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1. About this manual

This chapter contains an overview of the structure and content of this manual.

- 1.2 Structure of the manual - page 5
- 1.3 Emphasis in text - page 6

1.1 Introduction

This manual contains all the information you will need to use the Avira Management Console.

Additional help and information is available from our website, our Technical Support hotline and our regular newsletter (see 10. Service - page 136).

Your Avira Team

1.2 Structure of the manual

The manual for your Avira software consists of several chapters containing the following information:

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<th>Chapter</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. About this manual - page 5</td>
<td>Structure of the manual, emphasis in text</td>
</tr>
<tr>
<td>2. Product information - page 8</td>
<td>Overview of software features</td>
</tr>
<tr>
<td>3. Installation - page 13</td>
<td>Important information on installation of the AMC Server and AMC Frontend</td>
</tr>
<tr>
<td>4. Avira Management Console Frontend - page 20</td>
<td>Overview of the AMC Frontend</td>
</tr>
<tr>
<td>5. Configuration - page 29</td>
<td>- Configuration of the network and server connections.</td>
</tr>
<tr>
<td></td>
<td>- Configuration of the Security Environment.</td>
</tr>
<tr>
<td></td>
<td>- Configuration and updating of AMC services.</td>
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<td>Working with AMC:</td>
</tr>
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<td>- Managing software packages.</td>
</tr>
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<td></td>
<td>- Managing computer groups.</td>
</tr>
<tr>
<td></td>
<td>- Running commands and planning tasks.</td>
</tr>
</tbody>
</table>
### 1.3 Emphasis in text

The following emphases are also used in the text to improve readability and clarity:

<table>
<thead>
<tr>
<th>Emphasis in the text</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>C:\Program Files\Avira\</code></td>
<td>Paths and file names</td>
</tr>
<tr>
<td><strong>Select components</strong>&lt;br&gt;<code>Select all</code></td>
<td>GUI elements e.g. menu options, window titles, elements in dialog boxes</td>
</tr>
<tr>
<td><strong><a href="http://www.avira.com">www.avira.com</a></strong></td>
<td>Hyperlinks</td>
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<tr>
<td><strong>6. Operation - page 80</strong>&lt;br&gt;&quot;Creating virtual groups&quot; - page 33</td>
<td>Cross-references inside the document</td>
</tr>
<tr>
<td><code>setup.exe /remove</code></td>
<td>User input, commands and parameters</td>
</tr>
<tr>
<td><strong>Computer amount in group</strong></td>
<td>Displayed text in dialog windows; configuration options group</td>
</tr>
<tr>
<td><code>Set up boot scripts? [y]</code></td>
<td>Terminal output (command-line)</td>
</tr>
<tr>
<td><strong>Prerequisites</strong></td>
<td>... placed before conditions which must be fulfilled prior to performing an action.</td>
</tr>
<tr>
<td><strong>Warning</strong></td>
<td>... placed before warnings of critical data loss or hardware damage.</td>
</tr>
<tr>
<td><strong>Note</strong></td>
<td>... placed before an important piece of information, for example, relating to steps being carried out, or a tip facilitating the understanding and operation of the product.</td>
</tr>
</tbody>
</table>
### 1.4 Abbreviations

The following abbreviations are used in this manual:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMC</td>
<td>Avira Management Console</td>
</tr>
<tr>
<td>AUM</td>
<td>Avira Update Manager</td>
</tr>
<tr>
<td>DHCP</td>
<td>Dynamic Host Configuration Protocol (Protocol for the dynamic assignment of the host IP address)</td>
</tr>
<tr>
<td>GUI</td>
<td>Graphical User Interface</td>
</tr>
<tr>
<td>MMC</td>
<td>Microsoft Management Console</td>
</tr>
<tr>
<td>SSL</td>
<td>Secure Sockets Layer (encryption algorithm)</td>
</tr>
<tr>
<td>TCP/IP</td>
<td>Transmission Control Protocol/Internet Protocol (protocol for communication between computers)</td>
</tr>
</tbody>
</table>
2. Product information

The Avira Management Console (AMC) enables the remote installation and administration of Avira products on the network.

Components and services

The AMC consists of three components:

- **AMC Server**: This is the main application which runs on a central server on the network and consists of three services:
  - Server
  - Event Manager
  - Update Manager

This server also contains an integrated database for event administration.

- **AMC Agent**: A service performed on the computers on the network which establishes the connection between the main application (AMC Server) and the Avira products on the computers.
• **AMC Frontend:** A graphical user interface which can, for example, be installed on the administrator’s computer and which facilitates the effective administration of AMC services and components.

### 2.1 Functionality

The **AMC Server** operates with the aid of three services, each performing different tasks, which communicate with each other via an SSL-encrypted TCP/IP connection.

It manages:

- computers integrated into the **Security Environment** of AMC,
- Avira products installed on the computers,
- software packages supported by AMC.

Avira software packages are stored in the Software Repository of the AMC and can be remotely installed on computers in the Security Environment. An Avira product can inherit the configuration settings from its group, if installed via AMC.

The **Event Manager** receives events (e.g. virus alerts), saves them in a database and forwards them for display and generation of reports in the AMC Frontend.

The **Update Manager** carries out updates to the managed Avira products, the software packages in the AMC repository, and the AMC components.

The **AMC Agent**, which is installed on the computers in the Security Environment, forwards the commands, tasks and configurations of the main application AMC Server to the Avira products on the computers. The AMC Agent can relay events and messages from the Avira products to the AMC Server to be displayed in the AMC Frontend.

The **AMC Frontend** is a snap-in for the Microsoft Management Console (MMC). This graphical user interface clearly displays all information.

### 2.2 Features

All computers (Windows and Linux workstations and servers) in the Security Environment of the company network can be managed and monitored using the AMC. The computers are arranged in the Security Environment in a freely configurable tree structure with hierarchical groups.
The most important features and functions of Avira Management Console:

**Configuring a secure network environment**

- **Graphical user interface** for the configuration and operation of AMC (snap-in for Microsoft Management Console)
- **Silent setup of AMC Agents** via the network
- **Remote installation, configuration, updating and uninstallation** of the Avira security software on all network computers
- **Central repository for Avira products** for installation on the network
- **User management** for adding and monitoring users and access rights to computers or groups
- **Backup of server files**
- **SSL-encrypted communication protocol**
- Support for computers with dynamically allocated IP addresses (DHCP)

**Controlling Avira security products via the network**

- Central administration of **product-specific actions** (scan, update, etc.) via configurable commands and tasks
- **Sharing files/licenses** and **Remote execution of programs** from the share directory of the AMC Server
- **Pull mechanism** to reduce the network load on very large networks
- Saving of **pending operations and tasks** (installation, configuration, commands) for computers to which access is temporarily unavailable, and for pull AMC Agents

**Updating Avira software via the network**

- Central and automatic updating of supported software packages and of AMC components with Avira Update Manager
- **Monitoring products’ status**
- **Central control of the update function for installed Avira products** with Avira Update Manager or via a scheduled task
- **Testing the updates** before they are committed to the share directory
Monitoring the activity of Avira products via the network

- **Event Manager** to display network warnings and send email notifications for specific events
- **Configurable reports** for Avira products on the network
- **Central view of all events** issued by Avira products on the network

### 2.3 Licensing

Licensing involves two steps:

1. the purchase of the license
2. the activation of the license after installing the Avira Management Console

Normally you receive a license file by email after purchasing Avira products and acquiring the AMC.

The license is checked when computers are added to the Security Environment. If, for example, you have acquired a license for 500 clients, you can include a maximum of 500 computers in the Security Environment.

Licensing is carried out after installation of the AMC (see 4.2 Licensing the AMC - page 23).

**Evaluation mode**

If the product is not licensed, every time the AMC Frontend starts, a notification is displayed that Avira Management Console can be used in evaluation mode for a period of 30 days. In evaluation mode, a maximum of 100 computers can be managed in the Security Environment.

### 2.4 System requirements

**AMC Server:**

- Operating system: Windows Server 2003 (x32 or x64)(newest SP), Windows Server 2008 (x32 or x64)(newest SP)
- RAM: 1 GB dedicated to AMC Server
- Free memory space on the hard disk: 5 GB (including all products and update files)
**AMC Frontend:**

- Operating system: Windows XP (x32 or x64)(newest SP), Windows Vista (x32 or x64)(newest SP), Windows 7 (x32 or x64)(newest SP), Windows Server 2003 (x32 or x64)(newest SP), Windows Server 2008 (x32 or x64)(newest SP)
- RAM: 64 MB
- Free memory space on the hard disk: 100 MB

**AMC Agent:**

- Operating system: Windows XP (x32 or x64)(newest SP), Windows Vista (x32 or x64)(newest SP), Windows Server 2003 (x32 or x64)(newest SP), Windows 7 (newest SP), Windows Server 2008 (x32 or x64)(newest SP), Linux (glibc 2.2 or higher), Solaris Sparc 9 and 10, Mac OS X version 10.6 or newer
- RAM: 64 MB
- Free memory space on the hard disk: 50 MB
- Use with 64-bit Linux: Please use the required 32-bit libraries
- Linux: `strings` tool is required by the AMC Agent installer
- Linux: Start and configure `sshd` for authentication via password, if needed

**Note**

Please note that the Windows 2000 operating system is no longer supported.
3. Installation

3.1 Important information on installation

You normally install the AMC Server on a central Windows network server and the AMC Frontend user interface on a network computer, which you are using for AMC administration. Both components can also be installed on the same server.

During installation, you must enter the computer’s IP addresses in a dialog box and open certain ports, as the Avira Management Console needs these for communication. Therefore, have the relevant information at hand during installation.

Installation steps

Installation comprises the following steps:

1. Install the AMC Server
2. Install the AMC Frontend

After installing the AMC Server and the AMC Frontend, you can configure the AMC, include computers in the Security Environment and install and manage AMC Agents and Avira products via the network. Details on this are available in the following chapters.

3.2 Carrying out the installation

3.2.1 Installing the AMC Server

Prerequisites

• You require administrator rights for the server.
• The ports required by the AMC Server must be opened (if necessary in the firewall) and should not be used by other applications. The firewall integrated into the Windows operating system, from Windows XP onwards, is configured by the AMC Server.

1. Download the latest AMC version as a .zip file from the Avira website (http://www.avira.com) and unzip the file to a local directory.


   A dialog box with a security alert is displayed.
3. Click **Accept** to begin the installation.
   
The installation file is extracted. The installation dialog box is displayed.

4. Click **Next**.
   
The **License Agreement** window is displayed.

5. Please read the agreement carefully, then enable the option *I accept the terms of the license agreement* and click **Next**.

   **Note**
   Please note that the acceptance of the AMC license agreement also extends to all Avira products that you install over the AMC. You can find the Avira license agreement on the Avira website.

   The window for installation location is opened.

6. If necessary, change the destination path for the installation and click **Next**.
   
The window for configuring the IP address and server port is opened.

7. If you want to allow access to the AMC Agent installation files via the network, enable the option **Create AMC Agent Network Share**. For further information, refer to 5.5.3 Silent Agent setup in Windows - page 49.
If the **Multilanguage** option is enabled, the Avira Update Manager mirrors the update files for AMC in both languages (German and English). If this option is not enabled, AUM mirrors the update files of AMC in the installed language only.

If you are installing the AMC Frontend on a computer and there is a firewall present, the AMC Frontend ports (by default ports 7000 and 7001) must be opened, to enable communication with the AMC Server. The firewall integrated into Windows from Windows XP onwards is automatically configured with the appropriate settings by the AMC Server, Avira Update Manager and Event Manager.

**Note**
HTTP server port 80 must be opened and should not be used by another application.

8. Where necessary, change the **Network Interface** setting.

For **Network Interface** you can either select the IP address of the network adapter you want to use for the AMC communication, or choose the AMC Server’s hostname in order to use the primary network adapter that is linked to the hostname.

9. Click **Next**.

After the wizard has checked the network configuration, the dialog box **AUM-Server Network Configuration** appears.

![AUM-Server Network Configuration dialog box](image.png)
10. Confirm the specified configuration by clicking **Next**. Or: If necessary, change the predefined ports accordingly. The selected ports are opened automatically during installation and then remain open.

If required, click **Change...** to select a different root directory. You can also use a UNC path as the HTTP root directory and enter the UNC authentication here. However, locally connected networks are not supported. Then press **Next**.

After the wizard has checked the network configuration for the AUM Server, a dialog for entering the login data for the AMC Server opens.

11. Enter the name and password for the administrator account on this computer and click **Next**.
12. In the next window, enter the user name and the password for logging in to the AMC.

If you want to use a different account for the AMC login via the AMC Frontend, disable the option **Reuse account of AMC Server service as AMC user account** and enter the required settings for **AMC User** and **AMC/AUM Password**. Otherwise keep the option enabled and click **Next**.

**Note**

Should you wish to change the settings of the administrative or user account, you can do so after installation is complete: Right-click on **Avira Management Console Frontend**, then select **Settings** in the context menu. Choose the tab **Administrator Account**. Here you can change all the account settings which you have specified at installation.
13. Continue with the configuration of the update scheduler. Enter the required settings and click **Next**.

14. If the Windows Firewall is active, you will now be asked whether you want AMC Server services to be dealt with as an exception to the Microsoft Windows Firewall. If you confirm by selecting **Yes**, the firewall will be configured automatically; If you choose **No**, you have to configure the firewall manually at a later stage.

15. Click **Next**.

   The program is ready for installation.

16. Click **Install**.

   The application is installed.

17. Click **Finish**.

   The AMC Server and related components are now installed.

3.2.2 Installing the AMC Frontend

**Prerequisites**
- You require administrator rights to install the AMC Frontend.
1. Double-click on the self-extracting file: `<Avira_Management_Console_Frontend_en.exe>`
   Depending on the operating system, a dialog box with a security alert is displayed.

2. If appropriate, click **Accept** to begin the installation.
   The installation file is extracted. The installation dialog box is displayed.

3. Click **Next**.
   The **License Agreement** window is displayed.

4. Please read the agreement carefully, then enable the option **I accept the terms of the license agreement** and click **Next**.
   The window for installation path is opened.

