*

If this option is enabled, access to the file is allowed and the file is left as it is.

#### Warning

The affected file remains active on your workstation! It may cause serious damage on your workstation!

# **Quarantine**

If this option is enabled, the Scanner moves the file to the quarantine. These files can later be repaired or - if necessary - sent to the Avira Malware Research Center.

#### Secondary action

The option "**Secondary action**" can only be selected if the setting **repair** was selected under "**Primary action**". With this option it can now be decided what is to be done with the affected file if it cannot be repaired.

#### delete

If this option is enabled, the file is deleted. This process is much faster than "overwrite and delete".

#### overwrite and delete

If this option is enabled, the Scanner overwrites the file with a default pattern and then deletes (wipes) it. It cannot be restored.

#### <u>rename</u>

If this option is enabled, the Scanner renames the file. Direct access to these files (e.g. with double-click) is therefore no longer possible. Files can later be repaired and given their original names again.

#### Ignore

If this option is enabled, access to the file is allowed and the file is left as it is.

## Warning

The affected file remains active on your workstation! It may cause serious damage on your workstation!

#### Quarantine

If this option is enabled, the Scanner moves the file to Quarantine. These files can later be repaired or - if necessary - sent to the Avira Malware Research Center.

#### Note

If you have selected **Delete** or **Overwrite and Delete** as the primary or secondary action, you should note the following: In the case of heuristic hits, the affected files are not deleted, but are instead moved to quarantine.

# 12.1.1.2. Further actions

# Launch program following detection

After the on-demand scan, the Scanner can open a file of your choice (for example a program) if at least one virus or unwanted program has been detected, for example an email program, so that you can inform other users or the administrator.

#### Note

For security reasons it is only possible to start a program after a detection when a user is logged on the computer. The file is then opened with the rights that apply to the logged on user. If no user is logged on, this option is not performed.

## Program name

In this input box you can enter the name and the relevant path of the program that the Scanner should start after a detection.



This button opens a window in which you can select the desired program with the aid of the file selection dialog.

#### <u>Arguments</u>

In this input box you can enter command line parameters for the program to be started if necessary.

# Event log

## Use event log

If this option is enabled, an event report with the results of the scan is transferred to the Windows Event Log after a Scanner scan has been completed. The events can be called up in the Windows Event Viewer. The option is disabled as the default setting.

When scanning archives, the Scanner uses a recursive scan: Archives in archives are also unpacked and scanned for viruses and unwanted programs. The files are scanned, decompressed and scanned again.

# Scan archives

If this option is enabled, the selected archives in the archive list are scanned. This option is enabled as the default setting.

## All archive types

If this option is enabled, all archive types in the archive list are selected and scanned.

# **Smart Extensions**

If this option is enabled, the Scanner detects whether a file is a packed file format (archive), even if the file extension differs from the usual extensions, and scans the archive. However every file must be opened for this, which reduces the scanning speed. Example: If a \*.zip archive has the file extension \*.xyz, the Scanner also unpacks this archive and scans it. This option is enabled as the default setting.

#### Note

Only those archive types marked in the archive list are supported.

#### Recursion depth

Unpacking and scanning recursive archives can require a great deal of computer time and resources. If this option is enabled, you limit the depth of the scan in multi-packed archives to a certain number of packing levels (maximum recursion depth). This saves time and computer resources.

#### Note

In order to find a virus or an unwanted program in an archive, the Scanner must scan up to the recursion level in which the virus or the unwanted program is located.

# Maximum recursion depth

In order to enter the maximum recursion depth, the option Limit recursion depth must be enabled.

You can either enter the requested recursion depth directly or by means of the right arrow key on the entry field. The permitted values are 1 to 99. The standard value is 20 which is recommended.

#### Default values

The button restores the pre-defined values for scanning archives.

#### **Archives**

In this display area you can set which archives the Scanner should scan. For this, you must select the relevant entries.

# 12.1.1.3. Exceptions

# File objects to be omitted for the Scanner

The list in this window contains files and paths that should not be included by the Scanner in the scan for viruses or unwanted programs.

Please enter as few exceptions as possible here and really only files that, for whatever reason, should not be included in a normal scan. We recommend that you always scan these files for viruses or unwanted programs before they are included in this list!

#### Note

The entries in the list must not result in more than 6000 characters in total.

# Warning

These files are not included in a scan!

#### Note

The files included in this list are recorded in the report file. Please check the report file from time to time for unscanned files, as perhaps the reason you excluded a file here no longer exists. In this case you should remove the name of this file from this list again.

#### Input box

In this input box you can enter the name of the file object that is not included in the ondemand scan. No file object is entered as the default setting.



The button opens a window in which you can select the required file or the required path.

When you have entered a file name with its complete path, only this file is not scanned for infection. If you have entered a file name without a path, all files with this name (irrespective of the path or drive) are not scanned.

#### Add

With this button, you can add the file object entered in the input box to the display window.

## Delete

The button deletes a selected entry from the list. This button is inactive if no entry is selected.

# Note

If you add a complete partition to the list of the file objects, only those files that are saved directly under the partition will be excluded from the scan, which does not apply to files in sub-directories on the corresponding partition:

Example: File object to be skipped:  $D: \neq D: file.txt$  will be excluded from the scan of the Scanner, D: folderfile.txt will not be excluded from the scan.

#### Note

If you are managing the AntiVir program in SMC, you can use variables in the path details for file exceptions. You can find a list of variables you can use under Variables: Guard und Scanner Exceptions.

# 12.1.1.4. Heuristics

This configuration section contains the settings for the heuristic of the scan engine.

AntiVir products contain very powerful heuristics that can proactively uncover unknown malware, i.e. before a special virus signature to combat the damaging element has been created and before a virus guard update has been sent. Virus detection involves an extensive analysis and investigation of the affected codes for functions typical of malware. If the code being scanned exhibits these characteristic features, it is reported as being suspicious. This does not necessarily mean that the code is in fact malware. False positives do sometimes occur. The decision on how to handle affected code is to be made by the user, e.g. based on his or her knowledge of whether the source of the code is trustworthy or not.

# Macrovirus heuristics

#### Macrovirus heuristics

Your AntiVir product contains a highly powerful macrovirus heuristic. If this option is enabled, all macros in the relevant document are deleted in the event of a repair, alternatively suspect documents are only reported, i.e. you receive an alert. This option is enabled as the default setting and is recommended.

# Advanced Heuristic Analysis and Detection (AHeAD) enable AHeAD

Your AntiVir program contains a very powerful heuristic in the form of AntiVir AHeAD technology, which can also detect unknown (new) malware. If this option is enabled, you can define how "aggressive" this heuristic should be. This option is enabled as the default setting.

## Low detection level

If this option is enabled, slightly less unknown malware is detected, the risk of false alerts is low in this case.

## Medium detection level

This option is enabled as the default setting if you have selected the use of this heuristic.

# High detection level

If this option is enabled, significantly more unknown malware is detected, but there are also likely to be false positives.

# 12.1.2 Report

The Scanner has a comprehensive reporting function. You thus obtain precise information on the results of an on-demand scan. The report file contains all entries of the system as well as alerts and messages of the on-demand scan.

# Note

To enable you to establish what actions the Scanner has performed when viruses or unwanted programs have been detected, a report file should always be created.

# Reporting

# Off

If this option is enabled, the Scanner does not report the actions and results of the ondemand scan.

#### Default

When this option is activated, the Scanner logs the names of the files concerned with their path. In addition, the configuration for the current scan, version information and information on the licensee is written in the report file.

#### Advanced

When this option is activated, the Scanner logs alerts and tips in addition to the default information.

# **Complete**

When this option is activated, the Scanner also logs all scanned files. In addition, all files involved as well as alerts and tips are included in the report file.

#### Note

If you have to send us a report file at any time (for troubleshooting), please create this report file in this mode.

# 12.2 Guard

The Guard section of the configuration is responsible for the configuration of the onaccess scan.

# 12.2.1 Scan

You will normally want to monitor your system constantly. To this end, use the Guard (= on-access Scanner). You can thus scan all files that are copied or opened on the computer "on the fly", for viruses and unwanted programs.

# Scan mode

Here the time for scanning of a file is defined.

#### Scan when reading

If this option is enabled, the Guard scans the files before they are read or executed by the application or the operating system.

## Scan when writing

If this option is enabled, the Guard scans a file when writing. You can only access the file again after this process has been completed.

# Scan when reading and writing

If this option is enabled, the Guard scans files before opening, reading and executing and after writing. This option is enabled as the default setting and is recommended.

#### **Files**

The Guard can use a filter to scan only those files with a certain extension (type).

# <u>All files</u>

If this option is enabled, all files are scanned for viruses or unwanted programs, irrespective of their content and their file extension.

#### Note

If All files is enabled, the File extensions button cannot be selected.

## **Smart Extensions**

If this option is enabled, the selection of the files scanned for viruses or unwanted programs is automatically chosen by the program. This means that the program decides whether the files are scanned or not based on their content. This procedure is somewhat slower than Use file extension list, but more secure, since not only on the basis of the file extension is scanned.

#### Note

If Smart Extensions is enabled, the **File extensions** button cannot be selected.

# Use file extension list

If this option is enabled, only files with a specified extension are scanned. All file types that may contain viruses and unwanted programs are preset. The list can be edited manually via the "File extensions" button. This option is enabled as the default setting and is recommended.

#### Note

If this option is enabled and you have deleted all entries from the list with file extensions, this is indicated with the text "No file extensions" under the <u>File extensions</u> button.

## File extensions

With the aid of this button, a dialog box is opened in which all file extensions are displayed that are scanned in "**Use file extension list**" mode. Default entries are set for the extensions, but entries can be added or deleted.

#### Note

Please note that the file extension list may vary from version to version.

## **Archives**

# Scan archives

If this option is enabled, then archives will be scanned. Compressed files are scanned, then decompressed and scanned again. This option is deactivated by default. The archive scan is restricted by the recursion depth, the number of files to be scanned and the archive size. You can set the maximum recursion depth, the number of files to be scanned and the maximum archive size.

# Note

This option is deactivated by default, since the process puts heavy demands on the computer's performance. It is generally recommended that archives be checked using an on-demand scan.

#### Maximum recursion depth

When scanning archives, the Guard uses a recursive scan: Archives in archives are also unpacked and scanned for viruses and unwanted programs. You can define the recursion depth. The default value for the recursion depth is 1 and is recommended: all archives that are directly located in the main archive are scanned.

# Maximum number of files

When scanning archives, you can restrict the scan to a maximum number of files in the archive. The default value for the maximum number of files to be scanned is 10 and is recommended.

#### Maximum size (KB)

When scanning archives, you can restrict the scan to a maximum archive size to be unpacked. The standard value of 1000 KB is recommended.

### **Drives**

## Network drives

If this option is enabled, files on network drives (mapped drives) such as server volumes, peer drives etc., are scanned.

#### Note

In order not to reduce the performance of your computer too much, the option **Network drives** should only be enabled in exceptional cases.

# Warning

If this option is disabled, the network drives are **not** monitored. You are no longer protected against viruses or unwanted programs!

#### Note

When files are executed on network drives, they are scanned by the Guard irrespective of the setting for the *Network Drives* option. In some cases files on network drives are scanned while being opened, even though the *Network Drives* option is disabled. Reason: These files are accessed with 'Execute File' rights. If you want to exclude these files or even executed files on network drives from scanning by the Guard, enter the files in the list of file objects to be excluded (see: Guard::Scan::Exceptions).

## Enable caching

If this option is enabled, monitored files on network drives will be made available in the Guard's cache. Monitoring of network drives without the caching function is more secure, but does not perform as well as the monitoring of network drives with caching.

# 12.2.1.1. Action on detection

## Action on detection

You can define the actions to be performed by Guard when a virus or unwanted program is detected.

# **Interactive**

If this option is enabled, a desktop notification appears when Guard detects a virus or unwanted program. You have the option of removing the detected malware or accessing other possible virus treatment actions via the 'Details' button. The actions are displayed in a dialog box. The actions will be displayed in a dialog box. This option is enabled as the default setting.

#### Permitted actions

In this display box you can specify the virus management actions that should be available as further actions in the dialog box. You must activate the corresponding options for this.

#### <u>repair</u>

Guard repairs the infected file if possible.

#### rename

Guard renames the file. Direct access to these files (e.g. with double-click) is therefore no longer possible. The file can be repaired at a later time and renamed again.

#### Quarantine

Guard moves the file to Quarantine. The file can be recovered from quarantine manager if it has an informative value or - if necessary - sent to the Avira Malware Research Center. Depending on the file, further selection options are available in the quarantine manager .

#### delete

The file will be deleted. This process is much faster than "overwrite and delete".

#### lanore

Access to the file is permitted and the file is ignored.

## overwrite and delete

Guard overwrites the file with a default pattern before deleting it. It cannot be restored.

#### **Default**

This button allows you to select an action that is activated in the dialog box by default when a virus is detected. Select the action that should be activated by default and click on the "**Default**" button.

#### Note

The action **repair** cannot be selected as the default action.

Click here for more information.

## **Automatic**

If this option is enabled, no dialog box in case of a virus detection appears. Guard reacts according to the settings you predefine in this section as primary and secondary action.

# Backup to quarantine

If this option is enabled, the Guard creates a backup copy before carrying out the requested primary or secondary action. The backup copy is saved in quarantine. It can be restored via the quarantine manager if it is of informative value. You can also send the backup copy to the Avira Malware Research Center. Depending on the object, more selection options are available in the quarantine manager.

# Display detection alerts

If this option is enabled, then for each detection of a virus or unwanted program an alert appears.

#### Primary action

Primary action is the action performed when the Guard finds a virus or an unwanted program. If the "**repair**" option is selected but the affected file cannot be repaired, the action selected under "**Secondary action**" is performed.

#### Note

The Secondary action option can only be selected if the repair setting was selected under Primary action.

# repair

If this option is enabled, the Guard repairs affected files automatically. If the Guard cannot repair an affected file, it carries out the action selected under Secondary action.

#### Note

An automatic repair is recommended, but means that the Guard modifies files on the workstation.

#### delete

If this option is enabled, the file is deleted. This process is much faster than "overwrite and delete".

#### overwrite and delete

If this option is enabled, the Guard overwrites the file with a default pattern and then deletes it. It cannot be restored.

#### rename

If this option is enabled, the Guard renames the file. Direct access to these files (e.g. with double-click) is therefore no longer possible. Files can later be repaired and given their original names again.

#### Ignore

If this option is enabled, access to the file is allowed and the file is left as it is.

# Warning

The affected file remains active on your workstation! It may cause serious damage on your workstation!

## Deny access

If this option is enabled, the Guard only enters the detection in the report file if the report function is enabled. In addition, the Guard writes an entry in the Event log, if this option is enabled.

#### Quarantine

If this option is enabled, the Guard moves the file to Quarantine. The files in this directory can later be repaired or - if necessary - sent to the Avira Malware Research Center.

#### Secondary action

The option "**Secondary action**" can only be selected if the "**Repair**" option was selected under "**Primary action**". With this option it can now be decided what is to be done with the affected file if it cannot be repaired.

#### delete

If this option is enabled, the file is deleted. This process is much faster than "overwrite and delete".

## overwrite and delete

If this option is enabled, the Guard overwrites the file with a default pattern and then deletes it. It cannot be restored.

# <u>rename</u>

If this option is enabled, the Guard renames the file. Direct access to these files (e.g. with double-click) is therefore no longer possible. Files can later be repaired and given their original names again.

#### Ignore

If this option is enabled, access to the file is allowed and the file is left as it is.

# Warning

The affected file remains active on your workstation! It may cause serious damage on your workstation!

#### Deny access

If this option is enabled, the Guard only enters the detection in the report file if the report function is enabled. In addition, the Guard writes an entry in the Event log, if this option is enabled.

#### **Quarantine**

If this option is enabled, the Guard moves the file to Quarantine. The files can later be repaired or - if necessary - sent to the Avira Malware Research Center.

#### Note

If you have selected **Delete** or **Overwrite and Delete** as the primary or secondary action, please note the following: In the case of heuristic hits, the affected files are not deleted, but are instead moved to quarantine.

# 12.2.1.2. Further actions

#### **Notifications**

# Event log

## Use event log

If this option is enabled, an entry is added to the Windows event log for every detection. The events can be called up in the Windows event viewer. This option is enabled as the default setting.

#### **Autostart**

# **Block autostart function**

When this option is enabled, the execution of the Windows Autostart function is blocked on all connected drives, including USB sticks, CD and DVD drives and network drives. With the Windows Autostart function, files on data media or network drives are read immediately on loading or connection, and files can therefore be started and copied automatically. This functionality carries with it a high security risk, however, as malware and unwanted programs can be installed with the automatic start. The Autostart function is especially critical for USB sticks as data on a stick can be changed at any time.

