ESET Mail Security 4

for Microsoft Exchange Server

User Guide

Microsoft[®] Windows[®] Server 2000 / 2003 / 2008



ESET Mail Security

Copyright © 2010 by ESET, spol. s.r.o.

ESET Mail Security was developed by ESET, spol. s r.o. For more information visit www.eset.com. All rights reserved. No part of this documentation may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise without permission in writing from the author.

ESET, spol. s r.o. reserves the right to change any of the described application software without prior notice.

Customer Care Worldwide: www.eset.eu/support Customer Care North America: www.eset.com/support

REV. 13. 4. 2010

Contents

1. 1.1	Introd System	uction	••••4
1.2	Method	s used	4
	1.2.1	Mailbox scanning via VSAPI	4
	1.2.2	Message filtering on the SMTP server level	4
1.3	Types of	f protection	4
	1.3.1	Antivirus protection	4
	1.3.2	Antispam protection	4
	1.3.3	Application of user-defined rules	5
2	Install	ation	6
	Tunical I	nstallation	 د
2.1	Custom	Installation	o -
2.2	Liconco		/
2.3		tallation Configuration	9 0
2.4	PUSC-IIIS		9
3.	Updat	e	12
3. 3.1	Updat Proxy se	e	12
3. 3.1	Updat Proxy se	e erver setup	12
3. 3.1 4.	Updat Proxy se ESET N	e erver setup Aail Security - Microsoft	12 12
3. 3.1 4.	Updat Proxy se ESET M Exchai	e erver setup Mail Security - Microsoft nge Server protection	12 12
3. 3.1 4.	Updat Proxy se ESET N Exchai General	e erver setup Mail Security - Microsoft nge Server protection settings	12 12 13
3. 3.1 4. 4.1	Updat Proxy se ESET N Exchai General 4.1.1	e erver setup Mail Security - Microsoft nge Server protection settings Rules	12 12 13 13
3. 3.1 4. 4.1	Updat Proxy se ESET M Exchai General 4.1.1 4.1.1	e erver setup Mail Security - Microsoft nge Server protection settings Rules Adding new rules	12 12 13 13 13
3. 3.1 4. 4.1	Updat Proxy se ESET N Exchai 4.1.1 4.1.1 4.1.1 4.1.1	e Arver setup Mail Security - Microsoft nge Server protection settings Rules Adding new rules Actions	12 12 13 13 13 13 14
3. 3.1 4. 4.1	Updat Proxy se ESET N Exchai 4.1.1 4.1.1 4.1.1 4.1.2 4.1.2	e Prver setup Mail Security - Microsoft nge Server protection settings Rules Adding new rules Actions Log files	12 12 13 13 13 13 14 14
3. 3.1 4. 4.1	Updat Proxy set ESET N Exchar 4.1.1 4.1.1 4.1.1.2 4.1.2 4.1.2 4.1.3	e Aail Security - Microsoft nge Server protection settings Rules Adding new rules Actions Log files Message quarantine	12 12 13 13 13 13 14 14 14
3. 3.1 4. 4.1	Updat Proxy set ESET N Exchan 4.1.1 4.1.1 4.1.1.2 4.1.2 4.1.2 4.1.3 4.1.3.1	e Aail Security - Microsoft nge Server protection settings Rules. Adding new rules Actions Log files. Message quarantine Adding a new quarantine rule	12 12 13 13 13 13 14 14 14 14
3. 3.1 4. 4.1	Updat Proxy see ESET N Exchai 4.1.1 4.1.1.1 4.1.1.2 4.1.2 4.1.2 4.1.3 4.1.3.1 4.1.4	e Aail Security - Microsoft nge Server protection settings Adding new rules Actions Log files Message quarantine Adding a new quarantine rule Performance	12 13 13 13 13 14 14 14 14 15