5. If necessary, change the destination path for the installation and click **Next**.
   The dialog box for completing the installation is displayed.

6. Click **Install**.
   The AMC Frontend is being installed.

7. Click **Finish** when the installation is complete.
   The Windows **Start** menu now contains the Programs group **Avira > Avira Management Console** with the entry **Avira Management Console Frontend**.
4. Avira Management Console Frontend

You can manage the AMC with the AMC Frontend graphical user interface, which consists of a snap-in for the Microsoft Management Console (MMC).

Note
The appearance, structure and menu structure of the AMC Frontend may vary depending on the operating system, as the AMC Frontend is a snap-in for the Microsoft Management Console (MMC) framework. This section describes only the proprietary Avira elements of the AMC Frontend. For further information on the MMC and on manual integration of a snap-in, please refer to the user manual or the online help of your operating system.

Note
The AMC Frontend displays tooltips, when you point your mouse to input fields.

4.1 Starting the AMC Frontend and logging in to the AMC Server

Starting the AMC Frontend

1. In Windows, open Start > Programs > Avira > Avira Management Console > Avira Management Console Frontend.

   The AMC Frontend is displayed.

Logging in to the AMC Server

2. Click on the node Avira Management Console Frontend.
The AMC Frontend establishes the connection to the AMC Server. The **Login** window is displayed:

3. Type in the **Login** username and **Password** you provided for the administrator at AMC setup.

You can later add more users in the AMC Frontend. The menus and options available in the GUI depend on each user's permissions (see 5.9 User Management - page 75).

Enable the **Local Computer** option if the AMC Frontend is installed on the same computer as the AMC Server. Otherwise enable the **Remote computer** option, and enter the server name or click the **Browse** button to select the server.
If you are using a proxy for the connection to the AMC Server or have changed the port settings during installation of the AMC, carry out the following steps:

1. Click **Settings**.

![Settings dialog](image)

- Enable the **Use Proxy** option and enter the address and ports in form of "IP address:port", for example `127.0.0.1:80`.

- If you want to obtain AMC Frontend updates from the AUM integrated into the AMC, enable the option **Receive updates from Avira Update Manager**. Otherwise product updates are obtained from the preset Avira servers.

2. Click **OK**.

3. Optional: If you have created your own SSL certificates for your AMC Server and want these to be used by the clients for server authentication (see 5.7 SSL certificate administration - page 69), click the **SSL Configuration** tab and enable the **Server authentication** options:
5. Click **OK**.

With the login, the AMC Frontend establishes the connection to the AMC Server.

### 4.2 Licensing the AMC

**Prerequisites**

- The AMC Server main application and the AMC Frontend graphical user interface are installed (see 3. Installation - page 13)
- The license file is available (saved locally)

1. Start the AMC Frontend and establish the connection to the AMC Server (see 4.1 Starting the AMC Frontend and logging in to the AMC Server - page 20).

   The AMC Frontend is opened.

2. Right-click on **Avira Management Console Frontend**, and select **License**.
The license window is opened. The status box contains the entry **Invalid** highlighted in red.

![License window](image)

3. Click on **New License** and enter the path for the license file.

4. Select the license file (e.g. `hbedv.key`) and click **OK** to confirm.

The license file is loaded and the **License** window is displayed:

![License window](image)

The licensing procedure is complete.
4.3 AMC Frontend user interface

You can use the AMC Frontend to configure and control the following components:

- AMC Server and its modules
- AMC Agents in the Security Environment
- Avira software in the Software Repository
- Avira software installed on the computers in the Security Environment

After you have logged in to the AMC, the main window is displayed.

Note
The access rights of the users determine which AMC Frontend functions are shown.

The AMC Frontend is divided into two areas: the navigation area (left-hand window) and the details panel (right-hand window). The entries in the expandable navigation structure are referred to as nodes e.g. the Events node, the node for the computer group win-group etc.

The navigation area contains the following nodes:

- Software Repository
- Security Environment
- Network neighborhood
- Events
• Reports
• Configuration
• User Management
• Info Center
• Avira Update Manager

The details panel contains detailed information on the selected nodes. The appearance of the details panel (displayed contents, number and sequence of columns) can be changed using the View menu options. (see "Selecting and sorting the information displayed" - page 98)

• Software Repository

The central database of the AMC Server for storing Avira products. The details panel shows information on saved software packages: name, installation file, info- and license file (see 6.2 Managing software packages - page 83).

• Security Environment

A freely configurable, hierarchical structure of so-called virtual groups with assigned computers. The groups can, for example, represent the business structure or the user groups on the network.

The following nodes are displayed in the Security Environment:
- The group nodes with all computers assigned to the respective group.
- The computer nodes and the New computers node with sub-nodes for all Avira products and AMC Agents.
- The Filtered security environment node, when filtered groups are created.

The details panel shows information on the status of groups, computers, modules, operations, tasks and events.

Group nodes:
At a group level (e.g. departments), information on sub-groups or integrated computers is displayed: computer name and status symbols, version, status, operating system, AMC Agent availability, etc.
Computer nodes:
The following information is displayed for every computer, via the Views menu options (Action > Views in the menu bar or Views in the context menu) or via the Toolbar:

<table>
<thead>
<tr>
<th>Views</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product status</td>
<td>Displays the name, icon, status and details of products</td>
</tr>
<tr>
<td>Product version</td>
<td>Displays the name and version number of products</td>
</tr>
<tr>
<td>Error messages</td>
<td>Displays errors detected by Avira products on a computer (with the product name, error status and error message)</td>
</tr>
<tr>
<td>Events</td>
<td>Displays events detected by Avira products on the computer</td>
</tr>
<tr>
<td>Tasks</td>
<td>Displays tasks scheduled to be performed by Avira products on computers</td>
</tr>
<tr>
<td>Pending operations</td>
<td>Displays scheduled tasks for computers in offline mode and for pull AMC Agents. These tasks are executed when the clients revert to online mode or when AMC Agents perform synchronization.</td>
</tr>
</tbody>
</table>

For details, see 6.4 Displaying information on a computer or group - page 97.

- **Network neighborhood**

  Workgroups and computers on your MS Windows network. You can choose whether computers on the network display their name or IP address (right-click, Display IP Addresses). You can integrate computers from the Network neighborhood into the Security Environment by drag and drop or automatically, through the synchronization feature (see "Importing computers into the Security Environment" - page 35).

- **Events**

  A sorted or filtered list of events which have occurred on the computers. The events list can be filtered (e.g. by Level or Product) to display specific events (see 6.5 Displaying events - page 104).

- **Reports**

  The report templates and the generated reports for all computers. For further details, refer to 6.7 Creating and displaying reports - page 111.

- **Configuration**

  General configuration options for the AMC components. For further details, refer to 5.6 Configuring AMC - page 52.
• **User Management**
  
  A list of managed users. Here you can create, delete or edit AMC users. The details panel shows: User name, Complete name, Description, Email Address and Last login to the AMC Frontend.

• **Info Center**
  
  A website with the latest information on your product: known issues, tips and tricks, new application options and product updates.

• **Avira Update Manager**
  
  For each AUM server, the details panel shows the update status of the software packages in its repository, as well as configuration options for the AUM components.

  The console tree of the Avira Update Manager contains the following nodes in the navigation area:

  **Avira Update Manager:**
  
  This is the root node to which the managed AUM Servers are added. The detail window shows the version of the AUM Frontend and the logfile for automatic self-updates.

  **Servername:Port** [e.g. vm-win2k3:7050]:
  
  Displays the server name and the selected port used to connect the AUM Frontend to the AUM Server. The following details are displayed in the detail window: Server data (version information of the currently installed AUM Server), Update status and Logfiles.

  The following entries appear underneath the server node:

  - **Released products** - products for product updating can be added here.
  - **Scheduler** - configuration for the scheduling of product updates.
  - **Server Settings**:
    - **General** (general configuration options for the AUM);
    - **Network** (configuration options for the source of updates: HTTP server, proxy server);
    - **Email** (configuration for the sending of email messages).
  - **Frontend Settings** - SSL Server authentication.
5. Configuration

5.1 Overview

The main application, AMC Server, and the associated services are configured with the aid of the graphical user interface, AMC Frontend. The following steps should be performed after installation:

- 5.2 Configuring network and AMC Server connections - page 29
- 5.3 Setting up the Security Environment - page 31
- 5.5 Installing AMC Agents in the Security Environment - page 43

The settings for the AMC Server services can be customized if necessary:

- 5.6 Configuring AMC - page 52
- 5.7 SSL certificate administration - page 69

In addition you can easily update AMC via the Internet when updates are available.

- "Updating the AMC" - page 73
- "Creating a task for the AMC Server update" - page 74
- "Displaying and changing update tasks for the AMC Server" - page 75

You can adapt AMC user rights to the demands of your IT environment:

- 5.9 User Management - page 75

Starting the AMC Frontend

Carry out the steps described in 4.1 Starting the AMC Frontend and logging in to the AMC Server - page 20.

5.2 Configuring network and AMC Server connections

You can configure the connection so that these processes are simplified when the computer reboots and AMC Frontend starts.

Configuring the network connection

1. Right-click on the Avira Management Console Frontend node, and select Settings.
The settings window is opened:

2. Click the **Administrator Account** tab and enter the **Username** and **Password**, to be used for remote AMC Agent installation. If the AMC Server’s administrative account is also used for installing the AMC Agent on network computers, enable the option **Use the server’s current account**.

**Note**

Installing the AMC Agent via the option **Use the server’s current account** only works on Windows clients.

3. If you are accessing other client computers via SSH (e.g. Linux workstations), you can enable the **Use SSH public/private key authentication** option and select the **Key file** in putty format with the aid of the browse button [...].

On the **Login** tab, you can change the login password of the current user for the AMC Server.
5.3 Setting up the Security Environment

In the **Security Environment**, AMC uses so-called virtual groups of computers to carry out installation, configuration and monitoring tasks. Only computers integrated into the Security Environment can be managed by AMC.

![Avira Management Console Frontend](image)

**Security Environment nodes**

The Security Environment presents the hierarchical structure of your network in such a way as to optimize the installation and configuration of Avira products on the computers.

This requires the setting up of so-called **virtual groups** under the Security Environment nodes, corresponding to the various network groups. For example, you can create groups of computers from certain departments or combine computers with similar installation/configuration (e.g. with English-language products).

You can also nest groups. Individual or multiple groups can be moved to other groups at any time. You can choose which names you give to the computers and groups in the Security Environment.
## Status in the Security Environment

When starting the AMC Frontend, the status of the computers and groups is displayed in icon form.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Monitor green, arrow green" /></td>
<td>Monitor green, arrow green: Computer started, AMC Agent installed and started, full access available.</td>
</tr>
<tr>
<td><img src="image" alt="Monitor light blue, arrow red" /></td>
<td>Monitor light blue, arrow red: Computer started, AMC Agent not installed.</td>
</tr>
<tr>
<td><img src="image" alt="Monitor light blue, arrow orange" /></td>
<td>Monitor light blue, arrow orange: Computer started, AMC Agent installed, no access available.</td>
</tr>
<tr>
<td><img src="image" alt="Monitor dark, arrow orange" /></td>
<td>Monitor dark, arrow orange: Computer switched off or not connected to the network, AMC Agent installed, no access available.</td>
</tr>
<tr>
<td><img src="image" alt="Monitor dark, arrow red" /></td>
<td>Monitor dark, arrow red: Computer switched off or not connected to the network, AMC Agent not installed.</td>
</tr>
<tr>
<td><img src="image" alt="Monitor dark/light blue, arrow orange, red flag on the left next to the monitor" /></td>
<td>Monitor dark/light blue, arrow orange, red flag on the left next to the monitor: <strong>Pending operations</strong> have been saved, as the computer is switched off or not connected to the network, or no access to the AMC Agent is available. The operation is carried out as soon as the computer becomes available again in the Security Environment.</td>
</tr>
<tr>
<td><img src="image" alt="Monitor green, arrow green, red flag on the left next to the monitor" /></td>
<td>Monitor green, arrow green, red flag on the left next to the monitor: <strong>Pending operations</strong> and commands have been saved, as the AMC Agent on the computer is configured to use the pull mechanism. The operations are carried out when the AMC Agent performs the synchronization.</td>
</tr>
<tr>
<td><img src="image" alt="AMC is attempting to establish the connection or is executing a command" /></td>
<td>AMC is attempting to establish the connection or is executing a command.</td>
</tr>
<tr>
<td><img src="image" alt="Error in computer or group" /></td>
<td>Error in computer or group.</td>
</tr>
<tr>
<td><img src="image" alt="Warning or notification in computer or group" /></td>
<td>Warning or notification in computer or group.</td>
</tr>
<tr>
<td><img src="image" alt="Virtual computer group" /></td>
<td>Virtual computer group.</td>
</tr>
<tr>
<td><img src="image" alt="Filtered security environment and filtered sub-groups" /></td>
<td>Filtered security environment and filtered sub-groups.</td>
</tr>
<tr>
<td><img src="image" alt="Software package in Software Repository" /></td>
<td>Software package in Software Repository.</td>
</tr>
</tbody>
</table>
### 5.3.1 Creating virtual groups

1. Right-click on the **Security Environment** or a group node in the navigation area and select **New > Group**.

   The **Create new group** window is displayed.

2. Enter a name for the group and click **OK**.

   The new group is displayed under the **Security Environment** node in the navigation area.

**Displaying the name or IP address of the computer**

Right-click on the **Network neighborhood** node in the navigation area, and select **Display IP Addresses**.

- If the context menu option is highlighted: The computer IP addresses are displayed.
- If the context menu option is not highlighted: Only the names of the computers are displayed.

**Searching for computers or groups**

Using the **Search** option in the context menu of any group or of the Security Environment, you can search for certain computers or groups.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>📱</td>
<td>AMC Agent installed on the computer.</td>
</tr>
<tr>
<td>🎮</td>
<td>Software package installed on the computer.</td>
</tr>
<tr>
<td>📲</td>
<td>Update file in test mode, ready to be committed.</td>
</tr>
<tr>
<td>🚨</td>
<td>Error status. Computer, product or group must be scanned.</td>
</tr>
</tbody>
</table>
You can search either by hostname or IP address, or using wildcards:
*: matches any sequence of characters
?: matches any single character
\: searches for the \ character
\*: searches for the * character
\?: searches for the ? character

Example: searching for *server? will find mainserver1 but not server12

5.3.2 Adding computers to virtual groups

From the Network neighborhood

Depending on the view settings for the Network neighborhood node, computers are displayed by name or IP address.