### Exclude CDs and DVDs

When this option is enabled, the Autostart function is permitted on CD and DVD drives.

# Warning

Only disable the Autostart function for CD and DVD drives if you are sure you are only using trusted data media.

# 12.2.1.3. Exceptions

With these options you can configure exception objects for the Guard (on-access scan). The relevant objects are then not included in the on-access scan. The Guard can ignore file accesses to these objects during the on-access scan via the list of processes to be omitted. This is useful, for example, with databases or backup solutions.

Please note the following when specifying processes and file objects to be omitted: The list is processed from top to bottom. The longer the list is, the more processor time is required for processing the list for each access. Therefore, keep the list as short as possible.

# Processes to be omitted by the Guard

All file accesses of processes in this list are excluded from monitoring by Guard.

## Input box

In this field, enter the name of the process that is to be ignored by the real-time scan. No process is entered as the default setting.

#### Note

You can enter up to 128 processes.

#### Note

When entering the process, Unicode symbols are accepted. You can therefore enter process or directory names containing special symbols.

#### Note

You have the option of excluding processes from monitoring by the Guard without full path details.

application.exe

This however only applies to processes where the executable files are located on hard disk drives.

Full path details are required for processes where the executable files are located on connected drives, e.g. network drives. Please note the general information on the notation of Exceptions on connected network drives.

Do not specify any exceptions for processes where the executable files are located on dynamic drives. Dynamic drives are used for removable disks, such as CDs, DVDs or USB sticks.

## Note

Drive information must be entered as follows: [Drive letter]:\

The colon symbol (:) is only used to specify drives.

# Note

When specifying the process, you can use the wildcards\* (any number of characters) and ?? (a single character).

C:\Program Files\Application\application.exe

C:\Program Files\Application\applicatio?.exe

C:\Program Files\Application\applic\*.exe

C:\Program Files\Application\\*.exe

To avoid the process being excluded globally from monitoring by Guard, specifications exclusively comprising the following characters are invalid: \* (asterisk), ? (question mark), / (forward slash),  $\setminus$  (backslash),  $\cdot$  (dot),  $\cdot$  (colon).

#### Note

The specified path and file name of the process should contain a maximum of 255 characters. The entries in the list must not result in more than 6000 characters in total.

# Warning

Please note that all file accesses by processes recorded in the list are excluded from the scan for viruses and unwanted programs! The Windows Explorer and the operating system itself cannot be excluded. A corresponding entry in the list is ignored.



The button opens a window in which you can select an executable file.

## Processes

The "**Processes**" button opens the "*Process selection*" window in which the running processes are displayed.

#### Add

With this button, you can add the process entered in the input box to the display window.

#### Delete

With this button you can delete a selected process from the display window.

# File objects to be omitted by the Guard

All file accesses to objects in this list are excluded from monitoring by the Guard.

# Input box

In this box you can enter the name of the file object that is not included in the on-access scan. No file object is entered as the default setting.

#### Note

When specifying file objects to be omitted, you can use the wildcards\* (any number of characters) and ?? (a single character): Individual file extensions can also be excluded (including wildcards):

C:\Directory\\*.mdb

- \*.mdb
- \*.md?
- \*.xls\*

C:\Directory\\*.log

#### Note

Directory names must end with a backslash \, otherwise a file name is assumed.

#### Note

The entries in the list must have no more than 6000 characters in total.

#### Note

If a directory is excluded, all its sub-directories are automatically also excluded.

## Note

For each drive you can specify a maximum of 20 exceptions by entering the complete path (starting with the drive letter).

For example: C:\Program Files\Application\Name.log

The maximum number of exceptions without a complete path is 64.

For example: \*.log

\computer1\C\directory1

#### Note

In case of dynamic drives that are mounted as a directory on another drive, the alias of the operating system for the integrated drive in the list of the exceptions has to be used: e.g. \Device\HarddiskDmVolumes\PhysicalDmVolumes\BlockVolume1\\ If you use the mount point itself, for example, C:\DynDrive, the dynamic drive will be scanned nonetheless. You can determine the alias of the operating system to be used from the Guard report file.



The button opens a window in which you can select the file object to be excluded.

#### Add

With this button, you can add the file object entered in the input box to the display window.

#### Delete

With this button you can delete a selected file object from the display window.

Please note the further information when specifying exceptions:

#### Note

In order to also exclude objects when they are accessed with short DOS file names (DOS name convention 8.3), the relevant short file name must also be entered in the list.

#### Note

A file name that contains wildcards may not be terminated with a backslash.

For example:

```
C:\Program Files\Application\applic*.exe\
```

This entry is not valid and not treated as an exception!

#### Note

Please note the following with regard to exceptions on connected network drives: If you use the drive letter of the connected network drive, the files and folders specified are NOT excluded from the Guard scan. If the UNC path in the list of exceptions differs from the UNC path used to connect to the network drive (IP address specification in the list of exceptions – specification of computer name for connection to network drive), the specified folders and files are NOT excluded by the Guard scan. Locate the relevant UNC path in the Guard report file:

\\<Computer name>\<Enable>\ - OR - \\<IP address>\<Enable>\

#### Note

You can locate the path Guard uses to scan for infected files in the Guard report file. Indicate exactly the same path in the list of exceptions. Proceed as follows: Set the protocol function of the Guard to **Complete** in the configuration under Guard::Report. Now access the files, folders, mounted drives or connected network drives with the activated Guard. You can now read the path to be used from the Guard report file. The report file can be accessed in the Control Center under Local protection::Guard.

# Note

If you are managing the AntiVir program in SMC, you can use variables in the path details for process and file exceptions. You can find a list of variables you can use under Variables: Guard and Scanner Exceptions.

Examples for processes to be excluded:

- application.exe

The application.exe process is excluded from the Guard scan, irrespective of which hard disk drive it is located on and which directory it is in.

C:\Program Files1\Application.exe

The process for the file application.exe, which is located under the path C:\Program Files1, is excluded from the Guard scan.

C:\Program Files1\\*.exe

All processes for executable files located under the path C:\Program Files1 are excluded from the Guard scan.

# Examples for files to be excluded:

- \*.mdb

All files with the extension 'mdb' are excluded from the Guard scan

- \*.xls\*

All files with a file extension beginning 'xls' are excluded from the Guard scan, e.g. files with the extensions .xls and .xlsx.

C:\Directory\\*.log

All log files with the extension 'log', located under the path C:\Directory, are excluded from the Guard scan.

– \\Computer name\Shared1\

All files are excluded from the Guard scan accessed via a connection '\Computer name1\Shared1'. This is generally a connected network drive which accesses another computer with a shared folder via the computer name 'Computer name1' and the shared name 'Shared1'.

\\1.0.0.0\Shared1\\*.mdb

All files with the extension 'mdb' are excluded from the Guard scan accessed via a connection '\\1.0.0.\Shared1'. This is generally a connected network drive which accesses another computer with a shared folder via the IP address '1.0.0.0' and the shared name 'Shared1'.

# 12.2.1.4. Heuristics

This configuration section contains the settings for the heuristic of the scan engine.

AntiVir products contain very powerful heuristics that can proactively uncover unknown malware, i.e. before a special virus signature to combat the damaging element has been created and before a virus guard update has been sent. Virus detection involves an extensive analysis and investigation of the affected codes for functions typical of malware. If the code being scanned exhibits these characteristic features, it is reported as being suspicious. This does not necessarily mean that the code is in fact malware. False positives do sometimes occur. The decision on how to handle affected code is to be made by the user, e.g. based on his or her knowledge of whether the source of the code is trustworthy or not.

#### Macrovirus heuristics

## Macrovirus heuristics

Your AntiVir product contains a highly powerful macrovirus heuristic. If this option is enabled, all macros in the relevant document are deleted in the event of a repair, alternatively suspect documents are only reported, i.e. you receive an alert. This option is enabled as the default setting and is recommended.

# Advanced Heuristic Analysis and Detection (AHeAD) <a href="mailto:enable-AHeAD">enable AHeAD</a>

Your AntiVir program contains a very powerful heuristic in the form of AntiVir AHeAD technology, which can also detect unknown (new) malware. If this option is enabled, you can define how "aggressive" this heuristic should be. This option is enabled as the default setting.

#### Low detection level

If this option is enabled, slightly less unknown malware is detected, the risk of false alerts is low in this case.

#### Medium detection level

This option is enabled as the default setting if you have selected the use of this heuristic.

## High detection level

If this option is enabled, significantly more unknown malware is detected, but there are also likely to be false positives.

# 12.2.2 ProActiv

Avira AntiVir ProActiv protects you from new and unknown threats for which there are not yet any virus definitions or heuristics available. ProActiv technology is integrated into the Guard component and observes and analyzes the program actions performed. The behavior of the program is checked against typical malware action patterns: Type of action and action sequences. If a program exhibits behavior typical of malware, this is treated as a virus detection: You have the option of blocking the program or ignoring the notification and continuing to use the program. You can classify the program as trusted and add it to the application filter for permitted programs. You have the option of adding the program to the application filter for blocked programs using the *Always block* command.

The ProActiv component uses rule sets developed by the Avira Malware Research Center to identify suspicious behavior. The rule sets are supplied by Avira GmbH databases. Avira AntiVir ProActiv sends information on any suspicious programs detected to the Avira databases for logging. You have the option of disabling data transmission to the Avira databases

#### Note

ProActiv technology is not yet available for  $64\ \mathrm{bit}$  systems! Windows  $2000\ \mathrm{does}$  not support ProActiv components.

## General

Enabling Avira AntiVir ProActiv

If this option is enabled, programs on your computer system are monitored and checked for suspicious actions. You will receive a message if typical malware behavior is detected. You can block the program or select "*Ignore*" to continue to use the program. The monitoring process excludes: Programs classified as trusted, trusted and signed programs included by default in the permitted applications filter, and all programs which you have added to the application filter for permitted programs.

# Participating in the AntiVir ProActiv Community enhances your computer's security.

If this option is enabled, Avira AntiVir ProActiv sends data on suspicious programs and, in certain cases, suspicious program files (executable files) to the Avira Malware Research Center for advanced online scanning. After evaluation, these data are added to the ProActiv behavioral analysis rule sets. In this way, you become part of the Avira ProActiv community and contribute to the continuous improvement and refinement of the ProActiv security technology. No data are sent if this option is disabled. This has no effect on ProActiv functionality.

# Click here for further information

With this link you can access an Internet page where you can obtain detailed information on the advanced online scan. All data transmitted during an advanced online scan is included on the Internet page.

# 12.2.2.1. Application filter: Applications to be blocked

Under Application filter: Applications to be blocked you can enter applications which you classify as harmful and which you want Avira AntiVir ProActiv to block by default. The applications added cannot be executed on your computer system. You can also add programs to the application filter for blocking via Guard notifications of suspicious program behavior, by selecting the Always block this program option.

# Applications to be blocked

# **Applications**

The list contains all applications which you have classified as harmful which you have entered via the configuration or by notifying the ProActiv component. The applications on the list are blocked by Avira AntiVir ProActiv and cannot be executed on your computer system. An operating system message appears when a blocked program starts up. The applications to be blocked are identified by Avira AntVir ProActiv on the basis of the path specified and the file name, and are blocked irrespective of their content.

## Input box

Enter the application you want to block in this box. To identify the application, the full path, file name and file extension must be specified. The path must either show the drive on which the application is located or start with an environment variable.



The button opens a window in which you can select the application to be blocked.

#### Add

With the "**Add**" button you can transfer the application specified in the input box to the list of applications to be blocked.

#### Note

Applications required for the proper operation of the operating system cannot be added.

# <u>Delete</u>

The "**Delete**" button lets you remove a highlighted application from the list of applications to be blocked.

# 12.2.2.2. Application filter: Permitted applications

The section Application filter: Permitted applications lists the applications excluded from monitoring by the ProActiv component: signed programs classified as trusted and included in list by default, all applications classified as trusted and added to the application filter: You can add permitted applications to the list in Configuration. You also have the option of adding applications to suspicious program behavior via Guard notifications by using the **Trusted program** option in the Guard notification.

# Applications to be skipped

# **Applications**

The list contains applications excluded from monitoring by the ProActiv component. In the default installation settings, the list contains signed applications from trusted producers. You have the option of adding applications that you consider to be trustworthy via the configuration or via Guard notifications. The ProActiv component identifies applications using the path, the file name and the content. We recommend checking the content as malcode can be added to a program through changes such as updates. You can determine whether a contents check should be performed from the type specified: For the "Contents" type, the applications specified by path and file name are checked for changes to the file content before they are excluded from monitoring by the ProActiv component. If the file contents have been modified, the application is again monitored by the ProActiv component. For the "Path" type, no contents check is performed before the application is excluded from monitoring by the Guard. To change the exclusion type, click on the type displayed.

# Warning

Only use the *Path* type in exceptional cases. Malcode can be added to an application through an update. The originally harmless application is now malware.

#### Note

Some trusted applications, including for example all application components of your AntiVir program, are by default excluded from monitoring by the ProActiv component even though they are not included in the list.

#### Input box

In this box you enter the application to be excluded from monitoring by the ProActiv component. To identify the application, the full path, file name and file extension must be specified. The path must either show the drive on which the application is located or start with an environment variable.



The button opens a window in which you can select the application to be excluded.

#### Add

With the "**Add**" button you can transfer the application specified in the input box to the list of applications to be excluded.

#### <u>Delete</u>

The "**Delete**" button lets you remove a highlighted application from the list of applications to be excluded.

# 12.2.3 Report

Guard includes an extensive logging function to provide the user or administrator with exact notes about the type and manner of a detection.

# Reporting

This group allows for the content of the report file to be determined.

#### Off

If this option is enabled, then Guard does not create a log.

It is recommended that you should turn off the logging function only in exceptional cases, such as if you are executing trials with multiple viruses or unwanted programs.

# <u>Default</u>

If this option is enabled, Guard records important information (concerning detections, alerts and errors) in the report file, with less important information ignored for improved clarity. This option is enabled as the default setting.

## **Advanced**

If this option is enabled, Guard logs less important information to the report file as well.

# **Complete**

If this option is enabled, Guard logs all available information in the report file, including file size, file type, date, etc.

# Limit report file

# Limit size to n MB

If this option is enabled, the report file can be limited to a certain size; possible values: Permitted values are between 1 and 100 MB. Around 50 kilobytes of extra space are allowed when limiting the size of the report file to minimize the use of system resources. If the size of the log file exceeds the indicated size by more than 50 kilobytes, then old entries are deleted until the indicated size minus 50 kilobytes is reached.

# Backup report file before shortening

If this option is enabled, the report file is backed up before shortening. For the save location see Configuration :: General :: Directories :: Report directory.

# Write configuration in report file

If this option is enabled, the configuration of the on-access scan is recorded in the report file.

#### Note

If you have not specified any report file restriction, a new report file is automatically created when the report file reaches 100MB. A backup of the old report file is created. Up to three backups of old report files are saved. The oldest backups are deleted first.

# 12.3 MailGuard

The MailGuard section of the Configuration is responsible for the configuration of the MailGuard.

# 12.3.1 Scan

Use MailGuard to scan incoming emails for viruses and malware . Outgoing emails can be scanned for viruses and malware by MailGuard.

#### Scan

#### Turn on MailGuard

If this option is enabled, email traffic is monitored by MailGuard. MailGuard is a proxy server which checks data traffic between the email server you use and the email client program on your computer system: incoming emails are scanned for malware by default. If this option is disabled, the MailGuard service is still started, but monitoring by MailGuard is disabled.

# Scan incoming emails

If this option is enabled, incoming emails are scanned for viruses and malware. MailGuard supports POP3 and IMAP protocols. Enable the inbox account used by your email client to receive emails for monitoring by MailGuard.

# Monitor POP3 accounts

If this option is enabled, the POP3 accounts are monitored on the specified ports.

## Monitored ports

In this field you should enter the port to be used as the inbox by the POP3 protocol. Multiple ports are separated by commas.

# <u>Default</u>

This button resets the specified port to the default POP3 port.

# Monitor IMAP accounts

If this option is enabled, the IMAP accounts are monitored on the specified ports.

## Monitored ports

In this field you should enter the port to be used as the inbox by the IMAP protocol. Multiple ports are separated by commas.

# <u>Default</u>

This button resets the specified port to the default IMAP port.

## Scan outgoing emails (SMTP)

If this option is enabled, outgoing emails are scanned for viruses and malware.

## Monitored ports

In this field you should enter the port to be used as the outbox by the SMTP protocol. Multiple ports are separated by commas.

#### Default

This button resets the specified port to the default SMTP port.

#### Note

To verify the protocols and ports used, call up the properties of your email accounts in your email client program. Default ports are mostly used.