1. In the navigation area, expand the Network neighborhood node and the node of your network (e.g. Microsoft Windows network).
   The connected computers are displayed in the results window.

2. Drag the computer or group from the network neighborhood into the Security Environment.
   – OR –
   Right-click on a group or sub-group in the Security Environment, and select New > Computer.
   The Add new computer window is displayed.

3. Enter the Display name of the computer in the Security Environment, as well as the hostname and IP address of the computer (Hostname/IP), and click OK.
   The added computer is then displayed in its group in the navigation area under the Security Environment node.

From the “New computers” node

There may be computers on which the AMC Agent is already installed, but which are not yet integrated into the Security Environment. This may, for example, include laptops or computers on which the AMC Agent was installed manually. These computers automatically log in to the AMC Server if they are available on the network.

Computers on which the AMC Agent is installed and which are newly available on the network are displayed.

2. Add the required computers to other groups in the Security Environment. To do this, follow the steps described above.

5.3.3 Manually assigning a computer to an existing group

Starting with AMC Agent version 2.7, you can move computers from one virtual group to another in the Security Environment, using the command line on the client computer:

agent --group <group_name>

The group name must exist.

Conventions for hierarchical groups:

- Hierarchical groups must be specified relative to the Security Environment node, separated by slash (/) and enclosed in double quotes.
- If the group name contains spaces, it has to be enclosed in double quotes ("San Francisco").
- If the group name contains the slash character (/), it has to be enclosed in apostrophes ('US/Mexico').

Examples:

agent --group Sales
agent --group "San Francisco"
agent --group "Sales/'US/Mexico'"
agent --group "Sales/US/San Francisco"

In case of errors (for example, a group does not exist), the computer is not moved. Errors are logged by the AMC Agent and the AMC Server.

5.3.4 Importing computers into the Security Environment

Computers can also be imported into the Security Environment via the Synchronize option in the Security Environment's context menu. The following sub-options are available:
• Network neighborhood
• Comma separated file
• Active directory

Network neighborhood:

To import computers from the Network neighborhood:

1. Right-click on the Security Environment node and select Synchronize > Synchronize.
2. Select the Network neighborhood as the import source and click Next.

The computer list from the Network neighborhood is displayed.
3. Select the **Computers to be added** and the **Computers to be removed** as appropriate.

![Avira Management Console](image)

You can import/remove the entire list, or first select several computers and use the **Remove selected computers from list** buttons.

4. Click **Next** to import the required computers.

**Comma separated file:**

To import a computer list:

1. Create the computer list using a text editor and save it in the system. You can give the text file (*.txt) any name you want. The list must have the following structure:

   - **group**, name, IP or network name
   
   - First floor\Marketing,Computer01,mkpc1
   
   - Ground floor,Reception,192.168.146.1

   - **Group**: Name of the group in the Security Environment, with the relative path to the Security Environment, e.g. First floor\Marketing

   - **Name**: Display name of the computer in the Security Environment

   - **IP**: IP address or name of the computer on the network

2. Right-click on the **Security Environment** node, and select **Synchronize > Synchronize**.

3. Select **Comma separated file** as the import source.
4. Enter the path of the file [pclist.txt] and click **Next**.

The computer list from the imported file is displayed.

5. Select the **Computers to be added** and the **Computers to be removed** and click **Remove selected computers from list** as appropriate (as described above) and click **Next**.

The computer list is imported. The names of the computers are displayed in the Security Environment.

**Active directory:**

To import computers from Active directory:

1. Right-click on the **Security Environment** node, and select **Synchronize > Synchronize**.

2. Select **Active directory** as the import source.
3. Select one of the options below.

![Active directory]

- How do you want to represent your Active Directory in the AMC?
  - Ignore ADS hierarchy
  - Create groups based on the computer DNS names
  - Create groups based on ‘organizational units’

The computer list from the ADS is displayed.

4. Select the *Computers to be added* and the *Computers to be removed* and click **Remove selected computers from list** as appropriate (as described above) and click **Next**.

The computer list is imported from ADS according to the defined settings. The names of the computers are displayed in the Security Environment.

**Note**
The ADS communication port must be open to enable the import to be carried out (see 8.2 Requirements for ADS synchronization - page 133).

5.3.5 Automatic synchronization with ADS/LDAP

In environments with multiple administrators, the security network can be synchronized with the ADS/LDAP repository with the aid of the AMC. To do this, configure the scheduler for synchronizations as follows:

1. Right-click on the **Security Environment** and select **Synchronize**.

2. Select **Schedule synchronization**.

3. Select an option under **Active directory**.

4. Click **Finish**.

The task scheduler window is opened:
5. Enter a task name, select the interval at which the synchronization is to take place and click Next.

Depending on the interval selected, you can specify the data and time for the task to start:
6. Click Finish.

Note
AMC uses a request mechanism to carry out a synchronization at the stipulated intervals.

5.3.6 Controlling and modifying created tasks

Right-click on the Security Environment and select View > Synchronize tasks.

- OR -

Click the Synchronize tasks button:

![Screenshot of Avira Management Console with Synchronize tasks button highlighted.]

5.3.7 IP Address filter

Another useful function when grouping computers in the Security Environment is the IP Address filter option in the context menu for a group.

![Screenshot of IP Address filter configuration.]

New computers can be automatically moved into a certain group when their IP address matches the group's filtering criteria.

Usage:
IP addresses consist of 4 parts: a.b.c.d.
For creating a filter you need the possibility to specify placeholders.
This is done by using a range of numbers: x-y. When you use a range on any of the four parts of the IP address, you must omit the subsequent parts.

Example:
192.168.0.10-50 matches all computers whose first 3 IP parts match 192.168.0., and whose fourth part is between 10 and 50.
10.1-254 matches all computers whose first IP part is 10.
If you want to specify several filter criteria make sure you divide them with ",".
You can enter an IP address range and, as soon as the corresponding new computers log in to the AMC Server, they are integrated into the specified group (instead of the New computers node).

5.3.8 Renaming virtual groups

1. Right-click on a group and select Rename (Shortcut: F2).
   This makes the name editable.
2. Enter the new name and click next to the box.
   The new name is saved and displayed.

5.3.9 Deleting virtual groups/computers

If you are sure that no Avira products are installed on computers or in groups, they can be deleted. Right-click on the computer or group, and select Delete.

   The computer or group is removed from the Security Environment.

5.4 Adding update servers to the AUM

If you are using more than one update server for your network, you can integrate them into the AMC Frontend by adding them under the Avira Update Manager node.

**Prerequisites**

- The Avira Update Manager must be installed on the server you want to add. For further information, please refer to the Avira Update Manager user manual.

1. Right-click on the Avira Update Manager node, and select New > Add AUM server.
2. Enter the name of the server, the communication ports and the password.
   The new update server is added to the AMC Frontend under Avira Update Manager.

For further information on the configuration of the AUM Server, see "Configuration of the Avira Update Manager" - page 62.

Afterwards, you can choose which server you want to use for automatic updates to AMC components, virtual groups or computers. See 7. Updating the Software Repository and installed products - page 122.
5.5 Installing AMC Agents in the Security Environment

To install AMC Agents in the Security Environment you must have administrator rights on all computers.

**Note**
Make sure that all AMC components and Avira products are always up-to-date and can communicate with each other in the Security Environment.

**Note**
AMC can only monitor computers on which the AMC Agent is installed. It is therefore recommended that you install the AMC Agents throughout the Security Environment immediately after installation of the AMC. If you add new groups or computers to the system at a later time, you can carry out the installation of the AMC Agent for these groups or computers selectively.

You can use the **automatic product installation** feature, to install the AMC Agent automatically on new computers (see "Automatic product installation" - page 88).

Furthermore, you can adapt the configuration of the AMC Agent at any time and assign the new configuration to the required groups or computers (see "Changing the AMC Agent configuration" - page 53).
Requirements for communication between the AMC Agent and AMC Server

- If a firewall is installed on a client, the following ports (TCP) must be enabled: 7000, 7001, 7080, 7010. ICMP queries must also be possible.

  The firewall integrated into Windows since Windows Server 2003 is automatically appropriately configured by the AMC Server, Avira Update Manager and Event Manager.

  Other firewalls may disrupt the communication between AMC Agent and AMC Server. Should this be the case you’ll find corresponding error message in the log files (see "Displaying log files" - page 120).

- With an active Windows Firewall, exceptions for incoming ICMP echo requests (ping), Windows remote administration and Windows file and printer sharing must be configured.

- The Simple file sharing has to be deactivated for Windows XP: disable the option Windows Explorer > Tools > Folder Options > View > Use simple file sharing (recommended).

- The AMC Server must be able to access the administrative share C$ (\<Client-IP>C$) and the remote administration on the client with an authorized user account.

Installation procedure

Depending on the operating system, there are various procedures for installing the AMC Agent:

- Remote installation via the AMC Frontend
  – "Installing the AMC Agent via the AMC Frontend (Windows XP Professional/ Vista/ Windows 7/ UNIX)" - page 45

- (optional) Manual installation with installation file

- (optional) Silent Agent installation in Windows with a login script
  – "Silent Agent setup in Windows" - page 49

- (optional) UNIX: Manual installation with installation file
  – "Manually installing the AMC Agent (optional for UNIX systems)" - page 49
5.5.1 Installing the AMC Agent via the AMC Frontend
(Windows XP Professional/ Vista/ Windows 7/ UNIX)

Prerequisites

- Computers/groups must be integrated into the Security Environment and have
  the following status: Monitor light blue, arrow red.

1. In the navigation area, click on the Security Environment node and then on the groups/computers on which the AMC Agent is to be installed.
   The computers or groups are displayed with status icons in the results window.

2. Right-click on the group and select Installation > AMC Agent > Install.
   The Administrator Account window is opened:

3. Enter the Username and the Password for the administrator account, if you are using a different administrator account on the client computer, than on the AMC Server; On UNIX - type the root user and password, unless using SSH.

   -OR-
Enable the option **Use the server’s current account.**

**Note**
Installing the AMC Agent via the option **Use the server’s current account** works only on Windows clients.

4. If you are accessing client computers via SSH (e.g. Linux workstations), you can enable the **Use SSH public/private key authentication** option and select the **Key file** in putty format with the aid of the search button [...].

5. Click **OK**.

The AMC Agent is installed on the selected computers and groups.

A green icon is displayed in the frontend for the client computer (e.g. win7x64). The agent status **Ok** appears in the results window:

![Avira Management Console Frontend](image)

5.5.2 Manually installing the AMC Agent (Win XP Home Edition, optional: Windows XP Professional/ Vista/ Windows 7)

To install the AMC Agent on a computer with the Windows XP Home Edition operating system, you require the file **Avira_Management_Console_Agent_en.exe**. This file can be found in the local directory in which you extracted the .zip file (see 3.2 Carrying out the installation - page 13).
1. Copy the file `Avira_Management_Console_Agent_en.exe` to the local computer on which you want to install the AMC Agent.

2. Double-click on the file.
   A window for extracting the installation file and starting the installation is displayed.

3. Click **Install**.
   The installation file is extracted. The window for the InstallShield wizard is displayed.

4. Click **Next**.
   The **License Agreement** is displayed.

5. Please read the agreement carefully, then select **I accept the terms of the license agreement**, and click **Next**.
   The **AMC-Server Configuration** window is displayed.

6. Enter the **IP-Address** or the **Hostname** of the AMC Server.

7. Enter the **Ports** you also provided during AMC Server’s installation.
8. Click **Next**.

The **AMC-Agent Configuration** window is opened.

![AMC-Agent Configuration Window]

7. Enter the data for the local computer: the **Computer name** assigned to the computer in the **Security Environment**, and the **Port** for communication with the server, as provided during AMC Server's installation. Then click **Next**.

   If the Windows Firewall is active, you will be asked whether you want AMC Agent to be dealt with as an exception to the Microsoft Windows Firewall.

8. If you confirm by selecting **Yes** the firewall will be configured automatically, if you choose **No** you have to configure the firewall manually at a later stage.

   Click **Next** to confirm your choice.

   The **Select Destination Location** window is displayed.

9. If necessary, select a different installation directory and click **Next**.

   The program is ready for installation.

10. Click **Install**.

    The AMC Agent is installed.

11. Click **Finish**.

    The AMC Agent is now locally installed.

12. Restart the computer if necessary.
15. Start the AMC Frontend on the AMC Server (see 4.1 Starting the AMC Frontend and logging in to the AMC Server - page 20).

The computers/groups are displayed with their status icon in the Security Environment:

🔍 Monitor green, arrow green. The agent status reads Ok.

If the computers/groups are not yet integrated into the Security Environment, they are displayed under **New computers**. From here they can be moved to other Security Environment sub-categories. See 5.3.3 Manually assigning a computer to an existing group - page 35.

5.5.3 Silent Agent setup in Windows

As an alternative to interactive remote installation with the AMC Frontend, AMC Agents can also be installed with a Windows login script. The installation script is executed through file sharing. The agents are installed without further user interaction.

**Prerequisites**

- The client computers must have access to the shared directory in which the AMC Server administers the AMC Agent installation file. The default path reads: 
  ```
  C:\Documents and Settings\All Users\Application Data\Avira\Avira Security Management Center Server\Agent\installagent.bat
  ```
  For further information, refer to 3. Installation - page 13.

To carry out the installation of the AMC Agent in silent mode, integrate the batch file on the client computers into a login script.

If you have installed the AMC Agent on computers which are not integrated into the Security Environment, the relevant computers are added to the **New computers** group. From here they can be moved to other Security Environment sub-categories. See 5.3.3 Manually assigning a computer to an existing group - page 35.

5.5.4 Manually installing the AMC Agent (optional for UNIX systems)

If necessary you can also install the AMC Agent on UNIX systems manually.

The program package for installing the AMC Agent on UNIX systems

*(Avira_Management_Console_Unix_Agent.tgz)* is available from the Avira website

[http://www.avira.com](http://www.avira.com)
**Prerequisites**

- Computers/groups must be included in the Security Environment and have the following status: Monitor light blue, arrow red.
  
  If you have installed the AMC Agent on computers which are not integrated into the Security Environment, the relevant computers are added to the **New computers** group.

- The IP address of the server must be known.

1. Save the program package for the AMC Agent for UNIX 
   *(Avira_Management_Console_Unix_Agent.tgz)* to the computer.

2. Extract the package:
   ```
   linux:/tmp# tar -xzvf Avira_Management_Console_Unix_Agent.tgz
   ```
   
The files are extracted.

3. Change the installation directory:
   ```
   linux:/tmp# cd Avira_Management_Console_Unix_Agent
   ```

4. Install the AMC Agent:
   ```
   linux:/tmp/Avira_Management_Console_Unix_Agent# ./install --server_uri=http://HOST[:PORT] --update_uri=http://HOST[:PORT] --display_name=<AMC display name>
   ```
   
The IP address of the server and the display name of the computer in the AMC Security Environment must be specified. Port information is only required if the default port the AMC Agent uses to communicate with the AMC Server has been changed.

   The following message is displayed:
   ```
   Starting Avira Management Console Agent (UNIX) <version> installation...
   ```
   
The license agreement is displayed.

5. Read the text and then press **y** or **Enter**.
After installing the components you will be asked if the Agent should be started automatically:

Please specify if boot scripts should be set up.
Set up boot scripts? [y]

6. Press **y** or **Enter** to create a boot script.
You will be asked if the agent should be started:

Would you like to start the Avira AMC Agent now? [y]

7. Press **y** or **Enter**.
Installation of the AMC Agent is complete.

8. Please copy your license key file in `/usr/lib/AntiVir/agent` before running the software.
Without a valid license, the UNIX AMC Agent will not start.

If you have installed the AMC Agent on computers which are not integrated into the Security Environment, the relevant computers are added to the **New computers** group. From here they can be moved to other Security Environment sub-categories. See 5.3.3 Manually assigning a computer to an existing group - page 35.

To check the status of the AMC Agent:

1. Change the installation directory:
   ```
   cd /usr/lib/AntiVir/agent
   ```

2. Enter the following command:
   ```
   ./smc-agent status
   ```

3. If the AMC Agent is not running, start it with the following command:
   ```
   ./smc-agent start
   ```

   The **Enabled** status 🚀 is displayed in the results window for the AMC Agent.
5.5.5 Uninstalling the AMC Agent

**Warning**
If you uninstall the AMC Agent from a computer, the installed Avira products can no longer be managed by the AMC. Before uninstalling the AMC Agent, all Avira products should be uninstalled.

1. In the Security Environment, right-click on the computer or group, and select **Installation > AMC Agent > Uninstall**.

   A security question is displayed (example):
   ![Question](image)

   Are you sure you want to uninstall this software package?

   ![Yes No](image)

2. Click **Yes**.

   The AMC Agent is uninstalled. The status icon for the computer or group displays the new status.

5.6 Configuring AMC

AMC includes the four services (AMC Server, Event Manager, Avira Update Manager and Alert Manager), as well as the client service, AMC Agent. Except for the AMC Agent, all services are automatically installed when the AMC is installed.

**Warning**
Configuration settings should only be changed if absolutely necessary and with the utmost care. Changing the configuration settings may cause serious errors in the AMC. If necessary, contact our Support team before changing the settings.

The configuration of a service can be changed in the **Configuration** window. Details are available in the following sections.
5.6.1 Changing the AMC Agent configuration

The AMC Agent is configured hierarchically in the Security Environment, i.e. you can change the settings for each individual node, or the settings may be inherited from its parent node.

**Prerequisites**

- We recommend that you configure the AMC Agent first on the Security Environment parent node. Right-click on the node and select **Configuration > AMC Agent > Configure**. The exact method is described later in this chapter. All computers in the group inherit these settings. You can then change the configuration of individual computers or sub-groups (if you have first disabled the Inherit configuration option, in the lower-left corner of the Configuration window). This will overwrite the settings inherited from the parent node.

1. Right-click on the computer or group, and select **Configuration > AMC Agent > Configure**.

   The Configuration window is opened.

2. Disable the Inherit configuration option and implement the required changes to the General configuration and Communication sections (as described below).

   - If you want the changed settings for the computer or group to be effective immediately:
     Click Send now.
     The new configuration is applied to the computer or group.

   - If you do not want the new configuration to be applied to the computer or group until a later time:
     Click Send later.
     The new configuration is saved in the AMC Server’s database. It can then be assigned to the computer or group at any time.
General configuration:

- **Registration delay**
  The period between starting the client computer and starting the AMC Agent. This delay ensures that services are available, upon which the AMC Agent service depends.

- **Drop Events**
  Event types (Info or Info & Warning) not relayed by the AMC Agent, in order to reduce data traffic on the network.

- **Event commit interval**
  The time interval (in seconds) for the services to send events to the Event Manager. The events are not sent immediately, but in batches, to reduce data traffic on the network.

- **Server communication**
  The mechanism AMC Agents use to retrieve data from the server: **Push** (for clients on a local network) or **Pull** (for very large networks).
• **Pull interval**

The period (in minutes) over which the AMC Server is queried, if the pull mechanism is active. The standard setting is 60 minutes.

• **Set error state on critical events**

If this option is enabled, the AMC Agent notifies the AMC Server of every critical event (e.g. virus found). The AMC Server then displays an error status for the relevant computer.

• **Get product installation packages from AUM**

If this option is enabled, product installation packages are downloaded from the assigned AUM Server, instead of the AMC Software Repository.

**Note**
You have to set the corresponding AUM Server to mirror the product packages.

**Communication:**

![Configuration interface](image)
• **Event Manager URL**
  The HTTP address and communication port of the computer on which the Event Manager service is installed.

• **Server URL**
  The HTTP address and communication port of the computer on which the AMC Server is installed.

• **Update URL**
  The HTTP address and communication port of the computer on which the Avira Update Manager service is installed.

• **Request server authentication**
  Used for SSL certificate management: If this option is enabled, SSL authentication is used for the computer login.

• **Validate common name**
  If enabled, the common name of the host is also checked in the AMC Server certificate.

5.6.2 Exporting/ Importing the AMC Agent configuration

You can save (export) the configuration of the AMC Agent from a certain node of the Security Environment and re-use the same configuration (import) on other nodes.

**Export Configuration**

1. Right-click the computer node from which you want to export the AMC Agent configuration and select **Configuration > AMC Agent > Export Configuration**.

2. In the browse dialog, select the destination and give a name to the saved configuration file.

**Import Configuration**

**Note**
The imported configuration replaces the existing one. The configuration import also breaks the inheritance, if active.

1. Right-click the computer node on which you want to import the AMC Agent configuration and select **Configuration > AMC Agent > Import Configuration**.
2. In the browse dialog, select the configuration file from your system.

**Note**
You can always revert the configuration to the parent node’s settings, by selecting Configuration > AMC Agent > Reset to parent’s configuration.

5.6.3 Changing AMC Server and Event Manager configurations

1. Click **Configuration** in the AMC navigation area.
   
The **Configuration** window is opened.

2. Click on the required settings group in the left panel.
   
The settings are displayed in the right panel.

3. Carry out the changes. The options are explained below.

4. Click **OK**.
   
   You will be asked if you want to restart the service to implement the changes.

5. Click **Yes**.

   This process only takes a few seconds. If the AMC Server restarts, the Frontend needs to log in again.
General configuration settings

General Settings:

- **SMTP Server**
  The name of the mailserver from which AMC sends email notifications.

- **Sender email address**
  The email address from which AMC sends email notifications.

- **Use login data**
  If a login is required for the mailserver, enable this option and enter the user and password.

- **SMTP Login/SMPT Password**
  The user name and password for logging in to the mailserver.
Server Settings

General:

- **Display agent synchronization command**
  
  If this option is enabled, the **Commands** context menu of the Security Environment and of computer groups contains the additional command **Force agent synchronization**, used for pull AMC Agents. For further information, refer to "Push and pull mechanism" - page 107.

- **Minimize GUI refresh**
  
  If you are managing lots of clients via the AMC, you can enable this option to limit AMC Frontend refresh instances and considerably improve AMC performance. The AMC Frontend now only updates status icons to take account of error messages or pending operations.
• Reset error states older than...

To ensure the error status display is always up-to-date, the AMC can be configured to automatically reset the error status after a specific number of hours. Enable the option Reset error states older than... and enter the required number of hours.

Communication:

• Synchronize client node hostname or IP address with client values

If you have enabled the option Synchronize client node hostname or IP address with client values, you can choose between Use hostname or Use IP address for updating the client node name. If this option is enabled, the AMC always retrieves the computer name or IP address of the client computer from the AMC Agent.

• Synchronize client node display name

Enable this option if you want to display the computer name of the client in the Security Environment.
**Event Settings:**

Events sent by Avira products to the Event Manager (e.g. virus alerts) can be sent to an email address. In this way, the administrator is directly informed about the events displayed in the AMC Frontend, e.g. critical events.

- **Email address**
  
  Email address of the recipient, e.g. the administrator or the collective address of the administration system, so that multiple team members receive the notification. This applies to the SMTP server settings from the **General** settings node.

- **Send after count of... warning event(s)**
  
  Enable this option if you want to be notified of warnings by email. Then set the number of events which must occur, for a notification to be sent.

- **Send after count of... critical event(s)**
  
  Enable this option if you want to be notified of critical events by email. Then set the number of events which must occur, for a notification to be sent.
• **Send after count of... error event(s)**

Enable this option if you want to be notified of error events by email. Then set the number of events which must occur, for a notification to be sent.

• **Send after count of... security event(s)**

Enable this option if you want to be notified of security events by email. Then set the number of events which must occur, for a notification to be sent.

• **Delete events in database...**

This option can be used to set the number of days after which event entries are automatically deleted from the database, to ensure that not too much memory space is used unnecessarily and database limits are not exceeded.

### 5.6.4 Configuration of the Avira Update Manager

The Avira Update Manager (AUM) is integrated into the AMC Frontend and is responsible for updates to Avira software packages and installed products.

Clients on the network no longer have to download the updates themselves from the Internet; instead you can update the products via your intranet, reducing Internet data traffic.

The Avira Update Manager service runs on one or more servers on your network and manages product update downloads on these servers. You can configure and control the AUM service remotely, using the AMC Frontend.

If you install the AMC Server, an AUM service is automatically installed on the same server. You can add new servers to the AUM node at a later time (as described under [5.4 Adding update servers to the AUM - page 42](#)).
If the **automatic update mode** is enabled (enabled by default, see 7. Updating the Software Repository and installed products - page 122), update tasks no longer have to be scheduled; moreover, the update server also does not have to be configured for each product, because updates are automatically triggered and downloaded by the integrated Avira Update Manager (AUM). The automatic update mode also ensures that available updates are distributed to all client computers as quickly as possible.

You can use the **Configuration** settings (**Configuration > Update > Default AUM for all updates**) to select a default AUM Server for all updates: AMC Frontend, Software Repository, AMC Server (including installed AMC Agents and Avira products on the client computers, if set to automatic mode).
• Synchronization

You can separately enable the repositories’ synchronization option: **Automatically synchronize software repositories between AMC and AUM servers**. If this option is enabled, AMC automatically synchronizes all AUM instances in order to mirror all products contained in the Software Repository. If you delete or add a software package in the Software Repository, the AMC Server deletes/adds this product from/to all AUM servers.

In order to configure the individual AUM servers in your Security Environment, expand the **Avira Update Manager** node and then the server node (for example `vm-win2k3:7050`) and use the configuration options under **Server Settings** and **Frontend Settings**.
**AUM Server - General settings:**

- **Download location**
  
  To define the destination directory where the updated files and program packages are to be saved: under **Root directory for update files** specify the destination directory on the server. The destination folder should also be on the network. Shares are not supported.

  **Note**
  
  If the destination directory is on a computer on the intranet, you must specify the path manually in the form of a **UNC- path**. Ensure that you have the appropriate rights on the destination computer. The AUM service should not be logged in as a local system account, as this will make it impossible to log in to the destination computer. Example: `\\Destination computer\Share\Updates\Avira`

  If authentication is required on the selected server, enable the **Use UNC authentication for root directory** option and specify a **User** and a **Password**.

- **Updates**

  In the **Updates** area, you can enable the **Activate test mode** option.

  In test mode, new files are loaded and shared in a test directory (hosted by a second HTTP server). If they have been scanned, they can be applied on the standard HTTP server and made available via the Security Environment. See "Using the AUM in test mode" - page 125.
Enable the option **Activate automatic mode for AMC updates**, to update the corresponding groups automatically via AUM (activated by default).

**• Configure Avira Update Manager updates**

Under **Configure Avira Update Manager updates**, you can enable the option **Install AUM service updates automatically**, if you want AUM updates to be installed from the update servers immediately after a successful download (does not apply to the AUM integrated into the AMC).

**Note**
If you want to perform an update via the AUM in test mode, you first have to run the command **Commit products** from the context menu. Otherwise you will not be able to update the AMC Server and AMC Frontend at a later time.

**• Log level**

To define which events are to be logged in the AUM log file, go to the **Log level** drop-down menu and choose between: **Info**, **Warning**, **Error**, **Trace** or **Debug**.
**AUM Server - Network settings:**

- **Web server**

  To change the default download server, enable the **Use own server list** option, and specify the address (IP address or computer name) of the required download server in the **Update server list** field.

  If the server uses a different port than port 80, the port number has to be added after the server name. Example:

  testserver1:7080,testserver2

  You can also enter multiple download servers, separated by commas. One will then be selected at random.

- **HTTP Server**

  Change the values under **Port of server** and **Port of test server** in the **HTTP Server** area, if ports 7080 and 7100 are already being used by another application on the computer.
• Proxy server

If you are accessing the Internet via a proxy server, enable the **Use server** option in the **Proxy server** area, and enter the proxy server data (the **Use authentication** option is optional and dependent on the settings of the proxy server).