# 12.3.1.1. Action on detection

This configuration section contains settings for actions performed when MailGuard finds a virus or unwanted program in an email or in an attachment.

#### Note

These actions are performed both when a virus is detected in incoming emails and when a virus is detected in outgoing emails.

# Action on detection

#### Interactive

If this option is enabled, a dialog box appears when a virus or unwanted program is detected in an email or attachment in which you can choose what is to be done with the email or attachment concerned. This option is enabled as the default setting.

## Permitted actions

In this box actions can be specified, which can be selected to be displayed in case of a virus detection. You must activate the corresponding options for this.

# Move to quarantine

When this option has been activated, the email including all attachments is moved to quarantine. It can be later be delivered via the quarantine manager. The affected email is deleted. The body of the text and any attachments of the email are replaced by a default text.

## **Delete**

If this option is enabled, the affected email is deleted when a virus or unwanted program is detected. The body of the text and any attachments of the email are replaced by a default text.

## Delete attachment

If this option has been activated, the affected attachment is replaced by a default text. If the body of the email is affected, it will be erased and also replaced by a default text. The email itself is delivered.

# Move attachment to quarantine

If this option has been activated, the affected attachment is moved to quarantine and then deleted (replaced by a default text). The body of the email is delivered. The affected attachment can later be delivered via the quarantine manager.

# <u>Ignore</u>

If this option is enabled, an affected email is delivered despite detection of a virus or unwanted program.

## **Default**

This button allows you to select an action that is activated in the dialog box by default when a virus is detected. Select the action that should be activated by default and click on the **Default** button.

# Show progress bar

If this option is enabled, the MailGuard shows a progress bar during downloading of emails. This option can only be enabled if the option **Interactive** has been selected.

#### **Automatic**

If this option is enabled, you are no longer notified when a virus or unwanted program is found. MailGuard reacts according to the settings you define in this section.

#### Primary action

The Primary action is the action performed when the MailGuard finds a virus or an unwanted program in an email. If the option "**Ignore email**" is selected, it is also possible, under "**Affected attachments**", to select the process for dealing with a virus or unwanted program detected in an attachment.

# <u>Delete</u> <u>email</u>

If this option is enabled, the affected email is automatically deleted if a virus or unwanted program is found. The body of the email is replaced by the default text given below. The same applies to all attachments included; these are also replaced by a default text.

#### Isolate email

If this option is enabled, the complete email including all attachments is placed in Quarantine if a virus or unwanted program is found. If required, it can later be restored. The affected email itself is deleted. The body of the email is replaced by the default text given below. The same applies to all attachments included; these are also replaced by a default text.

## Ignore email

If this option is enabled, the affected email is ignored despite detection of a virus or unwanted program. However, you can decide what is to be done with the affected attachment:

### Affected attachments

The option "**Affected attachments**" can only be selected if the setting "**Ignore email**" has been selected under "**Primary action**". With this option it is now possible to decide what is to be done if a virus or unwanted program is found in an attachment.

#### delete

If this option is enabled, the affected attachment is deleted if a virus or unwanted program is found and replaced by a default text.

#### <u>Isolate</u>

If this option is enabled, the affected attachment is placed in Quarantine and then deleted (replaced by a default text). If required, the affected attachment(s) can later be restored.

# <u>Ignore</u>

If this option is enabled, the attachment is ignored despite detection of a virus or unwanted program and delivered.

#### Warning

If you select this option, you have no protection against viruses and unwanted programs by the MailGuard. Only select this item if you are certain you know what you are doing. Disable the preview in your email program, never open attachments by double-clicking!

# 12.3.1.2. Other actions

This configuration section contains other settings for actions performed when MailGuard finds a virus or unwanted program in an email or in an attachment.

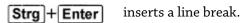
#### Note

These actions are performed exclusively when a virus is detected in incoming emails.

#### Default text for deleted and moved emails

The text in this box is inserted in the email as a message instead of the affected email. You can edit this message. A text may contain a maximum of 500 characters.

You can use the following key combination for formatting:



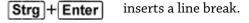
#### **Default**

The button inserts a pre-defined default text in the edit box.

#### Default text for deleted and moved attachments

The text in this box is inserted in the email as a message instead of the affected attachment. You can edit this message. A text may contain a maximum of 500 characters.

You can use the following key combination for formatting:



## **Default**

The button inserts a pre-defined default text in the edit box.

# 12.3.1.3. Heuristics

This configuration section contains the settings for the heuristic of the scan engine.

AntiVir products contain very powerful heuristics that can proactively uncover unknown malware, i.e. before a special virus signature to combat the damaging element has been created and before a virus guard update has been sent. Virus detection involves an extensive analysis and investigation of the affected codes for functions typical of malware. If the code being scanned exhibits these characteristic features, it is reported as being suspicious. This does not necessarily mean that the code is in fact malware. False positives do sometimes occur. The decision on how to handle affected code is to be made by the user, e.g. based on his or her knowledge of whether the source of the code is trustworthy or not.

# Macrovirus heuristics

## Activate macrovirus heuristics

Your AntiVir product contains a highly powerful macrovirus heuristic. If this option is enabled, all macros in the relevant document are deleted in the event of a repair, alternatively suspect documents are only reported, i.e. you receive an alert. This option is enabled as the default setting and is recommended.

# Advanced Heuristic Analysis and Detection (AHeAD) enable AHeAD

Your AntiVir program contains a very powerful heuristic in the form of AntiVir AHeAD technology, which can also detect unknown (new) malware. If this option is enabled, you can define how "aggressive" this heuristic should be. This option is enabled as the default setting.

# Low detection level

If this option is enabled, slightly less unknown malware is detected, the risk of false alerts is low in this case.

#### Medium detection level

This option is enabled as the default setting if you have selected use of this heuristic. This option is enabled as the default setting and is recommended.

## High detection level

If this option is enabled, significantly more unknown malware is detected, but there are also likely to be false positives.

# 12.3.2 General

# 12.3.2.1. Exceptions

# Scanning exceptions

This table shows you the list of email addresses excluded from scanning by AntiVir MailGuard (white list).

#### Note

The list of exceptions is used exclusively by MailGuard with regard to incoming emails.

#### **Status**

Icon	Description
$\boxtimes$	This email address will no longer be scanned for malware.

# Email address

Email that is no longer to be scanned.

# Malware

When this option is enabled, the email address is no longer scanned for malware.

#### <u>Up</u>

You can use this button to move a highlighted email address to a higher position. If no entry is highlighted or the highlighted address is at the first position in the list, this button is not enabled.

# <u>Down</u>

You can use this button to move a highlighted email address to a lower position. If no entry is highlighted or the highlighted address is at the last position in the list, this button is not enabled.

## Input box

In this box you enter the email address that you want to add to the list of email addresses not to be scanned. Depending on your settings, the email address will no longer be scanned in future by the MailGuard.

#### Add

With this button you can add the email address entered in the input box to the list of email addresses not to be scanned.

#### Delete

This button deletes a highlighted email address from the list.

# 12.3.2.2. Cache

#### Cache

The MailGuard cache contains data regarding the scanned emails that is displayed as statistical data in the Control Center under MailGuard.

# Maximum number of emails to be stored in the cache

This field is used to set the maximum number of emails that are stored by MailGuard in the cache. Emails are deleted oldest first.

# Maximum storage period of an email in days

The maximum storage period of an email in days is entered in this box. After this time, the email is removed from the cache.

## **Empty Cache**

Click on this button to delete the emails stored in the cache.

# 12.3.2.3. Footer

Under *Footer* you can configure an email footer which is displayed in the emails you send. This function requires activation of the MailGuard scan of outgoing emails (see option *Scan outgoing emails (SMTP)* under Configuration::MailGuard::Scan) . You can use the defined AntiVir MailGuard footer to confirm the sent email has been scanned by a virus protection program. You also have the option of inserting text yourself for a user-defined footer. If you use both footer options, the user-defined text is preceded by the AntiVir MailGuard footer.

# Footer for emails to be sent

# Attach AntiVir MailGuard footer

If this option is enabled, the AntiVir MailGuard footer is displayed beneath the message text of the sent email. The AntiVir MailGuard footer confirms that the sent email has been scanned for viruses and unwanted programs by AntiVir MailGuard. The AntiVir MailGuard footer contains the following text: "Scanned with AntiVir MailGuard [product version] [initials and version number of search engine] [initials and version number of virus definition file]".

# Attach this footer

If this option is enabled, the text which you insert into the input box is displayed as a footer in sent emails.

## Input box

In this input box, you can insert a text which is displayed as a footer in sent emails.

# 12.3.3 Report

MailGuard includes an extensive logging function to provide the user or administrator with exact notes about the type and manner of a detection.

# Reporting

This group allows for the content of the report file to be determined.

## Off

If this option is enabled, then MailGuard does not create a log. It is recommended that you should turn off the logging function only in exceptional cases, such as if you are executing trials with multiple viruses or unwanted programs.

# Default

If this option is enabled, MailGuard records important information (concerning detections, alerts and errors) in the report file, with less important information ignored for improved clarity. This option is enabled as the default setting.

# **Advanced**

If this option is enabled, MailGuard logs less important information to the report file as well.

## Complete

If this option is enabled, MailGuard logs all information to the report file.

# Limit report file

#### Limit size to n MB

If this option is enabled, the report file can be limited to a certain size; possible values: Permitted values are between 1 and 100 MB. Around 50 kilobytes of extra space are allowed when limiting the size of the report file to minimize the use of system resources. If the size of the log file exceeds the indicated size by more than 50 kilobytes, then old entries are deleted until the indicated size minus 50 kilobytes is reached.

# Backup report file before shortening

If this option is enabled, the report file is backed up before shortening. For the save location see Configuration :: General :: Directories :: Report directory.

# Write configuration in report file

If this option is enabled, the MailGuard configuration is recorded in the report file.

#### Note

If you have not specified any report file restriction, a new report file is automatically created when the report file reaches 100MB. A backup of the old report file is created. Up to three backups of old report files are saved. The oldest backups are deleted first.

# 12.4 Firewall

The FireWall section of Configuration is responsible for configuration of the Avira FireWall

# 12.4.1 Adapter rules

In the Avira FireWall, an adapter represents a software simulated hardware device (e.g. miniport, bridge connection, etc.) or a real hardware device (e.g. network card).

The Avira FireWall displays the adapter rules of all existing adapters on your computer for which a driver was installed.

A predefined adapter rule depends on the security level. You can change the security level in the Online protection: You can change the FireWall settings in the Control Center or define your own adapter rules. If you have defined your own adapter rules, in the FireWall section of the Control Center, the security level is set to custom.

#### Note

The default security level setting for all predefined rules of the Avira FireWall is **Medium.** 

# ICMP protocol

The Internet Control Message Protocol (ICMP) is used to exchange error and information messages on networks. The protocol is also used for status messages with ping or tracer.

With this rule, you can define the incoming and outgoing blocked message types, the behavior in case of flooding and the reaction to fragmented ICMP packets. This rule serves for preventing so-called ICMP flood attacks, which results in an increase of the CPU load of the attacked machine as it responds to every packet.

Predefined rules for the ICMP protocol

Setting: Low	Setting: Medium	Setting: High
Incoming blocked types: <b>no type</b> .	Same rule as for the low level.	Incoming blocked types: several types
Outgoing blocked types: <b>no type</b> .		Outgoing blocked types: several types
Assume flooding if delay between packets is less than <b>50</b> ms.		Assume flooding if delay between packets is less than <b>50</b> ms.
<b>Reject</b> fragmented ICMP packets.		<b>Reject</b> fragmented ICMP packets.

# Incoming blocked types: no types/several types

With a mouse click on the link a list of ICMP packet types is displayed. From this list you can specify the desired incoming ICMP message types you want to block.

# Outgoing blocked types: no types/several types

With a mouse click on the link a list of ICMP packet types is displayed. From this list you can select the desired outgoing ICMP message types you want to block.

# **Flooding**

With a mouse click on the link, a dialog box is displayed where you can enter the maximum allowed ICMPA delay.

# Fragmented ICMP packets

With a mouse click on the link, you have the choice to reject or not to reject fragmented ICMP packets.

# TCP port scan

With this rule, you can define when a TCP port scan is assumed by the FireWall and what should be done in this case. This rule serves for preventing so-called TCP port scan attacks that result in a detection of open TCP ports on your computer. This kind of attack is used to search a computer for weak spots and is often followed by more dangerous attack types.

Predefined rules for the TCP port scan

Setting: Low	Setting: Medium	Setting: High
Assume a TCP port scan if <b>50</b> or more ports were scanned in <b>5,000</b> milliseconds.  When detected, <b>log</b> attacker's IP and <b>don't add</b> rule to block the attack.	Assume a TCP port scan if <b>50</b> or more ports were scanned in <b>5,000</b> milliseconds.  When detected, <b>log</b> attacker's IP and <b>add</b> rule to block the attack.	Same rule as for medium level.

# **Ports**

With a mouse click on the link a dialog box appears in which you can enter the number of ports that must have been scanned so that a TCP port scan is assumed.

## Port scan time window

With a mouse click on this link a dialog box appears in which you can enter the time span for a certain number of port scans, so that a TCP port scan is assumed.

# Report file

With a mouse click on the link you have the choice to log or not to log the attacker's IP address.

# <u>Rule</u>

With a mouse click on the link you have the choice to add or not to add the rule to block the TCP port scan attack.

# **UDP** port scan

With this rule, you can define when a UDP port scan is assumed by the FireWall and what should be done in this case. This rule prevents so-called UDP port scan attacks that result in a detection of open UDP ports on your computer. This kind of attack is used to search a computer for weak spots and is often followed by more dangerous attack types.

# Predefined rules for the UDP port scan

Setting: Low	Setting: Medium	Setting: High
Assume a UDP port scan if <b>50</b> or more ports were scanned in <b>5,000</b>	Assume a UDP port scan if <b>50</b> or more ports were scanned in <b>5,000</b>	Same rule as for medium level.
milliseconds. When detected, <b>log</b> attacker's IP and <b>don't</b>	milliseconds. When detected, <b>log</b> attacker's IP and <b>add</b> rule	
<b>add</b> rule to block the attack.	to block the attack.	

## **Ports**

With a mouse click on the link a dialog box appears in which you can enter the number of ports that must have been scanned so that a UDP port scan is assumed.

# Port scan time window

With a mouse click on this link a dialog box appears in which you can enter the time span for a certain number of port scans, so that a UDP port scan is assumed.

# Report file

With a mouse click on the link you have the choice to log or not to log the attacker's IP address.

## Rule

With a mouse click on the link you have the choice to add or not to add the rule to block the UDP port scan attack.

# 12.4.1.1. Incoming Rules

Incoming rules are defined to control incoming data traffic by the Avira FireWall.

# Note

When a packet is filtered the corresponding rules are applied successively, therefore the rule order is very important. Change the rule order only if you are completely aware of what you are doing.

# Predefined rules for the TCP data traffic data monitor

Setting: Low	Setting: Medium	Setting: High
No incoming data traffic is blocked by the Avira FireWall.	<ul> <li>Allow established TCP connections on 135</li> </ul>	<ul> <li>Monitor</li> <li>established TCP</li> <li>data traffic</li> </ul>
	Allow TCP packets from address 0.0.0.0 with mask 0.0.0.0 if local ports in {135} and remote ports in {0-65535}. Apply forpackets of existing	Allow TCP packets from address 0.0.0.0 with mask 0.0.0.0 if local ports in {0- 65535} and remote ports in {0-65535}. Apply forpackets

connections.

Don't log when packet matches rule.

Advanced:
Discard packets that have following bytes <empty> with mask <empty> at offset 0.

Deny TCP packets on 135

> Deny TCP packets from address **0.0.0.0** with mask **0.0.0.0** if local ports in **{135}** and remote ports in {0-65535}. Apply for **all** packets. Don't log when packet matches rule. Advanced: Discard packets that have following bytes <empty> with mask **<empty>** at offset **0**.

Monitor TCP healthy data traffic

Allow TCP packets from address 0.0.0.0 with mask 0.0.0.0 if local ports in {0-65535} and remote ports in {0-65535}. Apply for connection

of existing connections.

Don't log when packet matches rule.

Advanced:
Discard packets that have following bytes <empty> with mask <empty> at offset 0.

initiation and existing connection packets.

Don't log when packet matches rule.

Advanced:
Discard packets that have following bytes <empty> with mask <empty> at offset 0.

Deny all TCP packets

Deny **TCP** packetsfrom address **0.0.0.0** with mask **0.0.0.0** if local ports are in range **{0-65535}** and the remote port is in range **{0-**65535}. Apply for **all** packets. Don't log when packet matches rule. Advanced: Discard packets that have following bytes <empty> with mask **<empty>** at offset **0**.

# Accept / reject TCP packets

With a mouse click on the link you have the choice to allow or deny special defined incoming TCP packets.

# IP address

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP address.

# <u>IP mask</u>

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP mask.

# Local ports

With a mouse click on this link a dialog box appears in which you can define the local port number(s) or complete port ranges.

# Remote ports

With a mouse click on this link a dialog box appears in which you can define the remote port number(s) or complete port ranges.

# **Application** method

With a mouse click on this link you have the choice to apply the rule for connection initiation and existing connection packets or only for packets of existing connections or for all packets.

# Report file

By clicking on the link with the mouse you can decide whether to write to a report file or not if the package complies with the rule.

The **advanced feature** enables content filtering. For example packets can be rejected if they contain some specific data at a certain offset. If you do not want to use this option do not select a file or choose an empty file.

## Filtered content: Data

With a mouse click on the link a dialog box appears in which you can select a file that contains the specific buffer.

# Filtered content: Mask

With a mouse click on the link a dialog box appears in which you can select the specific mask.

# Filtered content: Offset

With a mouse click on the link a dialog box appears in which you can define the filtered content offset. The offset is computed from where TCP header ends.

# Predefined rules for the UDP data traffic monitor

Setting: Low	Setting: Medium	Setting: High
-	<ul> <li>Monitor UDP accepted data traffic</li> </ul>	Monitor established UDP traffic
	Allow UDP packets from address 0.0.0.0 with mask 0.0.0.0 if local port is in {0-66535} and remote port is in {0-66535}. Apply rule to open ports. Don't log when packet matches	Allow <b>UDP packets</b> from address <b>0.0.0.0</b> with mask <b>0.0.0.0</b> if the local port is in range <b>{0-65535}</b> and the remote port is in range <b>{53, 67, 68, 123}</b> . Apply rule to <b>open ports</b> . <b>Don't log</b> when packet matches rule.  Advanced: Discard

rule.
Advanced: Discard packets that have following bytes <empty> with mask <empty> at offset 0.

packets that have following bytes <empty> with mask <empty> at offset 0.

Deny all UDP packets

> Deny **UDP packets**from address **0.0.0.0** with mask **0.0.0.0** if local ports are in range **{0-65535}** and the remote port is in range  $\{0-65535\}.$ Apply for **all** ports. Don't log when packet matches rule. Advanced: Discard packets that have following bytes <empty> with mask **<empty>** at

# Accept / reject UDP packets

With a mouse click on the link you have the choice to allow or deny special defined incoming UDP packets.

offset **0**.

# IP address

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP address.

# IP mask

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP mask.

# Local ports

With a mouse click on this link a dialog box appears in which you can define the local port number(s) or complete port ranges.

## Remote ports

With a mouse click on this link a dialog box appears in which you can define the remote port number(s) or complete port ranges.

# **Application** method

With a mouse click on this link you have the choice to apply this rule to all ports or only to all opened ports.

# Report file

By clicking on the link with the mouse you can decide whether to write to a report file or not if the package complies with the rule.

The **advanced feature** enables content filtering. For example packets can be rejected if they contain some specific data at a certain offset. If you do not want to use this option do not select a file or choose an empty file.

# Filtered content: Data

With a mouse click on the link a dialog box appears in which you can select a file that contains the specific buffer.

# Filtered content: Mask

With a mouse click on the link a dialog box appears in which you can select the specific mask.

# Filtered content: Offset

With a mouse click on the link a dialog box appears in which you can define the filtered content offset. The offset is computed from where UDP header ends.

# Predefined rules for the ICMP data traffic monitor

Setting: Low	Setting: Medium	Setting: High
-	<ul> <li>Do not discard</li> <li>ICMP based on IP</li> <li>address</li> </ul>	Same rule as for medium level.
	<b>Allow</b> ICMP	
	packets from	
	address <b>0.0.0.0</b>	
	with mask	
	<b>0.0.0.0</b> .	
	<b>Don't log</b> when	
	packet matches	
	rule.	
	Advanced:	
	Discard packets	
	that have	
	following bytes	
	<empty> with</empty>	
	mask <b><empty></empty></b> at	
	offset <b>0</b> .	

# Accept / reject ICMP packets

With a mouse click on the link you have the choice to allow or deny special defined incoming ICMP packets.

#### IP address

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP address.

## IP mask

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP mask.

# Report file

By clicking on the link with the mouse you can decide whether to write to a report file or not if the package complies with the rule.

The **advanced feature** enables content filtering. For example packets can be rejected if they contain some specific data at a certain offset. If you do not want to use this option do not select a file or choose an empty file.

# Filtered content: Data

With a mouse click on the link a dialog box appears in which you can select a file that contains the specific buffer.

# Filtered content: Mask

With a mouse click on the link a dialog box appears in which you can select the specific mask.

#### Filtered content: Offset

With a mouse click on the link a dialog box appears in which you can define the filtered content offset. The offset is computed from where ICMP header ends.

# Predefined rules for IP packets

Setting: Low	Setting: Medium	Setting: High
-	-	Deny all IP packets
		Deny <b>IP packets</b> from address <b>0.0.0.0</b> with mask <b>0.0.0.0</b> . <b>Don't log</b> when packet matches rule.

# Accept / deny IP packets

By clicking on the link with the mouse, you can decide whether you want to accept or reject specially defined IP packages.

#### IP address

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP address.

# IP mask

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP mask.

## Report file

By clicking on the link with the mouse you can decide whether to write to a report file or not if the package complies with the rule.

# Possible rules for monitoring IP packages based on IP protocols IP packages

By clicking on the link with the mouse, you can decide whether you want to accept or reject specially defined IP packages.

#### IP address

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP address.

#### IP mask

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP mask.

# **Protocol**

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP protocol.

# Report file

By clicking on the link with the mouse you can decide whether to write to a report file or not if the package complies with the rule.

# 12.4.1.2. Outgoing Rules

Outgoing rules are defined to control outgoing data traffic by the Avira FireWall. You can define an outgoing rule for one of the following protocols: IP, ICMP, UDP and TCP.

#### Note

When a packet is filtered the corresponding rules are applied successively, therefore the rule order is very important. Change the rule order only if you are completely aware of what you are doing.

#### **Buttons**

Button	Description
Add	Allows you to create a new rule. If you press this button, the " <b>Add new rule</b> dialog box is opened". In this dialog box you can select new rules.
Remove	Removes the selected rule.
Rule down	Moves the selected rule down one line, i.e. reduces the rule priority.
Rule up	Moves the selected rule up one line, i.e. increases the rule priority.
Rename	Allows you to give the selected rule another name.

#### Note

You can add new rules for individual adapters or for all adapters present on the computer. To add an adapter rule for all adapters, select **Computer** from the adapter hierarchy that is displayed and click on the **Add** button.

#### Note

To change the position of a rule you can also use the mouse to drag the rule to the required position.

# 12.4.2 Application rules

## Application rules for user

This list contains all users in the system. If you are logged in as an administrator, you can select the user to whom you want to apply the rules. If you are not a privileged user, you can see only the user currently logged on.

# Application list

This table shows the list of applications for which rules are defined. The application list contains the settings of each application that was executed and had a rule saved since the Avira FireWall was installed.

#### Normal view

	Description
Application	Name of the application.
Mode	Displays the selected application rule mode: In <b>filtered</b> mode, adapter rules are checked and executed after execution of the application rule. In <i>privileged</i> mode, adapter rules are ignored. Click the link to switch to a different mode.
Action	Shows the action that the Avira FireWall will automatically take when the application is using the network, whatever the network usage type is. With a mouse click on the link you can switch to another action type. The action types are <b>Ask</b> , <b>Allow</b> or <b>Deny</b> . <b>Ask</b> is the default action.

#### **Extended** configuration

If the network accesses of an application require individual rules, you can create the application rules based on packet filters in the same way as you created the adapter rules. To change to the extended configuration of the application rules, first activate expert mode. Then change the applications rules setting in the FireWall::Settings section: Enable the **Extended Settings** option and save the setting by clicking **Accept** or **OK**. In the firewall configuration, select the **FireWall::Application rules** section: An additional column with the heading *Filtering* with the entry *Simple* is displayed in the list of application rules. You now have an additional **Filtering**: *Advanced - Action:* rules
\*/span> option, which enables you to select the extended configuration.

	,
	Description
Application	Name of the application.
Mode	Displays the selected application rule mode: In <b>filtered</b> mode, adapter rules are checked and executed after execution of the application rule. In <i>privileged</i> mode, adapter rules are ignored. Click the link to switch to a different mode.
Action	Shows the action that the Avira FireWall will automatically take when the application is using the network, whatever the network usage type is.

	If you choose <i>Filtering - Simple</i> , you can click the link to select another action type. The values are <b>Ask</b> , <b>Allow</b> , <b>Deny</b> or <i>Extended</i> .  If you choose <i>Filtering - Advanced</i> , the <i>Rules</i> action type is displayed. The <b>Rules</b> link opens the <b>Application rules</b> window, in which you can enter specific rules for the application.
Filtering	Shows the type of filtering. You can select another type of filtering by clicking the link.
	Simple: In the case of simple filtering, the specified action is carried out on all network activities performed by the software application.
	Advanced: With this type of filtering, the rules that were added to the extended configuration are applied.

If you want to create specific rules for an application, select the **Advanced** entry under *Filtering*. The *Rules* entry is then displayed in the **Action** column. Click on **Rules** to open the window for creating specific application rules.

#### Specified application rules in the extended configuration

Specified application rules allow you to allow or deny specified data traffic for the application or allow or deny passive listening to individual ports. The following options are available:

Allow or deny code injection

Code injection is a technique for introducing code into the address space of another process to execute actions, forcing this process to load a dynamic link library (DLL). Code injection is used by malware, amongst other things, to execute code under cover of another program. In this way, access to the Internet in front of the FireWall can be hidden. In default mode, code injection is enabled for all signed applications.

Allow or deny passive listening to the application of ports

Allow or deny data traffic

Allow or deny incoming and/or outgoing IP packets

Allow or deny incoming and/or outgoing TCP packets

Allow or deny incoming and/or outgoing UDP packets

You can create as many application rules as you like for each application. The application rules are executed in the sequence shown (You will find more information).

#### Note

If you change the *Advanced* filtering of an application rule, the already existing application rules in the extended configuration are simply deactivated, not irretrievably deleted. If you select *Advanced* filtering again, the already existing application rules will be reactivated and displayed in the extended configuration for application rules window.

# Application details

In this box you can see details of the application selected in the application list box.

	Description	
Name	Name of the application.	

Path	Full path to the executable file.
Path	Full path to the executable file

#### **Buttons**

Button	Description
Add application	Allows you to create a new application rule. If you press this button, a dialog box is opened. Here you can select the required application for creating a new rule.
Remove rule	Removes the selected application rule.
Reload	Reloads the list of applications and simultaneously discards the changes just made to the application rules just made.

# 12.4.3 Trusted providers

A list of trusted software producers is displayed under *Trusted providers*. You can add / remove producers to / from the list using the *Always trust this provider* option in the *Network Event* popup window. You can allow network access from applications that are signed by the listed providers by default, by enabling the **Automatically allow** applications from trusted providers option.

# Trusted vendors for user

This list contains all users in the system. If you are logged in as an administrator, you can select the user whose list of trusted providers you want to view or update. If you are not a privileged user, you can see only the current user logged on.

# Automatically allow applications created by trusted vendors

If this option is enabled, the application provided with the signature of a known and trusted provider is automatically permitted access to the network. The option is enabled as the default setting.

#### **Vendors**

The list shows all providers classified as trusted.

#### **Buttons**

Button	Description
Remove	The highlighted entry is removed from the list of trusted providers. To permanently remove the selected provider from the list, click <b>Accept</b> or <b>OK</b> in the configuration window.
Reload	The changes made are reversed. The last list saved is loaded.

#### Note

If you remove providers from the list and then select **Apply** the providers will be permanently removed from the list. The change cannot be reversed with *Reload*. However, you can use the *Always trust this provider* option in the *Network Event* popup window to add a provider to the list of trusted providers again.

#### Note

The FireWall prioritizes application rules before making entries in the list of trusted providers: If you have created an application rule and the application provider is listed in the list of trusted providers, the application rule will be executed.

# 12.4.4 Settings

# Advanced options

#### **Enable FireWall**

If the option is activated, the Avira FireWall is enabled and protects your computer from risks originating from the Internet and other networks.

## Stop Windows Firewall on startup

If this option is enabled, the Windows Firewall is deactivated when the computer is rebooted. This option is enabled as the default setting.

#### Windows hosts file is not locked/locked

If this option is set to LOCKED, the windows hosts file is write protected. Manipulation is no longer possible. For example, malware is not able to redirect you to undesired websites. The state of this option is NOT LOCKED as the default setting.

#### Automatic rule timeout

#### Block forever

If this option is enabled, a rule that was automatically created, for example, during a port scan is retained.

#### Remove rule after n seconds

If this option is enabled, a rule that was automatically created for example during a port scan, is removed again after the time you have defined. This option is enabled as the default setting.

#### **Notifications**

Notifications define the events under which you wish to receive a desktop notification from the FireWall.

#### Port scan

If the option is activated, you will receive a desktop notification if a port scan has been detected by the FireWall.

#### Flooding

If the option is activated, you will receive a desktop notification if a flooding attack has been detected by the FireWall.

# Applications blocked

If the option is activated, you will receive a desktop notification if the FireWall has denied, i.e. blocked, network activity by an application.

#### IP blocked

If the option is activated, you will receive a desktop notification if the FireWall has denied, i.e. blocked, data traffic from an IP address.

# Application rules

The application rules options are used to set the configuration options for application rules in the FireWall::Application rules section.

# Advanced options

If this option is enabled, you can regulate different network accesses of an application on an individual basis.

# Basic settings

If this option is enabled, only one action can be set for different network accesses of the application.

# 12.4.5 Popup settings

# Popup settings

# Inspect process launch stack

If this option is enabled, the process stack inspection allows a more accurate control. The FireWall will assume that any of the untrustworthy processes in the stack may actually be the one accessing the network through its child process. Therefore a different popup window will be opened for each untrustworthy process in the process stack. This option is disabled as the default setting.

#### Allow multiple popups per process

If this option is enabled, every time an application is making a network connection, a popup is triggered. Alternatively you will be informed only on the first connection attempt. This option is disabled as the default setting.

# <u>Automatically disable popup notification in game mode</u>

When this option is enabled, Avira FireWall game mode is automatically activated when an application is executed in full-screen mode on your computer system. In game mode, all defined adapter and application rules apply. Applications for which no rules are defined with the "Allow" or "Deny" actions are temporarily allowed to access the network, so that no popup windows appear with questions about the network event.

# Remember the action for this application

#### Always enabled

When this option is enabled, the option "Remember action for this application" of the dialog box "Network event" is enabled as the default setting. This option is enabled as the default setting.

#### Always disabled

When this option is enabled, the option "**Remember action for this application**" of the dialog box "**Network event**" is disabled as the default setting.

# Allow signed application

When this option is enabled, the option "**Remember action for this application**" of the dialog box "**Network event**" is automatically enabled during network access by signed applications. The manufacturers are: Microsoft, Mozilla, Opera, Yahoo, Google, Hewlet Packard, Sun, Skype, Adobe, Lexmark, Creative Labs, ATI, nVidia.

### Remember last used state

When this option is enabled, the option "Remember action for this application" in the dialog box "Network event" is enabled in the same way as for the last network event. If the option "Remember action for this application" was enabled, this option is enabled for the following network event. If the option "Remember action for this application" was disabled for the last network event, this option is also disabled for the following network event.

#### Show details

In this group of configuration options, you can setup the display of detailed information in the **Network event** window.

#### Show details on demand

If this option is enabled, the detailed information is only displayed in the "Network event" window on request, i.e. the detailed information is displayed by clicking on the "**Show details**" button in the "Network event" window.

#### Always show details

If this option is enabled, detailed information is always displayed in the "Network event" window.

#### Remember last used state

If this option is enabled, the display of detailed information is managed in the same way as for the previous network event. If detailed information was displayed or accessed during the last network event, detailed information is displayed for the following network event. If detailed information was hidden and not displayed during the last network event, detailed information is not displayed for the following network event.

#### Allow privileged

In this group of configuration options, you can define the status of the *Allow privileged* option in the **Network event** window.

#### Always enabled

If this option is enabled, the "*Allow privileged*" option is enabled as the default setting in the "*Network event*" window.

## Always disabled

If this option is enabled, the "Allow privileged" option is disabled as the default setting in the "Network event" window.

#### Remember last used state

If this option is enabled, the status of the "Allow privileged" option is handled in the same way as for the previous network event in the "Network event" window: If the option "Allow privileged" was enabled for execution of the last network event, the option is enabled by default for the following network event. If the option "Allow privileged" was disabled for execution of the last network event, the option is disabled as the default setting for the following network event.