**AUM Server - Email settings:**

![Image of AUM Server - Email settings]

You can define the email messages sent by the Avira Update Manager as follows:

• **Email messages**

In the **Email messages** area, enable the option **Activate email notification** and fill in the following fields:

• **SMTP Server**

Name of mail server. The hostname should be a maximum of 127 characters.

**Example:** 192.168.1.100 or mail.testcompany.com

• **Sender**

Sender's email address

**Example:** sendername@testcompany.com
• Recipient(s)

Email address of the recipient(s). Separate individual addresses with a comma.
Example: recipientname@testcompany.com

• Authentication

If the mail server requires authentication, enable the Use authentication option in the Authentication area and enter the login data for the mail server.

In the Email notifications for the following events area, you can select when AUM emails are to be sent: Error, Warning or Information. Please also note the information contained in the log file. You can use the Send test email button to check the notification settings.

Note
The Simple Message Transfer Protocol (SMTP) is used to send emails.

AUM Frontend Settings:

Enabling SSL server authentication

AMC supports signed SSL certificates for all server applications, including the AUM Server. As a client application, the AUM Frontend supports SSL server authentication (for further information on the SSL function, see below).

5.7 SSL certificate administration

SSL ensures secure communication by means of data encryption and server/client authentication. This means that before information is exchanged, the client must verify the true identity of the server and the server must verify the true identity of the client. When this has been done, the communication partners can exchange their encrypted information.
The AMC supports signed certificates for all server applications (Event Manager, AUM Server, AMC Server). The AMC Server contains a new tool that supports SSL certificate creation and provision.

All AMC clients (AMC Agent, AUM Frontend, AMC Frontend) support SSL server authentication.

5.7.1 Creating a signed certificate for AMC Server

If you want to create your own certificate for your AMC Server and want the clients to authenticate the server, you can use the Certificate Creation Tool:

1. Double-click on the file `SSLCertRequester.exe` (in `C:\Program Files\Avira\Avira Security Management Center Server`), and click **Next**.

2. Select the first option: **Create SSL Certificate Request and Private Key**.
3. Fill out the data form and click **Create Certificate**.

![Certificate Creation Tool](image)

The **Common Name** has to correspond to the hostname of the AMC Server’s computer.

The tool generates the CSR (*YourNameReq.pem*) and the private key (*YourNameKey.pem*) for the AMC Server.

4. Save the private key in a secure location and send the CSR to a trusted Certification Authority for signing.

5. If the signed certificate is returned by email, use the **Certificate Creation Tool** to update the certificate and the private key in the AMC.

6. Double-click on the file **SSLCertRequester.exe** (in *C:\Program Files\Avira\Avira Security Management Center Server*), and click **Next**.
7. Select the second option **Import signed Certificate and Private Key pair.**

![Certificate Import Interface]

The Certificate will be imported for the following product:

Avira Management Console

8. Click **Browse** and search for the **Private Key** and the **Certificate** on your system, specify the **Password** and click **Import**.

5.7.2 Adding a Certificate Authority to the trusted list

If you want to use your own certificate, add the Certificate Authority (CA) that signed your AMC Server certificate to the list of trusted CAs.

1. Add manually your CA’s certificate (the contents of *cacert.pem*) to the list of trusted CAs in `C:\Program Files\Avira\Avira Security Management Center Server\ssl\cacert.pem`.

   If you want to use only your CA’s certificate, replace the existing file.

2. Copy the modified `cacert.pem` file to the **Application Data** folder on the systems on which the AMC components are installed: AMC Agent, AMC Frontend and AUM Frontend. For example:

   `C:\Documents and Settings\All Users\Application Data\Avira\Avira Internet Update Frontend\cacert.pem`.

3. Turn on the SSL server authentication function in the configuration for the AMC Agent (see "Changing the AMC Agent configuration" - page 53), AUM Frontend (see "AUM
5.8 Updating the AMC

For proper functioning, it is important that the software is always up-to-date and that the versions of the individual components are compatible with each other. The AMC components (AMC Frontend, AMC Server and all associated services, and the AMC Agents) can be updated quickly and easily. The AMC establishes an Internet connection to the servers for this purpose, downloads the available updates and installs them.

Internet access is required to update the AMC. Where necessary, you also have to open the necessary ports in your network’s firewall. The firewall integrated into Windows Server 2003 and Windows Server 2008 is automatically appropriately configured by the AMC Server, Avira Update Manager and Event Manager.

If the automatic update mode is active, you will only be notified that new updates are available for AMC Server and AMC Frontend.

5.8.1 Updating AMC Server and AMC Frontend

**Direct updates**

1. Right-click on **Avira Management Console Frontend**, and select **Update > Server > Start update**, in order to update the AMC Server.

   – OR –

Select **Update > Frontend**, in order to update the AMC Frontend.

The following message is displayed:

When updating the AMC Server:
When updating the AMC Frontend:

2. Click **Yes** to confirm and where necessary close the AMC Frontend.

   The connection to the AMC Server is interrupted

   The AMC establishes a connection to the Avira Update Manager, downloads and installs the updates from the Avira servers.

3. Restart the AMC Frontend, and log in again to the AMC Server (see "Starting the AMC Frontend and logging in to the AMC Server" - page 20).

**Updating with Avira Update Manager**

Under **Avira Update Manager**, expand the server node, right-click **Released products** and select **Update mirrored products**.

   The progress of the update is displayed in the **Update status** tab.

**Creating a task for the AMC Server update**

You can create a task to check for new updates of the AMC Server at regular intervals.

   **Note**

   The task for the scheduled update must be created by the administrator.

1. Right-click on **Avira Management Console Frontend** and select **Update > Server > Schedule update check**.

   The **Create a Task** window is displayed.

2. Enter a name for the task, select the frequency of recurrence and click **Next**.

3. Select the start date and start time for the task and click **Finish**.

   The task is created.

   You can edit the task settings at any time using the context menu options (see below).
5.8.2 Displaying and changing update tasks for the AMC Server

Right-click on Avira Management Console Frontend, and select Update > Show tasks.

Task details for the server update are displayed in the results window (see "Displaying tasks for software packages and AMC Server components" - page 110).

To edit a task:

1. Double-click on the task.

   The Create a Task window is displayed.

2. Carry out the required changes and save the task.

5.8.3 Updating AMC Agents

It is recommended to update AMC Agents automatically via the Avira Update Manager (default settings).

To update the AMC Agents manually over the entire Security Environment or in a specific group:

Right-click on the Security Environment node or on the node of the group and select Commands > AMC Agent > Start Update.

To update the AMC Agent manually on a specific computer:

Under the node of the computer in the Security Environment, right-click on AMC Agent, and select Commands > Start Update.

   You can also schedule AMC Agent updates. To do so, in the Commands window, click the Schedule this command button.

To update the AMC Agents via AUM, when not in automatic mode:

Under Avira Update Manager, expand the server node, right-click Released products and select Update mirrored products.

   The progress of the update is displayed in the Update status window.

5.9 User Management

The User Management function lets you create users with specific access rights. Administrators can use this function to organize the monitoring of the Security Environment
effectively and delegate specific IT tasks to users. Certain users can be allowed to display specific events or reports in the AMC, whilst being unable to change any security-related settings.

**Adding new users**

1. Right-click on the **User Management** node, and select **Create new user**.

   The **New user** window is opened.

2. Enter the user name, the full name, and optionally a description and email address:

   ![New user window]

   The user will receive messages about changes in products’ status, if you fill in the email address and activate the option **Receive product status email** under **User permissions** (described below).

3. If the account is not to be activated until a later time, select the **Account is deactivated** option.

4. On the **Permissions** tab, configure the user permissions.

5. Click **OK** to save the settings.

   The **Password** window is opened.

6. Enter the password and click **OK**.
The new user is displayed in the results window.

### Configuring the user account

The following settings can be defined for all user accounts:

- **Password**: Enter the password with which the user logs on to the AMC.
- **Properties**: Enter the user name, the full name, the description and the email address.
- **Rights**: Define access rights for the AMC.

#### Note

The Security Environment is visible to all users.

You can assign the following rights to users:

- Display network neighborhood
- Display reports
- Modify/delete reports
- Manage users
- Display events
- Delete events
- Manage Software Repository
- Change own login password
- Configure AMC
- Configure AUM
• Manage filtering groups
• Display filtering groups

Setting a password

1. Right-click on the user icon in User Management and select Set password.
   
   The Password window is opened.

2. Enter the password and click OK.

   Access to the user account is password-protected.

Setting user's properties

1. Right-click on the user icon in User Management and select Properties.

   The properties window is displayed.

2. Make the required changes to the user properties.
3. Click on the **Permissions** tab

![Properties of tester1 dialog box]

4. Enable/disable the required permissions, and click **OK** to confirm.

**Deleting a user**

1. Right-click on the user icon in **User Management** and select **Delete**.

2. Click **Yes**.

   The user is deleted.

**Configuring user rights for virtual groups**

You can configure the access rights of users for virtual groups and computers in the Security Environment. These rights are **inherited downwards** in the hierarchy of the virtual groups. You can define the authorized users and their access rights for each node individually or let them inherit the settings of the parent node.

The following rights can be assigned specifically to groups or users:

- **Browse**
- **Create/ delete groups**
• Create/delete computers
• Install/uninstall/configure agents
• Install/uninstall/configure products
• Send commands
• Manage server tasks
• Generate reports
• Manage group permissions
• Receive product status email

1. In the Security Environment, right-click on the node of a computer or virtual group, and select User permissions.

The User permissions window is displayed.

2. Highlight a user and configure his/her rights in the Permissions area.

Note
The rights for the Administrator user cannot be changed.
You can configure users and their permissions for every node. If the settings are inherited from the parent node, the Permissions area is greyed out (disabled)

3. Where appropriate, disable the **Use parent setting** option.

4. Click **Manage users**.

   The Users window is displayed.

   ![Users Window]

   5. In the *Available users* area, select the users who will be allowed to access the node and click **Add**.

   - OR -
   Select the users who will not be allowed access to the node and click **Delete**.

   The users will be added to or removed from the *Selected users* area.

**Use parent setting**

To apply the settings of the parent node: Enable the **Use parent setting** option.

The user and access rights settings are inherited from the parent node.
6. Operation

6.1 Overview

This chapter describes the functions of AMC. These functions may vary slightly depending on the operating system and MMC version.

With AMC you can perform the following tasks with Avira products:

- Store, install, uninstall and configure software packages:
  6.2 Managing software packages - page 83
- Create filtered groups in the Security Environment (using specific criteria):
  6.3 Creating filtered computer groups - page 92
- Display different information on the computers in the Security Environment after installation of the software packages:
  6.4 Displaying information on a computer or group - page 97
- Display and filter AMC messages after installation and configuration of the software packages:
  6.5 Displaying events - page 104
- Perform product-specific actions (e.g. scan or update) and schedule regular tasks:
  6.6 Executing commands and scheduling tasks - page 107
- Access reports and regularly retrieve the status of the installed software and overviews of past events and messages on the computers in the Security Environment:
  6.7 Creating and displaying reports - page 111
- Share and run files and special Avira tools via the network:
  6.8 Sharing files, licenses and programs in the Security Environment - page 116
- Record all AMC actions in log files (optional). This means, for example, that you can identify software installation errors on the network more quickly:
  6.9 Log files - page 120

Starting the AMC Frontend

Carry out the steps described in 4.1 Starting the AMC Frontend and logging in to the AMC Server - page 20.
6.2 Managing software packages

The AMC Frontend lets you install, configure or uninstall Avira products quickly and easily on virtual groups in the Security Environment. In the AMC, Avira products are managed as software packages in a proprietary database, named **Software Repository** under Security Environment, and **Products** under each AUM Server node.

**Note**

The **Software Repository** node is used by default, when installing Avira products on computers in the virtual groups. If you enable the option **Get product installation packages from AUM** in the AMC Agent configuration, and use the command **Update mirrored products** on the corresponding AUM Server, the installation packages will be retrieved from the AUM Server. See 5.6.1 Changing the AMC Agent configuration - page 53.

**The Software Repository node**

Software packages are displayed in the AMC Frontend under the node **Software Repository**.
General information about the software is displayed in the Details panel: the name of the Avira product, the name of the installation file, the version and the license file.

6.2.1 Adding and deleting software packages

Avira products, such as Avira Professional Security 12 (Windows) are saved in the Software Repository as software packages. A software package consists of all the Avira product's program files and an information file, packed in a self-extracting archive and saved in the AMC database.

Note
Before you can install a software package in the Security Environment, you must first obtain a license from Avira. Information on licensing can be found in the manual for the respective Avira product.

Adding a software package

Prerequisites
• The Avira product must be saved to a computer on the local network.

1. Right-click on the Software Repository node, and select New > Software.
   The window for selecting the software package opens.

2. Select the path for the software package and click Open.
   The software package is saved. The data contained in the package’s information file is displayed in the results window.

3. Click on the Browse button […], enter the path for the software license file and click Open.
   The license file path is displayed in the results window.

4. Click Accept.
After checking the license, the software is displayed under the **Software Repository** and **Avira Update Manager** nodes. The details panel contains information on the software.

### Deleting a software package

Please note that the license file is only valid for the new installation of the software. If you want to extend the license for a specific, already installed product, you have to renew the license file with the function **Copy files** (see "Sharing license files" - page 118).

1. **Expand the Software Repository node.**
   - The saved software packages are displayed.

2. **Right-click on the software package and select Delete.**
   - The software is removed from the AMC database.

Note

Avira recommends that you do not delete existing software packages, as this may delete linked files on the server hard disk.
6.2.2 Installing and uninstalling software packages

**Note**
Read the *readme.txt* file in the AMC main directory.

The installation or uninstallation of software packages on computers in the Security Environment starts in protected mode, i.e. the process cannot be either interrupted or terminated.

The installation and uninstallation of software packages can only be carried out if all computers in the Security Environment are in online mode, administrator access is available and AMC Agents are enabled.