# 12.5 Firewall under SMC

The FireWall is configured to meet the specific requirements of an administration through the Avira Security Management Center. Extended options and restrictions exist for individual configuration options:

- The FireWall settings apply to all users of the client computer
- Adapter rules: Security levels for individual adapters can be set using context menus
- Application rules: Network access by applications can be allowed or denied. There is no way of creating specific application rules.

If your AntiVir program is managed by the Avira Security Management Center, the following FireWall setting options in the Control Center are deactivated on client computers:

- Setting of the FireWall security levels
- Setting of adapter and application rules

# 12.5.1 General settings

# Advanced options

# Lock Windows hosts file

If the option is enabled, the Windows hosts file is write protected. Manipulation is no longer possible. For example, malware is not able to redirect you to undesired websites.

# Game Mode enable

When this option is enabled, Avira FireWall game mode is automatically activated when an application is executed in full-screen mode on your computer system. In game mode, all defined adapter and application rules apply. Applications for which no rules are defined with the "Allow" or "Deny" actions are temporarily allowed to access the network, so that no popup windows appear with questions about the network event.

# Stop Windows FireWall on startup

If this option is enabled, the Windows FireWall is deactivated when the computer is rebooted. This option is enabled as the default setting.

#### Enable FireWall

If the option is activated, the Avira FireWall is enabled and protects your computer from risks originating from the Internet and other networks.

# Automatic rule timeout

## **Block forever**

If this option is enabled, a rule that was automatically created, for example, during a port scan is retained.

#### Remove rule after n seconds

If this option is enabled, a rule that was automatically created for example during a port scan, is removed again after the time you have defined. This option is enabled as the default setting.

# 12.5.2 General adapter rules

Network connections that have been set up are designated adapters. Adapter rules can be drawn up for the following Client network connections:

- Default adapter: LAN or high-speed Internet
- Wireless
- Dial-up connection

Form the adapter's context menu you can specify predefined adapter rules for every available adapter:

- Security level High
- Security level Medium
- Security level Low

You also have the option of modifying individual adapter rules to suit your own particular requirements.

#### Note

The default security level setting for all predefined rules of the Avira FireWall is **Medium.** 

# ICMP protocol

The Internet Control Message Protocol (ICMP) is used to exchange error and information messages on networks. The protocol is also used for status messages with ping or tracer.

With this rule, you can define the incoming and outgoing blocked message types, the behavior in case of flooding and the reaction to fragmented ICMP packets. This rule serves for preventing so-called ICMP flood attacks, which results in an increase of the CPU load of the attacked machine as it responds to every packet.

# <u>Predefined</u> <u>rules</u> <u>for</u> <u>the</u> <u>ICMP</u> <u>protocol</u>

Setting: Low	Setting: Medium	Setting: High
Incoming blocked types: <b>no type</b> .	Same rule as for the low level.	Incoming blocked types: several types
Outgoing blocked types: <b>no type</b> .		Outgoing blocked types: several types
Assume flooding if delay between packets is less than		Assume flooding if delay between packets is less than

<b>50</b> ms.	<b>50</b> ms.
Reject fragmented ICMP	<b>Reject</b> fragmented ICMP
packets.	packets.

## Incoming blocked types: no types/several types

With a mouse click on the link a list of ICMP packet types is displayed. From this list you can specify the desired incoming ICMP message types you want to block.

# Outgoing blocked types: no types/several types

With a mouse click on the link a list of ICMP packet types is displayed. From this list you can select the desired outgoing ICMP message types you want to block.

# **Flooding**

With a mouse click on the link, a dialog box is displayed where you can enter the maximum allowed ICMPA delay.

## Fragmented ICMP packets

With a mouse click on the link, you have the choice to reject or not to reject fragmented ICMP packets.

# TCP port scan

With this rule, you can define when a TCP port scan is assumed by the FireWall and what should be done in this case. This rule serves for preventing so-called TCP port scan attacks that result in a detection of open TCP ports on your computer. This kind of attack is used to search a computer for weak spots and is often followed by more dangerous attack types.

# Predefined rules for the TCP port scan

Setting: Low	Setting: Medium	Setting: High
Assume a TCP port scan if <b>50</b> or more ports were scanned in <b>5,000</b> milliseconds. When detected, <b>log</b> attacker's IP and <b>don't add</b> rule to block the attack.	Assume a TCP port scan if <b>50</b> or more ports were scanned in <b>5,000</b> milliseconds.  When detected, <b>log</b> attacker's IP and <b>add</b> rule to block the attack.	Same rule as for medium level.

#### **Ports**

With a mouse click on the link a dialog box appears in which you can enter the number of ports that must have been scanned so that a TCP port scan is assumed.

#### Port scan time window

With a mouse click on this link a dialog box appears in which you can enter the time span for a certain number of port scans, so that a TCP port scan is assumed.

#### Report file

With a mouse click on the link you have the choice to log or not to log the attacker's IP address.

#### Rule

With a mouse click on the link you have the choice to add or not to add the rule to block the TCP port scan attack.

# **UDP** port scan

With this rule, you can define when a UDP port scan is assumed by the FireWall and what should be done in this case. This rule prevents so-called UDP port scan attacks that result in a detection of open UDP ports on your computer. This kind of attack is used to search a computer for weak spots and is often followed by more dangerous attack types.

Predefined rules for the UDP port scan

Setting: Low	Setting: Medium	Setting: High
Assume a UDP port scan if <b>50</b> or more ports were scanned in <b>5,000</b> milliseconds.  When detected, <b>log</b> attacker's IP and <b>don't</b> add rule to block the	Assume a UDP port scan if <b>50</b> or more ports were scanned in <b>5,000</b> milliseconds. When detected, <b>log</b> attacker's IP and <b>add</b> rule to block the attack.	Same rule as for medium level.
attack.		

#### **Ports**

With a mouse click on the link a dialog box appears in which you can enter the number of ports that must have been scanned so that a UDP port scan is assumed.

# Port scan time window

With a mouse click on this link a dialog box appears in which you can enter the time span for a certain number of port scans, so that a UDP port scan is assumed.

#### Report file

With a mouse click on the link you have the choice to log or not to log the attacker's IP address.

#### <u>Rule</u>

With a mouse click on the link you have the choice to add or not to add the rule to block the UDP port scan attack.

# 12.5.2.1. Incoming Rules

Incoming rules are defined to control incoming data traffic by the Avira FireWall.

#### Note

When a packet is filtered the corresponding rules are applied successively, therefore the rule order is very important. Change the rule order only if you are completely aware of what you are doing.

#### Predefined rules for the TCP data traffic data monitor

Setting: Low	Setting: Medium	Setting: High
No incoming data traffic is blocked by	<ul> <li>Allow established TCP connections</li> </ul>	<ul> <li>Monitor established TCP</li> </ul>
the Avira FireWall.	on 135	data traffic

**Allow** TCP packets from address **0.0.0.0** with mask **0.0.0.0** if local ports in **{135**} and remote ports in **{0-65535}**. Apply forpackets of existing connections. Don't log when packet matches rule. Advanced: Discard packets that have following bytes <empty> with mask **<empty>** at offset **0**.

Deny TCP packets on 135

> Deny TCP packets from address **0.0.0.0** with mask **0.0.0.0** if local ports in **{135**} and remote ports in **{0-65535}**. Apply for **all** packets. Don't log when packet matches rule. Advanced: Discard packets that have following bytes <empty> with mask **<empty>** at offset **0**.

Monitor TCP healthy data traffic

**Allow** TCP packets from address **0.0.0.0** with mask **0.0.0.0** if local ports in {0-**65535**} and remote ports in  $\{0-65535\}.$ Apply for**packets** of existing connections. Don't log when packet matches rule. Advanced: Discard packets that have following bytes <empty> with mask **<empty>** at offset **0**.

**Allow** TCP packets from  $address \ \textbf{0.0.0.0}$ with mask **0.0.0.0** if local ports in **{0-65535**} and remote ports in **{0-65535}**. Apply for connection initiation and existing connection packets. Don't log when packet matches rule. Advanced: Discard packets that have following bytes <empty> with mask **<empty>** at offset **0**.

Deny all TCP packets

Deny TCP packetsfrom address **0.0.0.0** with mask **0.0.0.0** if local ports are in range **{0-65535}** and the remote port is in range **{0-**65535}. Apply for **all** packets. Don't log when packet matches rule. Advanced: Discard packets that have following bytes <empty> with mask **<empty>** at offset **0**.

#### Accept / reject TCP packets

With a mouse click on the link you have the choice to allow or deny special defined incoming TCP packets.

#### IP address

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP address.

# IP mask

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP mask.

# Local ports

With a mouse click on this link a dialog box appears in which you can define the local port number(s) or complete port ranges.

#### Remote ports

With a mouse click on this link a dialog box appears in which you can define the remote port number(s) or complete port ranges.

#### **Application** method

With a mouse click on this link you have the choice to apply the rule for connection initiation and existing connection packets or only for packets of existing connections or for all packets.

# Report file

By clicking on the link with the mouse you can decide whether to write to a report file or not if the package complies with the rule.

The **advanced feature** enables content filtering. For example packets can be rejected if they contain some specific data at a certain offset. If you do not want to use this option do not select a file or choose an empty file.

#### Filtered content: Data

With a mouse click on the link a dialog box appears in which you can select a file that contains the specific buffer.

# Filtered content: Mask

With a mouse click on the link a dialog box appears in which you can select the specific mask.

# Filtered content: Offset

With a mouse click on the link a dialog box appears in which you can define the filtered content offset. The offset is computed from where TCP header ends.

# Predefined rules for the UDP traffic data monitor

Setting: Low	Setting: Medium	Setting: High
-	<ul> <li>Monitor UDP accepted data traffic</li> </ul>	Monitor established UDP traffic
	<b>Allow</b> UDP	Allow <b>UDP packets</b>

packets from address **0.0.0.0** with mask **0.0.0.0** if local port is in **{0-66535}** and remote port is in **{0-66535}**. Apply rule to **open** ports. Don't log when packet matches rule. Advanced: Discard packets that have following bytes <empty> with mask **<empty>** at offset **0**.

from address **0.0.0.0** with mask **0.0.0.0** if the local port is in range **{0-65535}** and the remote port is in range **{53, 67, 68, 123}**. Apply rule to **open ports**. **Don't log** when packet matches rule. Advanced: Discard packets that have following bytes

<empty> with mask

<empty> at offset 0.

Deny all UDP packets

Deny **UDP** packetsfrom address **0.0.0.0** with mask **0.0.0.0** if local ports are in range **{0-65535}** and the remote port is in range  $\{0-65535\}.$ Apply for all ports. Don't log when packet matches rule. Advanced: Discard packets that have following bytes <empty> with mask **<empty>** at offset 0.

# Accept / reject UDP packets

With a mouse click on the link you have the choice to allow or deny special defined incoming UDP packets.

# IP address

By clicking on this link with the mouse, a dialog box opens in which you can enter the required  ${\rm IP}$  address.

# IP mask

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP mask.

## Local ports

With a mouse click on this link a dialog box appears in which you can define the local port number(s) or complete port ranges.

#### Remote ports

With a mouse click on this link a dialog box appears in which you can define the remote port number(s) or complete port ranges.

# **Application** method

With a mouse click on this link you have the choice to apply this rule to all ports or only to all opened ports.

#### Report file

By clicking on the link with the mouse you can decide whether to write to a report file or not if the package complies with the rule.

The **advanced feature** enables content filtering. For example packets can be rejected if they contain some specific data at a certain offset. If you do not want to use this option do not select a file or choose an empty file.

#### Filtered content: Data

With a mouse click on the link a dialog box appears in which you can select a file that contains the specific buffer.

#### Filtered content: Mask

With a mouse click on the link a dialog box appears in which you can select the specific mask.

#### Filtered content: Offset

With a mouse click on the link a dialog box appears in which you can define the filtered content offset. The offset is computed from where UDP header ends.

#### Predefined rules for the ICMP traffic data monitor

Setting: Low	Setting: Medium	Setting: High
-	<ul> <li>Do not discard         ICMP based on IP         address</li> </ul>	Same rule as for medium level.
	Allow ICMP packets from address 0.0.0.0 with mask 0.0.0.0. Don't log when packet matches rule. Advanced: Discard packets	
	that have following bytes <b><empty></empty></b> with	

mask **<empty>** at offset **0**.

#### Accept / reject ICMP packets

With a mouse click on the link you have the choice to allow or deny special defined incoming ICMP packets.

#### IP address

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP address.

#### IP mask

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP mask.

#### Report file

By clicking on the link with the mouse you can decide whether to write to a report file or not if the package complies with the rule.

The **advanced feature** enables content filtering. For example packets can be rejected if they contain some specific data at a certain offset. If you do not want to use this option do not select a file or choose an empty file.

#### Filtered content: Data

With a mouse click on the link a dialog box appears in which you can select a file that contains the specific buffer.

#### Filtered content: Mask

With a mouse click on the link a dialog box appears in which you can select the specific mask.

# Filtered content: Offset

With a mouse click on the link a dialog box appears in which you can define the filtered content offset. The offset is computed from where ICMP header ends.

# Predefined rules for IP packets

Setting: Low	Setting: Medium	Setting: High
-	-	Deny all IP packets
		Deny <b>IP packets</b> from address <b>0.0.0.0</b> with mask <b>0.0.0.0</b> . <b>Don't log</b> when packet matches rule.

# Accept / deny IP packets

By clicking on the link with the mouse, you can decide whether you want to accept or reject specially defined IP packages.

#### IP address

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP address.

#### IP mask

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP mask.

# Report file

By clicking on the link with the mouse you can decide whether to write to a report file or not if the package complies with the rule.

# Possible rules for monitoring IP packages based on IP protocols

## IP packages

By clicking on the link with the mouse, you can decide whether you want to accept or reject specially defined IP packages.

#### IP address

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP address.

#### IP mask

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP mask.

## **Protocol**

By clicking on this link with the mouse, a dialog box opens in which you can enter the required IP protocol.

## Report file

By clicking on the link with the mouse you can decide whether to write to a report file or not if the package complies with the rule.

# 12.5.2.2. Outgoing Rules

Outgoing rules are defined to control outgoing data traffic by the Avira FireWall. You can define an outgoing rule for one of the following protocols: IP, ICMP, UDP and TCP.

#### Note

When a packet is filtered the corresponding rules are applied successively, therefore the rule order is very important. Change the rule order only if you are completely aware of what you are doing.

# **Buttons**

Button	Description
Add	Allows you to create a new rule. If you press this button, the " <b>Add new rule</b> dialog box is opened". In this dialog box you can select new rules.
Remove	Removes the selected rule.
Rule down	Moves the selected rule down one line, i.e. reduces the rule priority.
Rule up	Moves the selected rule up one line, i.e. increases the rule priority.

Rename Allows you to give the selected rule another name.	
---	--

#### Note

You can add new rules for individual adapters or for all adapters present on the computer. To add an adapter rule for all adapters, select **Computer** from the adapter hierarchy that is displayed and click on the **Add** button.

#### Note

To change the position of a rule you can also use the mouse to drag the rule to the required position.

# 12.5.3 Application list

You can use the application list to create rules specifying how applications access networks. You can add applications to lists and set the *Allow* and **Block** rules for the selected application using a context menu:

- $-\;$  Access to networks by applications with the Allow rule is permitted.
- Access to networks by applications with the Block rule is denied.

When applications are added, the *Allow* rule is set.

# Application list

This table shows the list of applications for which rules are defined. The symbols indicate whether network access by the applications is allowed or denied. The rules for the applications can be changed using a context menu.

## **Buttons**

Button	Description
Add using path	This button opens a dialog box in which you can select applications. The application is added to the application list with the rule "Allow network access". If you use the option "Add using path" the added FireWall application are identified by path and file name. Rules for an application remain valid and will be used by the FireWall, even if the content of an added executable file has been changed, e.g. by an update.
Add using MD5	This button opens a dialog box in which you can select applications. The application is added to the application list with the rule " <b>Allow network access</b> ". If you use the option "" <b>Add using MD5</b> " all added applications are uniquely identified using the MD5 checksum. This allows the FireWall to identify changes to the file content. If an application changes following an update, for example, the application with the rule in question is automatically removed from the application list. Following a change, the application must be added to the list again and the desired rule reapplied.
Add group	This button opens a dialog box in which you can select a directory. All applications in the selected path are added to the application list

	with the rule "Allow network access".
Remove	The selected application rule is removed.
Remove all	All application rules are removed.

# 12.5.4 Trusted providers

A list of trusted software producers is displayed under *Trusted providers*. Applications from the listed software manufacturers will be granted access to the network. You can add and remove manufacturers from the list.

#### **Vendors**

The list shows all providers classified as trusted.

#### **Buttons**

Button	Description
Add	This button opens a dialog box in which you can select applications. The manufacturer of the application is established and added to the list of trusted providers.
Add group	This button opens a dialog box in which you can select a directory. The manufacturers of all the applications in the selected path are established and added to the list of trusted providers.
Remove	The highlighted entry is removed from the list of trusted providers. To permanently remove the selected provider from the list, click " <b>Accept</b> " or " <b>OK</b> " in the configuration window.
Remove all	All entries are removed from the list of trusted providers.
Reload	The changes made are reversed. The last list saved is loaded.

# Note

If you remove providers from the list and then select **Apply** the providers will be permanently removed from the list. The change cannot be reversed with *Reload*.

#### Note

The FireWall prioritizes application rules before making entries in the list of trusted providers: If you have created an application rule and the application provider is listed in the list of trusted providers, the application rule will be executed.

# 12.5.5 Additional settings

#### **Notifications**

Notifications define the events under which you wish to receive a desktop notification from the FireWall.

#### Port scan

If the option is activated, you will receive a desktop notification if a port scan has been detected by the FireWall.

#### **Flooding**

If the option is activated, you will receive a desktop notification if a flooding attack has been detected by the FireWall.

## **Applications** blocked

If the option is activated, you will receive a desktop notification if the FireWall has denied, i.e. blocked, network activity by an application.

#### IP blocked

If the option is activated, you will receive a desktop notification if the FireWall has denied, i.e. blocked, data traffic from an IP address.

# Popup settings

# Inspect process launch stack

If this option is enabled, the process stack inspection allows a more accurate control. The FireWall will assume that any of the untrustworthy processes in the stack may actually be the one accessing the network through its child process. Therefore a different popup window will be opened for each untrustworthy process in the process stack. This option is disabled as the default setting.

# Allow multiple popups per process

If this option is enabled, every time an application is making a network connection, a popup is triggered. Alternatively you will be informed only on the first connection attempt. This option is disabled as the default setting.

#### Automatically disable popup notification in game mode

When this option is enabled, Avira FireWall game mode is automatically activated when an application is executed in full-screen mode on your computer system. In game mode, all defined adapter and application rules apply. Applications for which no rules are defined with the "Allow" or "Deny" actions are temporarily allowed to access the network, so that no popup windows appear with questions about the network event.

# 12.5.6 Display settings

# Remember the action for this application

#### Always enabled

When this option is enabled, the option "**Remember action for this application**" of the dialog box "**Network event**" is enabled as the default setting. This option is enabled as the default setting.

# Always disabled

When this option is enabled, the option "**Remember action for this application**" of the dialog box "**Network event**" is disabled as the default setting.

#### Allow signed application

When this option is enabled, the option "**Remember action for this application**" of the dialog box "**Network event**" is automatically enabled during network access by signed applications. The manufacturers are: Microsoft, Mozilla, Opera, Yahoo, Google, Hewlet Packard, Sun, Skype, Adobe, Lexmark, Creative Labs, ATI, nVidia.

#### Remember last used state

When this option is enabled, the option "Remember action for this application" in the dialog box "Network event" is enabled in the same way as for the last network event. If the option "Remember action for this application" was enabled, this option is enabled for the following network event. If the option "Remember action for this application" was disabled for the last network event, this option is also disabled for the following network event.

#### Show details

In this group of configuration options, you can setup the display of detailed information in the **Network event** window.

#### Show details on demand

If this option is enabled, the detailed information is only displayed in the "Network event" window on request, i.e. the detailed information is displayed by clicking on the "**Show details**" button in the "Network event" window.

#### Always show details

If this option is enabled, detailed information is always displayed in the "Network event" window.

# Remember last used state

If this option is enabled, the display of detailed information is managed in the same way as for the previous network event. If detailed information was displayed or accessed during the last network event, detailed information is displayed for the following network event. If detailed information was hidden and not displayed during the last network event, detailed information is not displayed for the following network event.

#### Allow privileged

In this group of configuration options, you can define the status of the *Allow privileged* option in the **Network event** window.

#### Always enabled

If this option is enabled, the "Allow privileged" option is enabled as the default setting in the "Network event" window.

#### Always disabled

If this option is enabled, the "Allow privileged" option is disabled as the default setting in the "Network event" window.

# Remember last used state

If this option is enabled, the status of the "Allow privileged" option is handled in the same way as for the previous network event in the "Network event" window: If the option Allow privileged was enabled for execution of the last network event, the option is enabled by default for the following network event. If the option Allow privileged was disabled for execution of the last network event, the option is disabled as the default setting for the following network event.

# 12.6 WebGuard

The WebGuard section of the Configuration is responsible for the configuration of the WebGuard.

# 12.6.1 Scan

WebGuard protects you against viruses or malware that reaches your computer from web pages that you load on your web browser from the Internet. The *Scan* heading can be used to set the behavior of the WebGuard component.

#### Scan

# **Enable WebGuard**

If this option is enabled, the web pages you request using an Internet browser are scanned for viruses and malware. WebGuard monitors the data transferred from the Internet using the HTTP protocol at ports 80, 8080, 3128. If any affected web pages are detected, the loading of the web pages is blocked. If this option is disabled, the WebGuard service is still started, but the scan for viruses and malware is disabled.

# Drive-by protection

Drive-by protection allows you to make settings to block I-Frames, also known as inline frames. I-Frames are HTML elements, i.e. elements of Internet pages that delimit an area of a web page. I-Frames can be used to load and display different web content - usually other URLs - as independent documents in a sub-window of the browser. I-Frames are mostly used for banner advertising. In some cases, I-Frames are used to conceal malware. In these cases the area of the I-Frame is mostly invisible or almost invisible in the browser. The *Block Suspect I-Frames* option allows you to check and block the loading of I-Frames.

#### Block suspicious I-frames

If this option is enabled, I-Frames on the web pages you request are scanned according to certain criteria. If there are suspect I-Frames on a requested web page, the I-Frame is blocked. An error message is displayed in the I-Frame window.

#### Default

If this option is enabled, I-Frames with suspect content is blocked.

#### **Advanced**

If this option is enabled, I-Frames with suspect content and I-Frames used in a suspicious way are blocked. The use of I-Frames is considered suspect if the I-Frame is very small and is therefore invisible or almost invisible in the browser of if the I-Frame is placed in an unusual position on the web page.

# 12.6.1.1. Action on detection

#### Action on detection

You can define the actions to be performed by WebGuard when a virus or unwanted program is detected.

#### **Interactive**

If this option is enabled, a dialog box appears when a virus or unwanted program is detected during an on-demand scan, in which you can choose what is to be done with the affected file. This option is enabled as the default setting.

#### Permitted actions

In this box actions can be specified, which can be selected to be displayed in case of a virus detection. You must activate the corresponding options for this.

#### Deny access

The website requested from the web server and/or any data or files transferred are not sent to your web browser. An error message to notify you that access has been denied is displayed in the web browser. WebGuard logs the detection to the report file if the report function is activated.

#### Quarantine

In the event of a virus or malware being detected, the website requested from the web server and/or the transferred data and files are moved into quarantine. The affected file can be recovered from the quarantine manager if it has any informative value or - if necessary - sent to the Avira Malware Research Center.

#### *Ignore*

The website requested from the web server and/or the data and files that were transferred are forwarded on by WebGuard to your web browser.

#### **Default**

This button allows you to select an action that is activated in the dialog box by default when a virus is detected. Select the action that is to be activated by default and click on the "Default" button.

Click here for more information.

#### Show progress bar

If this option is enabled, a desktop notification appears with a download progress bar if a download of website content exceeds a 20 second timeout. This desktop notification is designed in particular for downloading websites with larger data volumes: If you are surfing with WebGuard, website contents are not downloaded incrementally in the Internet browser, as they are scanned for viruses and malware before being displayed in the Internet browser. This option is disabled as the default setting.

#### **Automatic**

If this option is enabled, no dialog box in case of a virus detection appears. WebGuard reacts according to the settings you predefine in this section as primary and secondary action.

# Display detection alerts

If this option is activated, then for each detection of a virus or unwanted program an alert appears showing the actions being executed.

#### <u>Primary action</u>

The primary action is the action performed when WebGuard finds a virus or an unwanted program.

#### Deny access

The website requested from the web server and/or any data or files transferred are not sent to your web browser. An error message to notify you that access has been denied is displayed in the web browser. WebGuard logs the detection to the report file if the report function is activated.

#### Isolate

In the event of a virus or malware being detected, the website requested from the web server and/or the transferred data and files are moved into quarantine. The affected file can be recovered from the quarantine manager if it has any informative value or - if necessary - sent to the Avira Malware Research Center.

#### Ignore

The website requested from the web server and/or the data and files that were transferred are forwarded on by WebGuard to your web browser. Access to the file is permitted and the file is ignored.

# Warning

The affected file remains active on your workstation! It may cause serious damage on your workstation!

# 12.6.1.2. Locked requests

In **Locked requests** you can specify the file types and MIME types (content types for the transferred data) to be blocked by WebGuard. The Web filter lets you block known phishing and malware URLs. WebGuard prevents the transfer of data from the Internet to your computer system.

# File types / MIME types to be blocked by WebGuard (user-defined)

All file types and MIME types (content types for the transferred data) in the list are blocked by WebGuard.

#### Input box

In this box, enter the names of the MIME types and file types you want WebGuard to block. For file types, enter the file extension, e.g. .htm. For MIME types, indicate the media type and, where applicable, sub-type. The two statements are separated from one another by a single slash, e.g. video/mpeg or audio/x-wav.

#### Note

Files which are already stored on your computer system as temporary Internet files and blocked by WebGuard can, however, be downloaded locally from the Internet by your computer's Internet browser. Temporary Internet files are files saved on your computer by the Internet browser so that websites can be accessed more quickly.

#### Note

The list of blocked file and MIME types is ignored if they are entered in the list of excluded file and MIME types under WebGuard::Scan::Exceptions.

#### Note

No wildcards (\* for any number of characters or ? for a single character) can be used when entering file types and MIME types.

#### MIME types: Examples for media types:

- text = for text files
- image = for graphics files
- video = for video files
- audio = for sound files

application = for files linked to a particular program

# Examples: Excluded file and MIME types

- application/octet-stream = application/octet-stream MIME type files (executable files \*.bin, \*.exe, \*.com, \*dll, \*.class) are blocked by WebGuard.
- application/olescript = application/olescript MIME type files (ActiveX script-files \*.axs) are blocked by WebGuard.
- . exe = All files with the extension .exe (executable files) are blocked by WebGuard.
- msi = All files with the extension .msi (Windows Installer files) are blocked by WebGuard.

#### Add

The button allows you to copy MIME and file types from the input field into the display window.

#### Delete

The button deletes a selected entry from the list. This button is inactive if no entry is selected.

## Web Filter

The web filter is based on an internal database, updated daily, that classifies URLs according to content.

#### Activate web filter

When the option is enabled, all URLs matching the selected categories in the Web filter list are blocked.

## Web filter list

In the Web filter list you can select the content categories whose URLs are to be blocked by WebGuard.

#### Note

The Web filter is ignored for entries in the list of excluded URLs under WebGuard::Exceptions.

#### Note

Spam URLs are URLs sent with spam emails. The Fraud and Deception category covers web pages with "Subscription Expires" and other offers of services whose costs are hidden by the provider.

# 12.6.1.3. Exceptions

These options allow you to set exceptions based on MIME types (content types for the transferred data) and file types for URLs (Internet addresses) for scanning by WebGuard. The MIME types and URLs specified are ignored by WebGuard, i.e. that data is not scanned for viruses and malware when it is transferred to your computer system.

# MIME types skipped by WebGuard

In this field you can select the MIME types (content types for the transferred data) to be ignored by WebGuard during scanning.

# File types/MIME types skipped by WebGuard (user-defined)

All MIME types (content types for the transferred data) in the list are ignored by WebGuard during scanning.

#### Input box

In this box you can input the name of the MIME types and file types to be ignored by WebGuard during scanning. For file types, enter the file extension, e.g. .htm. For MIME types, indicate the media type and, where applicable, sub-type. The two statements are separated from one another by a single slash, e.g. video/mpeg or audio/x-wav.

#### Note

No wildcards (\* for any number of characters or ? for a single character) can be used when entering file types and MIME types.

#### Warning

All file types and content types on the exclusion list are downloaded into the Internet browser without further scanning of the blocked access (List of file and MIME types to be blocked in WebGuard::Scan::Blocked access) or by WebGuard: For all entries on the exclusion list, the entries on the list of file and MIME types to be blocked are ignored. No scan for viruses and malware is performed.

## MIME types: Examples for media types:

- text = for text files
- image = for graphics files
- video = for video files
- audio = for sound files
- application = for files linked to a particular program

#### Examples: Excluded file and MIME types

- audio/ = All audio media type files are excluded from WebGuard scans
- video/quicktime = All Quicktime sub-type video files (\*.qt, \*.mov) are excluded from WebGuard scans
- pdf = All Adobe PDF files are excluded from WebGuard scans.

#### Add

The button allows you to copy MIME and file types from the input field into the display window.

#### Delete

The button deletes a selected entry from the list. This button is inactive if no entry is selected.

#### URLs skipped by WebGuard

All URLs in this list are excluded from WebGuard scans.

#### Input box

In this box you can input URLs (Internet addresses) to be excluded from WebGuard scans, e.g. **www.domainname.com**. You can specify parts of the URL, using leading or following dots to indicate the domain level: .domainname.com for all pages and all subdomains of the domain. Indicate websites with any top-level domain (.com or .net) with a following dot: domainname.. If you indicate a string without a leading or concluding dot, the string is interpreted as a top-level domain, e.g. **net** for all NET domains (www.domain.net).

#### Note

You can also use the wildcard \* for any number of characters when specifying URLs. You can also use leading or following dots in combination with wildcards to indicate the domain level:

.domainname.\*

- \*.domainname.com
- .\*name\*.com (valid but not recommended)

Specifications without dots, like \*name\*, are interpreted as part of a top-level domain and are not advisable.

# Warning

All websites on the list of excluded URLs are downloaded into the Internet browser without further scanning by the web filter or WebGuard: For all entries in the list of excluded URLs, the entries in the web filter (see WebGuard::Scan::Blocked access) are ignored. No scan for viruses and malware is performed. Only trusted URLs should therefore be excluded from WebGuard scans.

#### Add

The button allows you to copy the URL entered in the input field (Internet address) to the viewer window.

## Delete

The button deletes a selected entry from the list. This button is inactive if no entry is selected.

#### Examples: Skipped URLs

- www.avira.com -OR- www.avira.com/\*
- = All URLs with the domain 'www.avira.com' are excluded from WebGuard scans: www.avira.com/en/pages/index.php, www.avira.com/en/support/index.html, www.avira.com/en/download/index.html, etc.

URLs with the domain 'www.avira.de' are not excluded from WebGuard scans.

- avira.com -OR- \*.avira.com
- = All URLs with the second and top-level domain 'avira.com' are excluded from WebGuard scans: The specification implies all existing subdomains for '.avira.com': www.avira.com, forum.avira.com, etc.
- avira.-OR- \*.avira.\*
- = All URLs with the second-level domain 'avira' are excluded from WebGuard scans: The specification implies all existing top-level domains or subdomains for '.avira': www.avira.com, www.avira.de, forum.avira.com, etc.
- .\*domain\*.\*

All URLs containing a second-level domain with the string 'domain' are excluded from WebGuard scans: www.domain.com, www.new-domain.de, www.sample-domain1.de, ...

```
- net -OR- *.net
```

= All URLs with the top-level domain 'net' are excluded from WebGuard scans: www.name1.net, www.name2.net, etc.

#### Warning

Enter the URLs you want to exclude from the WebGuard scan as precisely as possible. Avoid specifying an entire top-level domain or parts of a second-level domain because there is a risk that Internet pages that distribute malware and undesirable programs will be excluded from the WebGuard scan through global specifications under exclusions. You are recommended to specify at least the complete second-level domain and the top-level domain: domainname.com

# 12.6.1.4. Heuristics

This configuration section contains the settings for the heuristic of the scan engine.

AntiVir products contain very powerful heuristics that can proactively uncover unknown malware, i.e. before a special virus signature to combat the damaging element has been created and before a virus guard update has been sent. Virus detection involves an extensive analysis and investigation of the affected codes for functions typical of malware. If the code being scanned exhibits these characteristic features, it is reported as being suspicious. This does not necessarily mean that the code is in fact malware. False positives do sometimes occur. The decision on how to handle affected code is to be made by the user, e.g. based on his or her knowledge of whether the source of the code is trustworthy or not.