If there are computers in offline mode or AMC Agents with an enabled pull mechanism, the actions and commands (e.g. installing a software package) are saved and automatically triggered as soon as the computers or groups revert to online mode, or the AMC Agents perform synchronization. The computers for which an action is available have the status **Pending operations** (red flag on the left and/or orange arrow).

**Note**
Before the installation of a software package the Avira product must be configured. The configuration of Avira products require precise knowledge of the configuration parameters. Read and follow the configuration installations in the manual of the respective Avira product before you perform a remote installation or configuration with AMC.

**Installing a software package**

With AMC you can install Avira software packages on multiple computers at the same time. The configuration will be applied as set on the corresponding nodes in the Security Environment (see 5.3 Setting up the Security Environment - page 31).

**Note**
The AMC Agent must be installed first, if it is not yet available on the computer on which a software package is to be installed.

During installation, the product-specific **Install** or **Configuration** window is displayed, in which the required parameters can be defined (see 9.2 Product-specific configuration windows - page 135).
Example for Avira Server Security 12 (Windows):

1. Right-click on the computer or group on which the software is to be installed.

2. Select **Installation > [Name of software package] > Install**.

   The **Install** window is displayed.

3. If necessary, disable the **Inherit configuration** option and define the configuration parameters for the Avira product.

4. Click **Send later**, to save the configuration for future automatic installations (see "Automatic product installation" - page 88).

   - OR -

   Click **OK**, to start the software package installation immediately.

   The AMC Agent installs the software package. Where appropriate, program-specific dialog and message windows are displayed. The options in these windows correspond to those in the installation dialog windows of the respective Avira product. However, the setup provides only a standard installation, when done via AMC. For example, Avira Server Security 12 (Windows) is installed with enabled Guard, Systray Tool and Remote Control.
5. In the navigation area, click on the computer or group on which the installation was performed.

Information on the Avira products installed on the computer is displayed in the results window.

**Uninstalling a product**

**Prerequisites**

- Computers/groups must be included in the Security Environment and have the following status: Monitor green, arrow green.

1. Right-click on the computer or group on which the software is to be uninstalled.

2. In the context menu, select **Installation > [Name of software package] > Uninstall**.

3. Click **Yes**.

The product is uninstalled. The entries for this product are deleted in the results window.

**Warning**

Please note that some computers in your network might remain unprotected, if you remove a security product.

**Automatic product installation**

You can configure automatic routines to install the AMC Agent and certain Avira products on computers in groups, immediately after new computers are added to the group.

**Note**

For products to be installed automatically, the AMC Server user account must have administrator rights on all computers, to which the automatic installation of the AMC Agent applies. The AMC Agent must be manually installed on UNIX systems.

1. Right-click on the group in the Security Environment and select **Installation > Products**.
2. Disable the **Inherit from parent** option

You can then select the products to be automatically installed when a computer is added to the group.

3. If you want to install the AMC Agent automatically, when a computer is added to the group, activate the option **Install agent automatically when not available on the target system (Windows only)**.

4. Click **OK**.

   The selected products will be automatically installed on the computers of the chosen group. The installation configuration is applied as defined under **Installation > [Name of software package] > Install** (see "Installing a software package" - page 86).

6.2.3 Changing the configuration of an Avira product

Installed Avira products can be configured for each individual node. The **settings are then inherited downwards, from the parent nodes**.

We recommend that you configure the Avira product first on the **Security Environment** node. All computers in the group inherit these settings. You can then change the configuration of individual computers or sub-groups (if you have first disabled the **Inherit configuration** option), overwriting the settings inherited from the parent node.
During configuration of an Avira product, the product-specific Configuration dialog window is displayed in which the required parameters can be defined (see 9.2 Product-specific configuration windows - page 135).

Example for Avira Server Security 12 (Windows):

![Configuration dialog window](image)

**Note**

A product-specific configuration window is displayed during installation and configuration of a software package on computers in the Security Environment. The settings shown in this window are similar to the configuration options of the relevant Avira product. Please refer to each product’s documentation, for further information on configuration parameters.

If there are computers in offline mode or AMC Agents with an enabled pull mechanism, the actions and commands (e.g. installing a software package) are saved and automatically triggered as soon as the computers or groups revert to online mode, or the AMC Agents perform synchronization. The computers for which an action is available have the status **Pending operations** (red flag on the left and/or orange arrow).
Configuring an Avira product

Prerequisites
- Computers/groups must be included in the Security Environment and have the following status: Monitor green, arrow green.

1. Right-click on the computer or group.

   The product-specific Configuration window is opened.

3. Disable the Inherit configuration option and update the product settings.

4. If you want the changed settings for the computer or group to be effective immediately, click Send now.
   The new configuration is applied to the computer or group.
   -OR-
   If you want the changed settings for the computer or group to become effective at a later time, click Send later.
   AMC saves the new configuration locally for each node. It can then be assigned to the computer or group at a later time, by selecting Configuration > [Name of product] > Send now.

6.2.4 Exporting/ Importing the configuration of an Avira product

You can save (export) the configuration of an Avira product from a certain node of the Security Environment and re-use the same configuration (import) on other nodes.

Export Configuration

1. Right-click the computer node from which you want to export the product’s configuration and select Configuration > [product] > Export Configuration.

2. In the browse dialog, select the destination and give a name to the saved configuration file.
Import Configuration

Note
The imported configuration replaces the existing one. The configuration import also brakes the inheritance, if active.
You can import a product configuration only to a product of the same family, e.g. Avira Professional Security 12 (Windows) or Avira Server Security 12 (Windows). The language of the product is not a restriction.

1. Right-click the computer node on which you want to import the product configuration and select Configuration > [product] > Import Configuration.

2. In the browse dialog, select the configuration file from your system.

Note
You can always revert the configuration to the parent node’s settings, by selecting Configuration > [product] > Reset to parent’s configuration.

6.3 Creating filtered computer groups

You can use the New > Filtering group option in the context menu of the Security Environment, to create sub-groups of computers which satisfy specific criteria. Filtering can be performed according to the following criteria:

• Error status
• Product with an error message
• Installed or non-installed product
• Computers, groups, hostnames or IP addresses
• Last AMC Agent’s registration date

You can then execute commands directly for the filtered group and do not have to search the entire Security Environment for the required computers.
1. Right-click on the **Security Environment** node or on a group and select **New > Filtering group**.

The filter wizard opens.

2. Enter a name for the filtered group you want to create (e.g. **Errors**), and select the corresponding filter type from the menu.
Error state:

Select the first filter type if you want to include in a sub-group all computers on which an error has occurred. Then click **Finish**.

The sub-group (e.g. **Errors**) is displayed under the **Filtered security environment** node.

![Diagram of Avira Management Console frontend showing error status]

Product reporting an error:

Select the second filter type if you want to include in a sub-group all computers on which a product has reported an error. Then click **Next**.

The window **Module error status filter** is opened.

![Module error status filter window]

Select the module errors to be included in a group and click **Finish**.
The sub-group is displayed under the **Filtered security environment** node.

**Installed/ Not installed product:**

Select the third filter type if you want to include in a sub-group all computers on which a specific product has been installed or not installed. Then click **Next**.

The **Product filter** window is opened.

![Product filter window](image)

Select the required product and click **Finish**.

The sub-group is displayed under the **Filtered security environment** node.

**Wildcard search criteria:**

Select the fourth filter type if you want to include in a sub-group all computers with name or hostname matching a specific search criterion. Then click **Next**.
The **Text filter** window is opened.

![Text filter window](image)

Enter the hostname or the IP address you search for (* and ? wildcards supported). Click **Finish**.

The sub-group is displayed under the **Filtered security environment** node.

**AMC Agent’s last registration date:**

Select the fifth filter type if you want to include computers in a sub-group on the basis of the last AMC Agent registration. Then click **Next**.

The **Last registration filter** window is opened.
Enter a time period in which the last interaction is to have taken place, e.g. 14 days.
(default value: 14 days; minimum value: 1 day; maximum value: 365 days.)

Click Finish.

The sub-group is displayed under the Filtered security environment node.

6.4 Displaying information on a computer or group

6.4.1 Displaying information on a node or computer

Basic information on each node or computer can be displayed via the Properties context menu.

Properties of virtual groups:

Right-click on a virtual group under the Security Environment node and select Properties.

The Properties window is displayed:

Information on a virtual group:

- **Computer amount in group**: The number of computers in the group.
- **Available**: The number of computers currently connected to the AMC.
- **Product and Count**: The name and number of products installed in the group.

Computer properties:

Right-click on a computer under the Security Environment node and select Properties.

The Computer properties window is opened:
Information on a computer:

- **Display name**: The name of the computer in the Security Environment.
- **Hostname/IP**: The hostname or IP address on the network.

### 6.4.2 Displaying information in the details panel

AMC saves information on each computer and group in the Security Environment, which you can display and if necessary sort in the details panel.

When selecting a computer, various **Views** are available via the context menu or toolbar:

- For a group: **Status**, **Error messages**, **Tasks** and **Pending operations**
- For a computer: **Product status**, **Product version**, **Error messages**, **Events**, **Tasks** and **Pending operations**

#### Selecting and sorting the information displayed

**Prerequisites**

- Computers/groups must be included in the Security Environment and have the following status: 🌟 Monitor green, arrow green.

1. Right-click on the computer or group you want to display information on and select the required view from the **Views** option (alternately you can use the relevant toolbar button): **Product status**, **Product version**, **Error messages**, **Events**, **Tasks** or **Pending operations**.

   The relevant information is displayed in the details panel.

2. In the context menu select **View > Large/Small Icons** to display large or small icons for computers, products, tasks and events in the results window.

3. In the context menu, select **View > List** or **View > Detail** to display the elements or element details in table form.

4. The **Add/Remove Columns** option in the **View** menu lets you customize the display in the results window. The table can be sorted by clicking on the column heading.

5. Using the **Customize** option in the **View** menu, you can show or hide different elements of the MMC and snap-in interface (menus, toolbars, console tree, etc.)
Status view

This view displays the following information for each group:

- **Name**
  The name of the computer.

- **Operating system**
  Information on the operating system used.

- **Computer status**
  Information on the computer: "Online", "Offline", "Online, no agent installed" or "Not available".

- **Hostname/IP**
  The hostname or IP address on the network.

- **Configuration**
  The configuration settings of the AMC Agent (inherited or defined).

- **Last notification**
  The data and time of the last AMC Agent registration.

- **Installed products**
  A list of the products already installed on the relevant computer which can be managed using the AMC.

If you select a computer in the Security Environment, the following information is displayed in the **Product status** view:
• Product name
• Product state
• Status details

Status view for the Filtered security environment:

Product version view

This view displays information on all Avira program modules installed on the computer.

• Module name

A list of Avira products installed on the computer.
• **Module version**
  Information of the file version.

• **Module details**
  A description of the file.

**Events view**

Every Avira product on a computer generates product-specific events which are retrieved and saved by the AMC Agent:

- **Computername**
  The name of the computer on which the event was reported by the Avira product.

- **Level**
  Avira products assign a level (degree of importance) to every event: *Critical, Warning, Information, Security, Error.*

- **Product**
  The name of the Avira product reporting the event.

- **Actor**
  The name of the program component reporting the event.

- **Message**
  The product-specific text relating to the event.

- **Time**
  The date and time of the event.
**Tasks view**

Every Avira product on a computer supports product-specific commands (e.g. for executing scans or updates). These commands can be executed as scheduled tasks at regular intervals with the aid of the AMC.

You can display these tasks for each computer and each group. The group tasks are displayed in each computer’s scheduler.

- **Node**
  The name of the computer or group.

- **Name**
  The user-defined task name.

- **Period**
  The frequency of the task: hourly, daily, weekly, etc.

- **Start**
  The date and time of the first execution of the task.

- **Actor**
  The Avira product carrying out the task.

- **Command**
  The product-specific command for the task (e.g. update). The parameters of the command are not displayed at this point.

- **Weekdays**
  The weekdays for commands which are based on days of the week (Mon, Tue, Wed, etc).
• Created
The date and time of the creation of the task.

Pending operations view

Every Avira product supports product-specific commands (e.g. for performing scans or updates) which can be executed as scheduled actions at regular intervals with the aid of the AMC. If the action cannot be carried out because computers are in offline mode or the Agent is using the pull mechanism, the command or action is saved as a pending operation. The operation is then carried out as soon as the computer becomes available again or the agent performs synchronization.

You can display the pending operations for each group and each computer.

- Computer name
The name of the computer on which the pending operation is to be carried out.

- Operation
The operation type, e.g. installation or command.

- Product
The product for which the operation was created.

- Remarks
Information on the pending operation, such as command type and creation date.

- Created
The date and time of the creation of the operation.
Error messages view

If errors occur on computers in the Security Environment during actions in AMC, the affected computers are highlighted in the AMC Frontend.

Errors always occur at computer level. Nodes cannot produce errors, as they do not present physical structures on the network.

You can display the errors for each group and each computer.

• Computer name
  The name of the computer on which the error has occurred.

• Product name
  The name of the product reporting the error.

• Error message
  The text of the error message.

• Error state
  The status of the error.

• Created
  The date and time of the event.

6.5 Displaying events

Every Avira product generates specific events which are collected by AMC and displayed in the AMC Frontend. The AMC Agent collects the generated events and saves them in the local database.
These events can then be displayed in the AMC Frontend:

- You can display and sort events which have occurred on specific computers in the Security Environment node (see 6.4 Displaying information on a computer or group - page 97).
- You can display and sort events which have occurred on all computers in the Events node. You can use filter criteria only on the Events node.

Note
The number of events depends on the number of managed computers and it can take a long time to display all events.

Events node

The details panel of the Events node contains detailed information on all events that have occurred in the Security Environment.

The Events view for the whole Security Environment corresponds roughly to the Events view for each computer’s node (see also 6.4 Displaying information on a computer or group - page 97).

If you double-click on an event, the detailed information is displayed in a separate window.

You can easily identify the computer on which an event occurred: right-click the event and select the Jump to computer option.
Displaying and filtering events

You can filter events as needed, to only display specific events. The following options are available:

- **No Filter**: All events are displayed in the details panel.
- **Level**: Only events at a specific level (*Critical*, *Warning*, *Information*, *Security*, *Error*) are displayed.
- **Product**: The events generated by a specific product are displayed. The products which can be filtered are listed under **Filter > Product**.
- **String**: Only events which contain a specific sequence of characters are displayed.

The **Events** node contains events transmitted to the AMC Agent by Avira products in the Security Environment (e.g. to a virus scanner).

1. Click on **Events**.
   
   All Security Environment events are displayed unfiltered in the details panel.

2. If you click on a column heading, data is sorted according to this criterion, e.g. by **Level** or **Time**.

3. Right-click on **Events**, select **Filter** and then the required filter option.

   The filtered data is displayed in the results window.

   – OR –

   Select **Filter > String** and enter the character sequence to be used for the search and filter function in the **String filter** window:

   ![String filter window](image)

4. After entering the text, click **OK**.

   The scanned events are displayed in the results window.

Deleting events

As over time the list of events gets more and more extensive, you can delete events to save memory space.
Right-click on an event and select **Delete**.

– OR –

Right-click on **Events** and select **Delete all**.

### 6.6 Executing commands and scheduling tasks

For every Avira product there are various ways of performing actions such as scan and update, using specific parameters or schedules. You can configure, activate and plan these actions using AMC for computers and groups in the Security Environment. An action initiated by AMC (e.g. Scan) is referred to as a **Command**, while the planned, single or periodical action is called a **Task** (e.g. weekly update).

AMC can run all commands supported by the installed Avira products.

#### Note
Further information on Avira commands and parameters is available in the documentation for the relevant Avira product. Please read and follow all relevant instructions before executing commands and scheduling tasks with the AMC.

#### Warning
If you shut down the AMC Server, all active commands will be cancelled.

The result of a command (e.g. **Scan**) or task (e.g. **Scan hard disk**) is displayed in the results window of the **Events** node or that of the group or computer.

**Push and pull mechanism**

One of the following mechanisms is used to execute tasks and commands, depending on the configuration of the AMC Agent (see [5.6 Configuring AMC - page 52](#)).

- **Push**: Commands are sent by the AMC Server directly to the AMC Agents’ scheduler.

  If AMC Agents are in offline mode, actions and commands are saved as **Pending operations** and run as soon as the AMC Agent is connected again.

  Computers on which an action has not been carried out have the status **Pending operations**: Monitor dark, arrow orange, red flag on the left.

- **Pull**: Contrary to the push mechanism, AMC Agents in pull mode retrieve commands from the Server at configurable intervals. All operations are treated as pending. This mechanism enables the management of clients, which cannot be directly accessed by
the AMC Server (e.g. out-of-office laptops). Moreover, the pull mode can ensure a better distribution of the traffic load over the network.

Computers with pull-agents have the following status icon:

- Monitor green, arrow green, red flag on the left (in online mode)
- Monitor dark, arrow orange, red flag on the left (in offline mode)

Under certain circumstances, a synchronization may be forced for pull AMC Agents. The command **Force agent synchronization** is available for this purpose. It can be enabled as follows:

- In the navigation area, click **Configuration > Server Settings**, click on **General** and enable the **Display agent synchronization command** option.

The following command is then displayed in the context menu for the Security Environment and the context menu of each computer: **Commands > Force agent synchronization**.

**Executing commands**

1. Right-click on the computer or group, and select **Commands**.
   
   A sub-menu is displayed showing all installed Avira products.

2. Select the required product and then the required command (e.g. **Start update**).
   
   If the command has parameters, these can be entered in the **Commands** dialog box.

   Example for Avira Professional Security 12 (Windows):

3. Enter the required parameters and click **OK**.
   
   The command is executed and the event is displayed in the results window of the **Events** node. With a pull AMC Agent, the command is saved as a pending operation until synchronization is carried out.
Scheduling tasks

Execution of all available commands can be scheduled for a specific time. In the AMC, a scheduled command is referred to as a task.

1. Right-click on the computer or group, and select Commands.

   A sub-menu is displayed showing all installed Avira products.

2. Select the required product and then the required command (e.g. Start update).

   If the command has parameters, the application path and other parameters can be given in the Commands dialog box.

3. Select the required parameters and click Schedule this command.

   The Create a Task window is displayed:

   4. Enter a task name and select the frequency of recurrence.
5. Click **Next**.

The window for selecting time and data settings is opened:

![Create a Task](image)

5. **Click Next**.

The window for selecting time and data settings is opened:

5. Select the start time and start date and click **Finish**.

The task is created and displayed in the details panel of the computer or group (see "Tasks view" - page 102).

**Displaying tasks and pending operations**

The scheduled tasks are displayed in the results window of the computer or group on which the execution is scheduled.

Right-click on the computer or group, and select **Tasks** or **Pending operations**.

The tasks are displayed, together with further information, in the details panel (see "Tasks view" - page 102).

**Displaying tasks for software packages and AMC Server components**

Scheduled tasks for updating AMC Server components or software packages are displayed under **Avira Management Console Frontend**:

Right-click on **Avira Management Console Frontend**, and select **Update > Show tasks**.
The tasks are displayed in the results window.

- **Name**
  The name of the task.

- **Period**
  The selected frequency of execution.

- **Start**
  The time of the first execution.

- **Status**
  Information on the task execution.

- **Weekdays**
  Short names of the days of the week (Mon, Tue...), when the task should be run.

- **Created**
  Date and hour of the task’s creation.

### 6.7 Creating and displaying reports

You can let the AMC Agent create reports for individual computers or computer groups in the Security Environment.

First, create a report template for a specific report type. AMC can generate the following report types for all Avira products installed in the Security Environment.

- Managed computers
- Managed products
• Product version information
• Product license information
• Engine and VDF version
• Found malware (general)
• Found malware (file)
• Found malware (email)
• Found malware (Http)
• Top 10 malware
• Top 10 infected computers

Note
Further information on report types can be found in the manual for the respective Avira product. Please read the information on report types in the manual carefully before creating and scheduling AMC reports.

Reports node
Click the Reports node, to display the reports and the report templates in the details panel.

<table>
<thead>
<tr>
<th>Template name</th>
<th>Template type</th>
<th>Group</th>
<th>Timeframe</th>
<th>Start Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>malware</td>
<td>Found Malware (General)</td>
<td>Security Enviro...</td>
<td>7 day(s)</td>
<td>13.10.2011</td>
</tr>
<tr>
<td>products</td>
<td>Managed Products</td>
<td>Security Enviro...</td>
<td>Not available</td>
<td>13.10.2011</td>
</tr>
<tr>
<td>computers</td>
<td>Managed Computers</td>
<td>Security Enviro...</td>
<td>Not available</td>
<td>13.10.2011</td>
</tr>
</tbody>
</table>

• Template name
  The user-defined report name.

• Template type
  The selected report type.

• Group
  The virtual group or computer for which the report is created.
Creating report templates

1. Right-click on the computer or group, and select Create report.

   The following window is displayed:

2. Select the report type and the period for the report, and click Next.
The **Configure report** window is opened:

```
Name: Found Malware

Scheduler

✓ Schedule report

Startdate: 17.01.2011
Starttime: 14:24:01

• Daily
• Weekly
• Monthly
```

3. Enter a name for the report template.

4. If the report is to be created at regular intervals, enable the **Schedule report** option and enter the start date/time and creation interval.

5. Click **Finish**.

The report template is created. The report is either created immediately or at the scheduled time and displayed under the **Reports** node.

**Editing report templates**

**Note**

The report type selected for a report template cannot be changed. If you require a different report type, you have to create a new template.

1. Under the **Reports** node, click on a report template and select **Properties**.

   The **Select report type** window is displayed.

2. Change the period where appropriate and click **Next**.

   The **Configure report** window is displayed.
3. Change the **Name** and the **Scheduler** settings where appropriate, and click **Finish**.

The changes are saved. The report template is displayed in the results window under the **Reports** node.

**Displaying reports**

The reports can be displayed in list form or as HTML pages.

1. In the navigation area, expand the **Reports** node.
   
   The available report templates are displayed in the details panel.

2. Double-click on a report template in the details panel.
   
   The created report templates are displayed with the start and end date.

3. Right-click on the required report in the navigation area and select **List** or **HTML**.
   
   The report is displayed in the selected format (e.g. as a list).

**Printing reports**

In the AMC, reports are processed as HTML pages and can be displayed and printed out using an operating system HTML editor (e.g. Microsoft Word or Microsoft Internet Explorer)

1. Select the report in the **HTML** view, as described in the previous section.

2. Right-click on the report and select **Print**.
The report is opened in the HTML editor.

3. Print the report using the editor’s **Print** command.

### 6.8 Sharing files, licenses and programs in the Security Environment

**Note**

On computers in the Security Environment, you can only share programs signed by Avira.

AMC provides two options for sharing and executing files and executable programs (certified by Avira) on all computers in the Security Environment.

- You can share and if required immediately execute files and programs (configured where appropriate with start parameters and commands) on individual computers or in groups. In this way you can, for example, deploy virus removers, license files, etc.
- You can configure AMC Agents on computers to execute programs by remote access. You can also schedule the execution of these programs as tasks (see also "Scheduling tasks" - page 109).
When shared, the files are copied to the installation directory of the Avira product you have selected (\<amc_server_install>\Avira Security Management Center Agent\>). AMC uses this directory as the root directory for the actions carried out. You can also create sub-directories in this root directory (e.g. ...\New-VDF-Files), so you can quickly retrieve the files on the computer.

When using remote access to execute a program, the program must be in the installation directory of the AMC Agent (\<amc_server_install>\Avira Security Management Center Agent\)).

**Note**
If you want to use this function on a regular basis, we recommend that you create a default directory for the copied files, e.g. ...\Shared files.

**Warning**
Please note the following when sharing executable files:
Read the information on the programs, commands and parameters in the program documentation before sharing and executing these with the AMC.

If an error occurs after running a program, a fault event is sent to the AMC Agent. The affected groups are displayed with error status.

If there are computers in offline mode, the actions and commands (e.g. installing a software package) are saved and automatically triggered as soon as the computers or groups revert to online mode, or the AMC Agents perform synchronization. The computers for which an action is available have the status ![Pending operations](red flag on the left and/or orange arrow).

**Sharing and executing files and programs**

1. Right-click the computer or group and select Installation > [Avira product] > Copy files.
The **Copy files** window is opened:

2. Click *add* and browse for the files/ programs you want to copy.
   
   If necessary, indicate the **Subdirectory** in which the files are to be copied.

3. Click **Copy**.

4. If the copied files are to be opened and executed immediately: Click the file in the list, to select it, enable the option **Execute selected file after copy operation** and enter the required values in the **Parameter** and **Command** fields.

**Sharing license files**

If you want to extend the license for an Avira product, you have to load the new license file with the **Copy files** function.

1. Update the license file for the software package in the **Software Repository** so it can be used for future installations.

2. Right-click on the computer or group on which the product is installed in the Security Environment, and select **Installation > [Avira product] > Copy files**. Then follow the steps as described above.
Running programs

Prerequisites

- The program files must be in the installation directory (or in a sub-directory) of the computer or group.

1. Right-click on the computer or group, and select **Commands > AMC Agent > Start Application**.

   The **Commands** window is opened.

   ![Commands Window](image)

   **Application Path:** "C:\Program Files (x86)\Avira\AntiVir Desktop\licmgr.exe"

2. For Windows AMC Agents:
   Enter the path and file name. Use double quotes for absolute paths. Example:
   "C:\Program Files (x86)\Avira\AntiVir Desktop\licmgr.exe"

   For UNIX AMC Agents:
   Call the interpreter, to execute a script. Example:
   `/bin/sh /tmp/sample_script.sh`

3. If the program is to be executed immediately and only once: Click **OK**.
   The program will be executed.

   – OR –
If the program is to be executed at regular intervals as a scheduled task:
Click on the **Schedule this command** button (see "Scheduling tasks" - page 109).
The task is displayed in the results window of the computer or group.

### 6.9 Log files

If errors occur during the installation, configuration or uninstallation of software packages, during the execution of actions by Avira products on computers or in groups in the Security Environment, or during the execution of tasks and commands, the AMC can display the log files for the Avira products and AMC services in the AMC Frontend.

Errors always occur at computer level. Nodes cannot produce errors, as they do not present physical structures on the network.

**Note**
You cannot view the logfiles, if the AMC Server cannot connect to the Agents (e.g. the AMC Agent is behind a firewall).

**Note**
For troubleshooting it is recommended that you first check the Avira product’s log files and have them at hand when you contact support services.

**Displaying log files**

1. Right-click on the computer and select **View Logfile**.
   The logfiles window is opened.

2. Select the required log file in the drop-down list in the **Choose logfile** area:

   ![logfiles_window.png](attachment:logfiles_window.png)

   The log file is displayed in the window.
3. Select a filter from the drop-down list:

The log file is filtered and displayed in the window.

**Resetting the error status**

When an error occurs in the AMC, the affected areas of the Security Environment are highlighted in the navigation area with a red stop icon.

**Prerequisites**

- An error icon ✗ is displayed next to the computer or group node.

In the toolbar, select the **Error messages** view for the computer or group in the Security Environment.

**Check log file**

To identify and rectify the error, first check the log file for the affected node (see above).

**Delete error**

1. To prevent other relevant error messages from being accidentally deleted, right-click on the appropriate error and select **Delete**.

2. Click **Yes** to confirm.

   The error message is deleted.

**Reset error status**

After fixing the error’s cause, reset the error status of the node by right-clicking the node and selecting **Reset error state**.
7. Updating the Software Repository and installed products

The Software Repository and installed Avira products can be automatically updated with the aid of the Avira Update Manager. The AUM is integrated into AMC and is a component of AMC’s configuration.

Avira products can be updated in the AMC by various means:

- **Automatic update mode** (enabled by default): automatically updates the software packages and installed products via the integrated AUM Server, according to the AUM Scheduler.
  
  – OR –

- If you disable the Automatic update option (right-click a computer or group and select Automatic update > Disabled), you can update the products manually, using an update command or via scheduled tasks.