#### Macrovirus heuristics

#### Macrovirus heuristics

Your AntiVir product contains a highly powerful macrovirus heuristic. If this option is enabled, all macros in the relevant document are deleted in the event of a repair, alternatively suspect documents are only reported, i.e. you receive an alert. This option is enabled as the default setting and is recommended.

# Advanced Heuristic Analysis and Detection (AHeAD) enable AHeAD

Your AntiVir program contains a very powerful heuristic in the form of AntiVir AHeAD technology, which can also detect unknown (new) malware. If this option is enabled, you can define how "aggressive" this heuristic should be. This option is enabled as the default setting.

#### Low detection level

If this option is enabled, slightly less unknown malware is detected, the risk of false alerts is low in this case.

#### Medium detection level

This option is enabled as the default setting if you have selected the use of this heuristic.

# High detection level

If this option is enabled, significantly more unknown malware is detected, but there are also likely to be false positives.

# 12.6.2 Report

The WebGuard includes an extensive logging function to provide the user or administrator with exact notes about the type and manner of a detection.

# Reporting

This group allows for the content of the report file to be determined.

#### Off

If this option is enabled, then WebGuard does not create a log. It is recommended that you should turn off the logging function only in exceptional cases, such as if you are executing trials with multiple viruses or unwanted programs.

#### Default

If this option is enabled, WebGuard records important information (concerning detections, alerts and errors) in the report file, with less important information ignored for improved clarity. This option is enabled as the default setting.

#### **Advanced**

If this option is enabled, WebGuard logs less important information to the report file as well.

## Complete

If this option is enabled, WebGuard logs all available information in the report file, including file size, file type, date, etc.

# Limit report file

#### Limit size to n MB

If this option is enabled, the report file can be limited to a certain size; possible values: Permitted values are between 1 and 100 MB. Around 50 kilobytes of extra space are allowed when limiting the size of the report file to minimize the use of system resources. If the size of the log file exceeds the indicated size by more than 50 kilobytes, old entries are then deleted until the indicated size has been reduced by 20%.

# Backup report file before shortening

If this option is enabled, the report file is backed up before shortening. For the save location see Configuration :: General :: Directories :: Report directory.

# Write configuration in report file

If this option is enabled, the configuration of the on-access scan is recorded in the report file.

# Note

If you have not specified any report file restriction, older entries are automatically deleted when the report file reaches 100MB. Entries are deleted until the size of the report file reaches 80 MB.

# 12.7 Update

In the *Update* section you can configure the automatic receiving of updates and the connection to the download servers. You can specify various update intervals and activate or deactivate automatic updating.

#### Note

If you configure your AntiVir program in the AntiVir Security Management Center, automatic updates are not available.

# Automatic update

#### **Activate**

If this option is enabled, automatic updates are performed for the enabled events at the specified interval.

# Automatic update every n days / hours / minutes

In this box you can specify the interval at which the automatic update is performed. To change the update interval, highlight one of the time options in the box and change it using the arrow key to the right of the input box.

#### Start job while connecting to the Internet (dial-up)

If this option is enabled, in addition to the specified update interval, the update job is performed every time an Internet connection is established.

# Repeat job if the time has already expired

If this option is enabled, past update jobs are performed that could not be performed at the time specified, for example because the computer was switched off.

# **Download**

# via web server

The update is performed via a web server using an HTTP connection. You can use a proprietary web server on the Internet or a web server on an intranet, which obtains the update files from a proprietary download server on the Internet.

# Note

You can access further settings for updating via a web server under: Configuration :: General :: Update :: Web server .

## via file server / shared folders

The update is performed via a file server on an intranet which obtains the update files from a proprietary download server on the Internet.

#### Note

You can access further settings for updating via a file server under: Configuration :: General :: Update :: File server .

# 12.7.1 Start product update

Under **Product update**, configure how product updates or the notification of available product updates are handled.

# **Product updates**

#### Download and automatically install product updates

If this option is enabled, product updates are downloaded and automatically installed by the Update component as soon as they become available. Updates to the virus definition file and scan engine are performed independently of this setting. The conditions for this option are: complete configuration of the update and an open connection to a download server.

# <u>Download product updates.</u> If a <u>restart is necessary, install the update after the</u> system restart, otherwise install it immediately.

If this option is enabled, product updates will be downloaded as soon as they become available. If no restart is necessary, the update is installed automatically after the update file is downloaded. If a product update requires you to restart your computer, it will be executed at the next user-controlled system reboot and not immediately after the download of the update file. This has the advantage that the restart is not performed while users are working at their computers. Updates to the virus definition file and scan engine are performed independently of this setting. The conditions for this option are: complete configuration of the update and an open connection to a download server.

# Notification when new product updates are available

If this option is enabled, you will be notified by email when new product updates become available. Updates to the virus definition file and scan engine are performed independently of this setting. The conditions for this option are: complete configuration of the update and an open connection to a download server. You will receive notifications via a desktop popup window and via an alert from the Updater in the Control Centre under Overview::Events.

#### Notify again after n day(s)

If the product update was not installed after the initial notification, enter in this box the number of days that are to elapse before you are again notified that product updates are available.

#### Do not download product updates

If this option is enabled, no automatic product updates or notifications of available product updates by the Updater are performed. Updates to the virus definition file and search engine are performed independently of this setting.

# **Important**

An update of the virus definition file and of the search engine is performed during every update process independent of the settings for the product update (see Chapter Updates).

#### Note

If you have enabled an option for an automatic product update, you can configure further restart notification and cancellation options under Restart settings.

# 12.7.2 Restart settings

When a product update for your AntiVir program is performed, you may have to restart your computer system. If you have selected automatic product updates under General::Update::Product update, you can choose between the different restart notification and restart cancellation options under **Restart settings**.

#### Note

Note that your restart settings allow you to choose between two options for executing a product update requiring a computer restart in the configuration under General::Update::Product update.

Automatic execution of the product update with the required computer restart when update is available: The update and the restart are performed while users are working on their computers. If you have enabled this option, it may be useful to select restart routines with a cancel option or reminder function.

Execution of the product update where a computer restart is required after the next system reboot: the update and the restart are performed after users have started up their computers and logged in. Automatic restart routines are recommended for this option.

# Restart settings

# Restart the computer after n seconds

If this option is enabled, the restart which is necessary after a product update has been executed is performed **automatically** at the specified interval. A countdown message appears with no option for canceling the computer restart..

# Reminder message for restart every n seconds

If this option is enabled, the restart which is necessary after a product update has been executed is **not** performed automatically. At the specified interval, you will receive restart notifications without cancel options. These notifications let you confirm the computer restart or select the "**Remind me again**" option.

#### Query whether computer should be restarted

If this option is enabled, the restart which is necessary after a product update has been executed is **not** performed automatically. You will receive only one message, which offers the option to perform a restart directly or cancel the restart routine.

#### Restart computer without query

If this option is enabled, the restart which is necessary after a product update has been executed is performed **automatically**. You will not receive any notification.

# 12.7.3 File server

In the case of more than one workstation on a network, your AntiVir program can download an update from a file server in the intranet, which in turn obtains the update files from a proprietary download server on the Internet. This ensures that the AntiVir program is up-to-date on all workstations.

#### Note

The Configuration heading is only enabled if under Configuration :: General :: Product update the **via File Server / Shared folders** option has been selected.

# Download

Enter the name of the file server on which the update files for your AntiVir program and the required directories '/release/update/' are located. The following must be specified: file:// <IP address of the file server>/release/update/. The 'release' directory must be a directory that can be accessed by all users.



The button opens a window in which you can select the required download directory.

# Server login

#### Login name

Enter a user name to log in on the server. Use a user account with access rights to the used shared folders on the server.

#### Login password

Enter the password for the user account. The characters entered are masked with \*.

#### Note

If you do not specify any data in the Server login section, no authentication will be performed when accessing the file server. In this case the user must have sufficient rights for the file server.

The update can be performed directly via a web server on the Internet or the intranet.

#### Web server connection

# Use existing connection (network)

This setting is displayed if your connection is used via a network.

# Use the following connection:

This setting is displayed if you define your connection individually.

The Updater automatically detects which connection options are available. Connection options that are not available are grayed out and cannot be activated. A dial-up connection can be established manually via a phone book entry in Windows, for example.

- User: Enter the user name of the selected account.
- Password: Enter the password for this account. For security reasons, the actual characters you type in this space are replaced by asterisks (\*).

#### Note

If you have forgotten an existing Internet account name or password, contact your Internet Service Provider.

#### Note

The automatic dial-up of the updater through so-called dial-up tools (e.g. SmartSurfer, Oleco, etc.) is currently not yet available.

# Terminate a dial-up connection that was set up for the update

If this option is enabled, the RDT connection made for the update is automatically interrupted again as soon as the download has been successfully performed.

#### Note

This option is not available under Vista. Under Vista the dial-up connection opened for the update is always terminated as soon as the download has been performed.

#### Download

#### Standard-Server

Enter the addresses (URL) of the web servers from which the updates and the required update directory 'update' are to be loaded. The format for the address of the web server is as follows: http://<address of the web server>[:Port]/update. If you do not specify a port, port 80 will be used. By default, the accessible Avira GmbH web servers are specified for updating. You can, however, use your own web servers on the company intranet. If a number of web servers are specified, separate each one by a comma.

#### **Default**

The button restores the predefined addresses.

#### Priority server

In this field, enter the update directory and URL of the web server that will first be requested to provide the update. If this server cannot be reached, the standard servers indicated will be used. The format for the address of the web server is as follows: http://<address of web server>[:Port]/update. If you do not specify a port, port 80 will be used.

# 12.8 General

# 12.8.1 Email

With certain events, the AntiVir program can send alerts and messages via email to one or more recipients. This is done with the Simple Message Transfer Protocol (SMTP).

The messages can be triggered by various events. The following components support email sending:

Guard: Sending notificationsScanner: Sending notificationsUpdater: Sending notifications

#### Note

Please note that ESMTP is not supported. In addition, an encrypted transfer via TLS (Transport Layer Security) or SSL (Secure Sockets Layer) is currently not possible.

# Email messages

#### **SMTP** server

Enter the name of the host to be used here - either its IP address or the direct host name. The maximum possible length of the host name is 127 characters.

For example:

192.168.1.100 or mail.samplecompany.com.

## Sender address

In this input box, enter the email address of the sender. The maximum length of the sender's address is 127 characters.

# Authentication

Some mail servers expect a program to verify itself to the server (log in) before an email is sent. Alerts can be transmitted with authentication to an SMTP server via email.

#### Use authentication

If this option is enabled, a user name and a password can be entered in the relevant boxes for login (authentication).

- User name: Enter your user name here.
- Password: Enter the relevant password here. The password is saved in encrypted form. For security reasons, the actual characters you type in this space are replaced by asterisks (\*).

#### Send test email

When you click on the button, the program attempts to send a test email to the sender address to check the data entered.

# 12.8.2 Threat categories

# Selection of threat categories

Your AntiVir product protects you against computer viruses.

In addition, you can scan according to the following extended threat categories.

- Backdoor Clients (BDC)
- Dialer (DIALER)
- Games (GAMES)
- Jokes (JOKES)
- Security Privacy Risk (SPR)
- Adware/Spyware (ADSPY)
- Unusual runtime packers (PCK)
- Double Extension Files (HEUR-DBLEXT)
- Phishing
- Application (APPL)

By clicking on the relevant box, the selected type is enabled (check mark set) or disabled (no check mark).

# Select all

If this option is enabled, all types are enabled.

# **Default values**

This button restores the predefined default values.

# Note

If a type is disabled, files recognized as being of the relevant program type are no longer indicated. No entry is made in the report file.

# 12.8.3 Password

You can protect your AntiVir program in different areas with a password. If a password has been issued, you will be asked for this password every time you want to open the protected area.

#### **Password**

#### Enter password

Enter your required password here. For security reasons, the actual characters you type in this space are replaced by asterisks (\*). The password can only have a maximum of 20 chars. Once the password has been issued, the program refuses access if an incorrect password is entered. An empty box means "No password".

# Confirm password

Confirm the password entered above by entering again here. For security reasons, the actual characters you type in this space are replaced by asterisks (\*).

#### Note

The password is case-sensitive!

# Areas protected by password

Your AntiVir program can protect individual areas with a password. By clicking the relevant box, the password request can be disabled or re-enabled for individual areas as required.

cu.	
Password- protected area	Function
Control Center	If this option is enabled, the pre-defined password is required to start the Control Center.
Activate / deactivate Guard	If this option is enabled, the pre-defined password is required to enable or disable AntiVir Guard.
Activate / deactivate MailGuard	If this option is enabled, the pre-defined password is required to enable/disable MailGuard.
Activate / deactivate FireWall	If this option is enabled, the pre-defined password is required to enable/disable the FireWall.
Activate / deactivate WebGuard	If this option is enabled, the pre-defined password is required to enable/disable WebGuard.
Download rescue CD from the Internet	If this option is enabled, the pre-defined password is required to start the Avira Rescue CD download.
Quarantine	If this option is enabled, all areas of the quarantine manager protected by a password are enabled. By clicking on the relevant box, the password enquiry can be disabled

	or enabled again on request for individual areas.
Restore affected objects	If this option is enabled, the pre-defined password is required to restore an object.
Rescan affected objects	If this option is enabled, the pre-defined password is required to rescan an object.
Affected object properties	If this option is enabled, the pre-defined password is required to display the properties of an object.
Delete affected objects	If this option is enabled, the pre-defined password is required to delete an object.
Send email to Avira	If this option is enabled, the pre-defined password is required to send an object to the Avira Malware Research Center for examination.
Copying affected objects	If this option is enabled, the pre-defined password is required to copy the affected object.
Add and modify jobs	If this option is enabled, the pre-defined password is required to add and modify jobs in the Scheduler.
Start product updates	If this option is enabled, the pre-defined password is required to start the product updates in the Update menu.
Configuration	If this option is enabled, configuration of the program is only possible after entering the pre-defined password.
Manually switch configuration	If this option is enabled, the pre-defined password is required to manually switch to a different configuration profile .
Enable expert mode	If this option is enabled, the pre-defined password is required to enable expert mode.
Installation / Uninstallation	If this option is enabled, the pre-defined password is required for installation or uninstallation of the program.

# 12.8.4 Security

# Update

# Alert if last update older than n day(s)

In this box, you can enter the maximum number of days allowed to have passed since the last update If this number of days has passed, a red icon is displayed for the update status under Status in the Control Center.

## Show notice if the virus definition file is out of date

If this option is enabled, you will obtain an alert if the virus definition file is not up-todate. With the help of the alert option, you can configure the temporal interval for an alert if the last update is older than n day(s).

## **Product protection**

## Note

The product protection options are not available if the Guard has not been installed using the user-defined installation option.

## Protect processes from unwanted termination

If this option is enabled, all processes of the program are protected against unwanted termination by viruses and malware or against 'uncontrolled' termination by a user, e.g. via Task-Manager. This option is enabled as the default setting.

## Advanced process protection

If this option is enabled, all processes of the program are protected with advanced options against unwanted termination. Advanced process protection requires considerably more computer resources than simple protection. The option is enabled as the default setting. To disable this option, you have to restart your computer.

## **Important**

Password protection is not available for Windows XP 64 bit!

## Warning

If process protection is enabled, interaction problems can occur with other software products. Disable process protection in these cases.

## Protect files and registry entries from manipulation

If this option is enabled, all registry entries of the program and all program files (binary and configuration files) are protected from manipulation. Protection against manipulation entails preventing write, delete and, in some cases, read access to the registry entries or program files by users or external programs. To enable this option, you have to restart your computer.

#### Warning

Please note that, if this option is disabled, the repair of computers infected with specific types of malware may fail.

### Note

When this option is activated, changes can only be made to the configuration, including changes to scan or update requests, by means of the user interface.

#### **Important**

Protection for files and registration entries is not available for Windows XP 64 bit!

12.8.5 WMI

Support for Windows Management Instrumentation

Windows Management Instrumentation is a basic Windows management technique that uses script and programming languages to allow read and write access, both local and remote, to settings on Windows systems. Your AntiVir program supports WMI and provides data (status information, statistical data, reports, planned requests, etc.) as well as events and methods (stopping and starting processes) via an interface. WMI gives you the option of downloading operating data from the program and controlling the program. You can request a complete reference guide to the WMI interface from the manufacturer. The reference file is available in PDF format when you sign a confidentiality agreement.

## Enable WMI support

When this option is enabled, you can download operating data from the program via WMI.

## Allow enabling/disabling of services

When this option is enabled, you can enable and disable program services via WMI.

## 12.8.6 Directories

## Temporary path

In this input box, enter the path where the program will store its temporary files.

## Use default system settings

If this option is enabled, the settings of the system are used for handling temporary files.

#### Note

You can see where your system saves temporary files - for example with Windows XP - under: Start/Settings/Control Panel/System/Index card "Advanced"/Button "Environment Variables". The temporary variables (TEMP, TMP) for the currently registered user and for system variables (TEMP, TMP) are shown here with their relevant values.

### Use following directory

If this option is enabled, the path displayed in the input box is used.



The button opens a window in which you can select the required temporary path.

#### **Default**

The button restores the pre-defined directory for the temporary path.

## Report directory

This input box contains the path to the report directory.



The button opens a window in which you can select the required directory.

#### <u>Default</u>

The button restores the pre-defined path to the report directory.

## Quarantine directory

This box contains the path to the quarantine directory.



The button opens a window in which you can select the required directory.

### Default

The button restores the predefined path to the quarantine directory.

## 12.8.7 Proxy

## Proxy server

### Do not use a proxy server

If this option is enabled, your connection to the web server is not established via a proxy server.

## Use Windows system settings

When the option is enabled, the current Windows system settings are used for the connection to the web server via a proxy server. Configure the Windows system settings to use a proxy server under **Control panel::Internet options::Connections::LAN settings**. You can also access the Internet options in the Extras menu in Internet Explorer.

#### Warning

If you are using a proxy server which requires authentication, enter all the required data under the option *Use this proxy server*. The *Use Windows system settings* option can only be used for proxy servers without authentication.

## Use this proxy server

If your web server connection is set up via a proxy server, you can enter the relevant information here.

## Address

Enter the computer name or IP address of the proxy server you want to use to connect to the web server.

#### Port

Please enter the port number of the proxy server you want to use to connect to the web server.

## Login name

Enter a user name to log in on the proxy server.

## Login password

Enter the relevant password for logging in on the proxy server here. For security reasons, the actual characters you type in this space are replaced by asterisks (\*).

## Examples:

Address: proxy.domain.com Port: 8080 Address: 192.168.1.100 Port: 3128

# 12.8.8 Warnings

## 12.8.8.1. Network

You can send individually configurable alerts from the Scanner or from the Guard to any workstations in your network.

#### Note

Please check whether the "Message service" has been started. You will find the service (i.e. in Windows XP, for example) under "Start/Settings/System control/Administration/Services".

#### Note

An alert is always sent to computers, NOT to a certain user.

## Warning

This functionality is no longer supported by the following operating systems: Windows Server 2008 and higher

Windows Vista and higher

## Send message to

The list in this window shows names of computers that receive a message when a virus or unwanted program is found.

#### Note

A computer can always be entered only once in this list.

## Insert

With this button you can add a further computer. A window is opened in which you can enter the names of new computers. A computer name can be a maximum of 15 characters long.



The button opens a window in which you can alternatively select a computer directly from your computer environment.

## <u>Delete</u>

With this button you can delete the currently selected entry from the list.

#### Guard

### Network alerts

If this option is enabled, network alerts are sent. This option is disabled as the default setting.

## Note

To be able to activate this option, at least one recipient must be entered under General :: Alerts :: Network.

## Message to be sent

The window shows the message sent to the selected workstation when a virus or unwanted program is detected. You can edit this message. A text may contain a maximum of 500 characters.

You can use the following key combinations for formatting the message:

**Strg** + **Tab** Inserts a tab. The current line is indented by several characters to the right.

Strg + Enter inserts a line break.

The message can include wildcards for information found during the search. These wildcards are replaced by the actual text when sent.

## The following wildcards can be used:

%VIRUS% contains the name of the detected virus or of the unwanted

program

%FILE% contains the path and file name of the affected file

%COMPUTER% contains the name of the computer on which the Guard is

running

%NAME% contains the name of the user who accessed the affected file

%ACTION% contains the action performed after the detection of the

virus

%MACADDR% contains the MAC address of the computer on which the

Guard is running

#### Default

The button restores the predefined default text for an alert.

### Scanner

## Enable network alerts

If this option is enabled, network alerts are sent. This option is disabled as the default setting.

#### Note

To be able to activate this option, at least one recipient must be entered under General :: Alerts :: Network.

## Message to be sent

The window shows the message sent to the selected workstation when a virus or unwanted program is detected. You can edit this message. A text may contain a maximum of 500 characters.

You can use the following key combinations for formatting the message:

Inserts a tab. The current line is indented by several characters to the right.

Strg + Enter inserts a line break.

The message can include wildcards for information found during the search. These wildcards are replaced by the actual text when sent.

## The following wildcards can be used:

%VIRUS% contains the name of the detected virus or of the unwanted

### program

%NAME%

contains the name of the logged in user using the Scanner

#### **Default**

The button restores the predefined default text for an alert.

## 12.8.8.2. Email

#### **Email**

With certain events, the AntiVir program can send alerts and messages via email to one or more recipients. This is done with the Simple Message Transfer Protocol (SMTP).

The messages can be triggered by various events. The following components support email sending:

Guard: Sending notifications

Scanner: Sending notifications

Updater: Sending notifications

#### Note

Please note that ESMTP is not supported. In addition, an encrypted transfer via TLS (Transport Layer Security) or SSL (Secure Sockets Layer) is currently not possible.

## Email messages

#### SMTP server

Enter the name of the host to be used here - either its IP address or the direct host name. The maximum possible length of the host name is 127 characters.

For example:

192.168.1.100 or mail.samplecompany.com.

## Sender address

In this input box, enter the email address of the sender. The maximum length of the sender's address is 127 characters.

### Authentication

Some mail servers expect a program to verify itself to the server (log in) before an email is sent. Alerts can be transmitted with authentication to an SMTP server via email.

#### Use authentication

If this option is enabled, a user name and a password can be entered in the relevant boxes for login (authentication).

- User name: Enter your user name here.
- Password: Enter the relevant password here. The password is saved in encrypted form. For security reasons, the actual characters you type in this space are replaced by asterisks (\*).

### Send test email

When you click on the button, the program attempts to send a test email to the sender address to check the data entered.

#### Guard

AntiVir Guard can send alerts by email to one or more recipients for certain events.

#### Guard

#### **Email alerts**

If this option is enabled, AntiVir Guard sends email messages with the most important information when a certain event occurs. This option is disabled as the default setting.

## Email messages for the following events

## The on-access scan detected a virus or unwanted program.

If this option is enabled, you always receive an email with the name of the virus or unwanted program and the affected file when the on-access scan detects a virus or an unwanted program.

#### Edit

The "Edit" button opens the "Email template" window in which you can configure the notification for an "On-access detection" event. You have the option of inserting text for the subject line and body of the email. You can use variables for this purpose (see Configuration::General::Email::Alerts::Email Template).

## A critical error occurred in Guard.

If this option is enabled, you will receive an email whenever an internal critical error is detected.

## Note

In this case, please inform our technical support and include the data given in the email. The specified file should also be sent for examination.

#### Edit

The "Edit" button opens the "Email template" window in which you can configure the notification for a "Critical error in Guard" event. You have the option of inserting text for the subject line and body of the email. You can use variables for this purpose (see Configuration::General::Email::Alerts::Email Template).

### Recipient(s)

Enter the email address(es) of the recipient(s) in this box. The individual addresses are separated by commas. The maximum length of all addresses together (i.e. the total character string) is 260 characters.

## Scanner

With certain events, the on-demand scan can send alerts and messages via email to one or more recipients.

### Scanner

#### Enable email alerts

If this option is enabled, the program sends email messages with the most important information when a certain event occurs. This option is disabled as the default setting.

## Email messages for the following events

## The on-demand scan detected a virus or unwanted program.

If this option is enabled, you receive an email with the name of the virus or unwanted program and the affected file whenever the on-demand scan detects a virus or an unwanted program.

#### Edit

The "Edit" button opens the "Email template" window in which you can configure the notification for an "Scan detection" event. You have the option of inserting text for the subject line and body of the email. You can use variables for this purpose (see Configuration::General::Email::Alerts::Email Template).

## End of scheduled scan.

When the option is activated, an email is sent when a scan job has been performed. The email contains data on the point and duration of the scan job, on the folders and files scanned as well as on the viruses found and warnings.

#### Edit

The "Edit" button opens the "Email template" window in which you can configure the notification for the "End of scan" event. You have the option of inserting text for the subject line and body of the email. You can use variables for this purpose (see Configuration::General::Email::Alerts::Email Template).

## Add report file as attachment

If this option is enabled, the current report file of the Scanner component is added to the email as an attachment when sending Scanner notifications.

#### Recipient address(es)

Enter the email address(es) of the recipient(s) in this box. The individual addresses are separated by commas. The maximum length of all addresses together (i.e. the total character string) is 260 characters.

## Updater

The Updater component can send notifications by email to one or more recipients for specific events.

## Updater

## Email alerts

If this option is enabled, the Update component sends email messages with the most important data when a specific event occurs. This option is disabled as the default setting.

## Email messages for the following events

## No update necessary. Your program is up-to-date.

If this option is enabled, an email is sent if the Updater has successfully made a connection to the download server but there are no new files available on the server. This means that your AntiVir program is up to date.

#### Edit

The "Edit" button opens the "Email template" window in which you can configure the notification for a "No update necessary" event. You have the option of inserting text for the subject line and body of the email. You can use variables for this purpose (see Configuration::General::Email::Alerts::Email Template).

#### Update finished successfully. New files have been installed.

If this option is enabled, an email is sent for all updates performed: This may be a product update or an update of the virus definition file or of the scanning engine.

#### Edit

The "Edit" button opens the "Email template" window in which you can configure the notification for an "Update successful – new files installed" event. You have the option of inserting text for the subject line and body of the email. You can use variables for this purpose (see Configuration::General::Email::Alerts::Email Template).

## Update finished successfully. A new product update is available.

If this option is enabled, an email is only sent if an update of the scanning engine or virus definition file was performed without a product update, but a product update is available.

#### Edit

The "Edit" button opens the "Email template" window in which you can configure the notification for an "Update successful – product update available" event. You have the option of inserting text for the subject line and body of the email. You can use variables for this purpose (see Configuration::General::Email::Alerts::Email Template).

## Update failed.

If this option is enabled, an email is sent if the update has failed due to an error.

#### Edit

The "Edit" button opens the "Email template" window in which you can configure the notification for an "Update failed" event. You have the option of inserting text for the subject line and body of the email. You can use variables for this purpose (see Configuration::General::Email::Alerts::Email Template).

## Add report file as attachment

If this option is enabled, the current report file of the Updater component is added to the email as an attachment when sending Updater notifications.

## Recipient(s)

Enter the email address(es) of the recipient(s) in this box. The individual addresses are separated by commas. The maximum length of all addresses together (i.e. the total character string) is 260 characters.

#### Note

Alerts are always sent by email for the following events if an SMTP server and a recipient address have been configured for Updater notifications:

A product update is required for every further update of the program.

An update of the scanning engine or of the virus definition file could not be performed as a product update is necessary.

These alerts are sent irrespective of your email warning settings for the Update component.

## Email template

In the  $\it Email$  template window you can configure the email notifications for the individual components to the enabled events . You can insert text of up to a maximum of 128 characters in the subject line and up to a maximum of 1024 characters in the message field.

The following variables can be used in the email subject and email message:

## Globally acceptable variables

Variable	Value
Windows environment variables	The email notifications component supports all Windows environment variables.
%SYSTEM_IP%	IP address of the computer
%FQDN%	Fully qualified domain name
%TIMESTAMP%	Event time stamp: Time and date format as per the language settings of the operating system
%COMPUTERNAME%	NetBIOS computer name
%USERNAME%	Name of user accessing the component
%PRODUCTVER%	Product version
%PRODUCTNAME%	Product name
%MODULENAME%	Name of the component sending the email
%MODULEVER%	Version of the component sending the email

# Specific component variables

Variable	Value	Component emails
%ENGINEVER%	Version of scan engine used	Guard Scanner
%VDFVER%	Version of virus definition file used	Guard Scanner
%SOURCE%	Fully qualified file name	Guard
%VIRUSNAME%	Name of the virus or unwanted program	Guard
%ACTION%	Action performed after the detection	Guard
%MACADDR%	MAC address of the first registered network card	Guard
%UPDFILESLIST%	List of updated files	Updater
%UPDATETYPE%	Update type: Update of scan engine and virus definition file, or product update with	Updater

	update of scan engine	
	and virus definition file	
%UPDATEURL%	URL of download server used for update	Updater
%UPDATE_ERROR%	Update error in words	Updater
%DIRCOUNT%	Number of scanned directories	Scanner
%FILECOUNT%	Number of files scanned	Scanner
%MALWARECOUNT%	Number of viruses or unwanted programs detected	Scanner
%REPAIREDCOUNT%	Number of infected files repaired	Scanner
%RENAMEDCOUNT%	Number of infected files renamed	Scanner
%DELETEDCOUNT%	Number of infected files deleted	Scanner
%WIPECOUNT%	Number of infected files overwritten and deleted	Scanner
%MOVEDCOUNT%	Number of infected files moved to quarantine	Scanner
%WARNINGCOUNT%	Number of warnings	Scanner
%ENDTYPE%	Status of scan: Terminated/Successfully completed	Scanner
%START_TIME%	Start time of the scan: Start time of the update	Scanner Updater
%END_TIME%	End of the scan End of the update	Scanner Updater
%TIME_TAKEN%	Duration of scan in minutes Duration of the update in minutes	Scanner Updater
%LOGFILEPATH%	Path and file name of the report file	Scanner Updater

# 12.8.8.3. Acoustic alerts

## Acoustic alert

When a virus or malware is detected by the Scanner or Guard, an acoustic alert is sounded in interactive action mode. You can now choose to activate or deactivate the acoustic alert and select an alternative Wave file for the alert.

#### Note

The action mode of the Scanner is set in the configuration under Scanner::Scan::Action on detection. The action mode of the Guard is set in the configuration under Guard::Scan::Action on detection.

#### No warning

When this option is enabled, there is no acoustic alert when a virus is detected by the Scanner or Guard.

## Use PC speakers (only in interactive mode)

If this option is enabled, there is an acoustic alert with the default signal when a virus is detected by the Scanner or Guard. The acoustic alert is sounded on the PC's internal speaker.

## Use the following Wave file (interactive mode only)

If this option is enabled, there is an acoustic alert with the selected Wave file when a virus is detected by the Scanner or Guard. The selected Wave file is played over a connected external speaker.

#### Wave file

In this input box you can enter the name and the associated path of an audio file of your choice. The program's default acoustic signal is entered as standard.



The button opens a window in which you can select the required file with the aid of the file explorer.

#### Test

This button is used to test the selected wave file.

# 12.8.8.4. Warnings

Your AntiVir program generates so-called slide-ups, desktop notifications for specific events, which give information on successful or failed program sequences such as updates. In *Warnings* you can enable or disable the notifications for specific events..

With desktop notifications, you have the option of disabling the notification directly in the slide-up. You can reverse the disabling of the notification in *Warnings*.

## **Warnings**

## on dial-up connections used

If this option is enabled, you will receive a desktop notification alert if a dialer creates a dial-up connection on your computer via the telephone or ISDN network. There is a danger that the connection may have been created by an unknown and unwanted dialer and that the connection may be chargeable. (see Viruses and more::Threat categories: Dialer).

## on successfully updated files

If this option is enabled, you will receive a desktop notification whenever an update has been successfully performed and files updated.

## on failed update

If this option is enabled, you will receive a desktop notification whenever an update fails: No connection to the download server could be created or the update files could not be installed.

## that no update is necessary

If this option is enabled, you will receive a desktop notification whenever an update is started but installation of the files is not necessary as your program is up to date.

## 12.8.9 Events

#### Limit size of event database

## Limit maximum number of events to n entries

If this option is enabled, the maximum number of events listed in the event database can be limited to a certain size; possible values: 100 to 10000 entries. If the number of entered entries is exceeded, the oldest entries are deleted.

## Delete events older than n day(s)

If this option is enabled, events listed in the event database are deleted after a certain period of time; possible values: 1 to 90 days. This option is enabled as the default setting, with a value of 30 days.

### Do not limit size of event database (delete events manually)

When this option has been activated, the size of the event database is not limited. However, a maximum of 20,000 entries are displayed in the program interface under Events.

# 12.8.10 Limit reports

Limit number of reports

#### Limit the number to n units

When this option is enabled, the maximum number of reports can be limited to a specific amount. Values between 1 and 300 are permissible. If the specified number is exceeded, then the oldest report at that time is deleted.

## Delete all reports more than n day(s) old

If this option is enabled, reports are automatically deleted after a specific number of days. Permissible values are: 1 to 90 days. This option is enabled as the default setting, with a value of 30 days.

## Do not limit number of reports (manually delete reports)

If this option is enabled, the number of reports is not restricted.

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Issued Q2-2011

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