**Note**

Avira products installed on the computers in the Security Environment can be updated via Internet or intranet connection, depending on the configuration of the update routine. Updates are performed separately on each computer. The products in the **Software Repository** are not updated in this way.

Please read and follow the updating instruction in the manuals for the respective Avira products before you perform updates via AMC.

When updating Avira products in the Software Repository, products installed on the computers in the Security Environment are not updated.

7.1 Using the Avira Update Manager

The Avira Update Manager service is preconfigured, i.e. no further user actions are required after installation of the AMC Server. AUM distributes the updated files across the entire network so that client computers do not require Internet access to perform updates.
The automatic update mode is enabled by default: all AUM servers automatically mirror all packages contained in the AMC Software Repository.
7.1.1 Using the AUM Scheduler

To configure the interval at which Avira Update Manager scans for available product updates and downloads them to the corresponding AUM server:

1. In the navigation area, click on the node of the AUM server being configured.

2. Click **Scheduler**:

![Scheduler Configuration](image)

3. In the **Scheduling** area, activate the **Enable scheduling** function and then the required update interval (Once, Hourly, Daily, Weekly, Monthly or Every \(x\) days/hours/minutes).

4. If you have enabled Every \(x\) days/hours/minutes enter an update interval. The minimum interval is 15 minutes.

5. Specify the start date and time for the first update in the **Start time/ Start date** fields.

The scheduler has been configured. When you exit the dialog box you will automatically receive a prompt to save all changes. The service performs product updates at the specified date and time and at the appropriate intervals.

**Note**
The selected interval must be at least 5 minutes longer than the interval set for the automatic copying of files in test mode.
7.1.2 Using the AUM in test mode

The AUM can also be used in **test mode**. This mode can be enabled in the AUM configuration window:

1. **Enable the **Activate test mode** option under **Server Settings > General**.**

   In test mode, new files are loaded into a special test directory (**Test products**) on a second HTTP server. The files remain in this location until they are committed.

   You can assign the test repository of an AUM Server to a group, to test the updates:

   2. Right-click the group and select **Automatic update > Use update test server**.
After validation, the test files can be committed (Released products), to serve as update source to the other groups.

3. Right-click on Test products, and select Commit products.

The test files can also be committed automatically:

Under Server Settings > General, enable the option Commit test files automatically and enter the required time (in minutes).

**Note**
The selected interval must be at least 5 minutes less than the interval set for updating the products.

The files will be moved after this period of time has elapsed.

4. Click Yes to confirm the change. The AUM servers are first reinitialized.

**Warning**
If the server was offline at the time of the planned commit operation, the test files are released as soon as the server booted up again. This is to say that if the automatic commit is scheduled for 9:30 p.m. and the server is offline at that time, but will be booted up again at 10 p.m., the automatic commit will take place at 10 p.m.

If problems occur during the test, the moving of the test files can be terminated. Right-click on the Test products node and select Drop upcoming commit.

Alternately, you can type the following command in the command line:

--drop_automatic_commit

This means that the automatic commit command remains active, but currently queued files are deleted. New files are not saved in the queue until the next update.

Manual commit, which allows files to be committed individually at any time is still available via the context menu of the Test products node.

**Note**
If you want to perform an update via the AUM in test mode, you first have to click on Released products in the context menu. Otherwise you will not be able to update the AMC Server and AMC Frontend at a later time.
7.2 Updating packages in the Software Repository node

It is recommended to update the Software Repository via the integrated AUM Server using the automatic update mode (enabled by default).

Manually updating software packages

If the automatic mode is disabled (Server Settings > General > Activate automatic mode for AMC updates under the relevant AUM server node), you can update the Software Repository manually:

Right-click the Software Repository node and select Update Software Repository > Start Update.

– OR –

Right-click on a software package in the Software Repository and select Update > Execute update.

AMC creates a connection to the specified update server, downloads the available software updates and saves them in the Software Repository node.

Scheduling regular updates of software packages

You can update software packages in the AMC Server at regular intervals by creating an update task. You can update all software packages or only specific software packages.

1. Right-click the Software Repository node and select Update Software Repository > Schedule update.

– OR –

Right-click on a specific software package in Software Repository and select Update > Schedule update.

The Create a Task window is displayed.

2. Enter a name for the task, select the frequency of recurrence, and click Next.

In the next window, you will be asked to enter start date and start time details.

3. Select the start date and start time and click Finish.

The task is saved.

You can edit the task at any time using the options in the context menu (see "Displaying tasks for software packages and AMC Server components" - page 110).
7.3 Updating installed Avira products

It is recommended to update the Software Repository via the integrated AUM Server using the automatic update mode (enabled by default).

In case you added more AUM servers to AMC, you can select an update server which you can use to update Avira products on specific computers or in specific groups:

1. Right-click on the computer or group in the Security Environment and select **Automatic update**.

2. Click **Inherit settings from parent node** to disable this option, if it is still enabled.

3. Click the option **Use [server] for updating**.

Manually updating installed Avira products

**Note**

If you want to execute update commands and tasks manually via the Avira Update Manager, you must disable the **Automatic update** option in the context menu of the Security Environment, group or computer node (Right-click the node: **Automatic update > Disabled**).

Right-click on the group or computer, and select **Commands > [Avira product] > Start update**.

The update routine for the Avira product is started and the new program files are installed.

You can schedule update tasks for Avira products installed on the computers in the Security Environment. For further information, refer to **6.6 Executing commands and scheduling tasks - page 107**.
7.4 Update overview

You update all Avira products via the AUM, by selecting the **Update mirrored products** option under **Released products** or under **Products > Test products**.

Alternately you can update the AUM itself, using the AUM scheduler.

7.4.1 Update using AUM in automatic mode

The AUM has an automatic update mode for updates in the AMC. You can enable this function under:

- **Server Settings > General > Activate automatic mode for AMC updates** under the relevant AUM server node
- **Automatic update > Use [server] for updating** in the context menu of the Security Environment, group or computer node, for the Avira installed products

The **automatic mode** is enabled by default.

The following table contains a list of updatable program modules and indicates which can be automatically updated.

<table>
<thead>
<tr>
<th>Program module</th>
<th>Can be automatically updated?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products in AUM repository</td>
<td>Yes</td>
</tr>
<tr>
<td>AMC Software Repository</td>
<td>Yes</td>
</tr>
<tr>
<td>AMC Agent</td>
<td>Yes</td>
</tr>
<tr>
<td>Installed products</td>
<td>Yes</td>
</tr>
<tr>
<td>AMC Server</td>
<td>No (You are only notified that new updates are available, when you log in.)</td>
</tr>
<tr>
<td>AMC Frontend</td>
<td>No (You are only notified that new updates are available, when you log in.)</td>
</tr>
<tr>
<td>AUM service</td>
<td>On AMC-integrated AUM - No (It is updated together with the AMC Server.) On further AUM servers - Yes</td>
</tr>
</tbody>
</table>

**Note**

If the repositories’ synchronization option is enabled (**Configuration > Update > Automatically synchronize software repositories between AMC and AUM servers**), AMC automatically synchronizes all AUM instances in order to mirror all products contained in the Software Repository.
7.4.2 Update using AUM without automatic mode

The automatic update mode can be disabled under:

- **Server Settings > General > Activate automatic mode for AMC updates** under the relevant AUM server node
- **Automatic update > Disabled** under Security Environment, group or computer node, for the Avira installed products

If the automatic mode is disabled, only products in AUM repository are updated. All other program modules have to be manually updated.

The following table shows:

- how to start the update of any available update module
- how to determine which AUM is updating the respective module

<table>
<thead>
<tr>
<th>Update module</th>
<th>Update procedure</th>
<th>Update AUM</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMC Server</td>
<td>Right-click the AMC Frontend node: Update &gt; Server &gt; Start update</td>
<td>Default AUM server</td>
<td>Configuration &gt; Update &gt; Default AUM for all updates</td>
</tr>
<tr>
<td>AMC Frontend</td>
<td>Right-click the AMC Frontend node: Update &gt; Frontend</td>
<td>Default AUM server</td>
<td>Configuration &gt; Update &gt; Default AUM for all updates</td>
</tr>
<tr>
<td>Software Repository</td>
<td>Right-click the Software Repository node: Update Software Repository &gt; Start Update</td>
<td>Default AUM server</td>
<td>Configuration &gt; Update &gt; Default AUM for all updates</td>
</tr>
<tr>
<td>AMC Agent</td>
<td>Right-click the AMC Agent node: Commands &gt; Start Update</td>
<td>Any AUM displayed in the AMC or another source</td>
<td>AMC Agent: Configuration &gt; Communication &gt; Update URL</td>
</tr>
<tr>
<td>Product</td>
<td>Right-click a product node: Commands &gt; Start update</td>
<td>Any AUM displayed in the AMC or another source</td>
<td>[Avira product]: Configuration &gt; Configure &gt; Update</td>
</tr>
</tbody>
</table>
### Updating the Software Repository and installed products

<table>
<thead>
<tr>
<th>Update module</th>
<th>Update procedure</th>
<th>Update AUM</th>
<th>Configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUM service on AMC-integrated AUM</td>
<td>Right-click the AUM server node: <strong>Start AUM server service self update</strong></td>
<td>AMC-integrated AUM</td>
<td>none</td>
</tr>
<tr>
<td>AUM service on further AUM servers</td>
<td>Right-click the AUM server node: <strong>Start AUM server service self update</strong></td>
<td>Further AUM servers</td>
<td>none</td>
</tr>
</tbody>
</table>
8. Troubleshooting

8.1 Requirements for communication between the AMC Agent and AMC Server

**Prerequisites**

- If a firewall is installed on a client, the following ports (TCP) must be enabled: 7000, 7001, 7080, 7100. ICMP queries must also be allowed.

- With an active Windows Firewall, exceptions for incoming ICMP echo requests (ping), Windows remote administration and Windows file and printer sharing must be configured.

- The Simple file sharing must be deactivated for Windows XP: uncheck the option **Windows Explorer > Tools > Folder Options > View > Use simple file sharing (recommended).**

- The AMC Server must be able to access the administrative share C$ (\<Client-IP>C$) and the remote administration on the client with an authorized user account.

**Warning**

Other firewalls may disrupt the communication between AMC Agent and AMC Server. Should this be the case you’ll find corresponding error messages in the log files (see "Displaying log files" - page 120).
8.2 Requirements for ADS synchronization

Prerequisites

- It must be possible to terminate domain names using the DNS.
- When using a firewall, all Active Directory ports must be open. These ports include:
  - 389 (LDAP)
  - 88 (Kerberos)
  - 636 (LDAP over SSL)
  - 3268 (Global Catalog LDAP)
  - 3269 (Global Catalog LDAP over SSL)

The firewall integrated into Windows Server 2003 and 2008 is automatically configured by the AMC Server, AMC Agent, AUM and Event Manager.

- The user account for the AMC Server must have access rights for Active Directory.
- There should be no group rules to prevent access to Active Directory.

8.3 Backup for AMC Server files

1. To create a backup for the AMC Server, right-click on the Avira Management Console Frontend node and select Backup server files.

   A message will appear informing you that the backup may take several minutes.

2. Click Yes.

   You can now navigate to the location for saving the backup archive in an Explorer window on the AMC Server, and enter a name for the resulting .zip file.

   On completion of the backup, an information window will appear describing how the archive can be restored:

   All relevant server files were backed up.
   To restore these files, please stop all AMC services
   (all services starting with 'Avira Management Console') and the Avira Update Manager Service,
   then extract all files from the backup archive, overwriting existing files.
   Please make sure that you always restore ALL files to prevent inconsistencies.
   Then, please restart all services.

   [OK]
8.4 Error during installation of the AMC Agent

Reason

The **Use simple file sharing (recommended)** option in Windows is enabled (**Control panel > Folder options > View > Advanced settings**).

This option sets the **Force Guest** flag to the value 1. Administrator access is no longer possible and the AMC Agent cannot be installed.

Solution

Disable the option.

8.5 Error during AUM updates without multilanguage support

Reason

If you do not enable the **Multilanguage** option during AMC installation, the integrated AUM will mirror only the language of the current installation (English or German). If you add further AUM servers to your AMC, they will not be able to update AMC components from the integrated AUM, because they attempt to run an "all languages" update.

Solution

1. Disable the repositories’ synchronization option: **Configuration > Update > Automatically synchronize software repositories between AMC and AUM servers**.

2. Remove any language-dependent files from the integrated AUM’s repository.

3. Add **All-Language** files instead.

4. Re-activate the repositories’ synchronization option.
9. Products supported by AMC

9.1 Supported Avira products

Avira Management Console currently supports the following Avira products which have to be purchased separately. For further information, please go to our website: http://www.avira.com

- Avira Professional Security 13 (Windows)
- Avira Server Security 13 (Windows)
- Avira Professional Security 12 (Windows)
- Avira Server Security 12 (Windows)
- Avira Mac Security
- Avira AntiVir Professional 10 (Windows)
- Avira AntiVir Server 10 (Windows)
- Avira AntiVir Server (UNIX)
- Avira AntiVir Professional (UNIX)
- Avira AntiVir MailGate (UNIX)
- Avira AntiVir WebGate (UNIX)

9.2 Product-specific configuration windows

In the AMC, Avira products are managed as software packages. A product-specific configuration window is displayed during installation and configuration of a software package on computers in the Security Environment. The options in this window are similar to the configuration options of the relevant Avira product. In the AMC, they are only shown in another form. For further information, refer to "Changing the configuration of an Avira product" - page 89.

You can find detailed information on configuration options in the manual for the respective Avira product.

Warning
Loss of product functions due to incorrect configuration:
Please read the chapter on configuration in the manual of the respective Avira product, before changing configuration settings in the AMC.
10. Service

10.1 Support

Support service

All necessary information on our comprehensive support service can be obtained from our website http://www.avira.com.

Forum

Before you contact the hotline, we recommend that you visit our user forum at http://forum.avira.com.

FAQs

Please also read the FAQs section on our website. Your question may already have been asked and answered by other users in this section.

10.2 Contact

Address

Avira Operations GmbH & Co. KG
Kaplaneiweg 1
D-88069 Tettnang
Germany

Internet

You can find further information about us and our products at the following address: http://www.avira.com