	Antivirus	and antichuwara cattings	- 6
4.2	Antivirus	Actions	16
	4.2.1	Alorts and patifications	10
	4.2.2		10
	4.2.3	Performance	17
	4.2.4	Virus-Scanning Application Programming	
		Interface (VSAPI)	17
	4.2.4.1	Microsoft Exchange Server 5.5 (VSAPI 1.0)	17
	4.2.4.1.1	Actions	17
	4.2.4.1.2	Performance	17
	4.2.4.2	Microsoft Exchange Server 2000 (VSAPI 2.0)	18
	4.2.4.2.1	Actions	18
	4.2.4.2.2	Performance	18
	4.2.4.3	Microsoft Exchange Server 2003 (VSAPI 2.5)	19
	4.2.4.3.1	Actions	19
	4.2.4.3.2	Performance	20
	4.2.4.4	Microsoft Exchange Server 2007/2010 (VSAPI	
		2.6)	20
	4.2.4.4.1	Actions	20
	4.2.4.4.2	Performance	21
	4.2.5	Transport Agent	21
4.3	Antispan	n settings	21
	4.3.1	Antispam engine parameter setup	21
	4.3.2	Alerts and notifications	22
	4.3.3	Transport Agent	22
4.4	FAO		22
			·

1. Introduction

ESET Mail Security 4 for Microsoft Exchange Server is an integrated solution protecting user mailboxes from various types of malware content (most often they are email attachments infected by worms or trojans, documents containing harmful scripts, phishing, spam etc.). ESET Mail Security provides three types of protection: Antivirus, Antispam and application of userdefined rules. ESET Mail Security filters the malicious content on the mailserver level, before it arrives in the addressee's email client inbox.

ESET Mail Security supports Microsoft Exchange Server versions 5.5 and later, in addition to Microsoft Exchange Server in a cluster environment. In newer versions (Microsoft Exchange Server 2007 and later), specific roles (mailbox, hub, edge) are also supported. You can remotely manage ESET Mail Security in larger networks with the help of ESET Remote Administrator.

As far as functionality is concerned, ESET Mail Security is very similar to ESET NOD32 Antivirus 4.0. It has all the tools necessary to ensure protection of the server-asclient (resident protection, web-access protection, email client protection and antispam), while providing Microsoft Exchange Server protection.

1.1 System requirements

Supported Operating Systems:

- Microsoft Windows 2000 Server
- Microsoft Windows 2003 Server (x86 and x64)
- Microsoft Windows 2008 Server (x86 and x64)
- Microsoft Windows 2008 Server R2

Supported Microsoft Exchange Server versions:

- Microsoft Exchange Server 5.5 SP3, SP4
- Microsoft Exchange Server 2000 SP1, SP2, SP3
- Microsoft Exchange Server 2003 SP1, SP2
- Microsoft Exchange Server 2007 SP1, SP2
- Microsoft Exchange Server 2010

Hardware requirements depend on the operating system version and the version of Microsoft Exchange Server in use. We recommend reading the Microsoft Exchange Server product documentation for more detailed information on hardware requirements.

1.2 Methods used

Two independent methods are used to scan email messages:

Mailbox scanning via VSAPI 4 Message filtering on the SMTP server level 4

1.2.1 Mailbox scanning via VSAPI

The mailbox scanning process is triggered and controlled by the Microsoft Exchange Server. Emails in the Microsoft Exchange Server store database are scanned continuously. Depending on the version of Microsoft Exchange Server, the VSAPI interface version and the user-defined settings, the scanning process can be triggered in any of the following situations:

- When the user accesses email, e.g. in an email client (email is always scanned with the latest virus signature database)
- In the background, when use of the Microsoft Exchange Server is low
- Proactively (based on the Microsoft Exchange Server's inner algorithm)

The VSAPI interface is currently used for antivirus scan and rule-based protection.

1.2.2 Message filtering on the SMTP server level

SMTP server-level filtering is secured by a specialized plugin. In Microsoft Exchange Server 2000 and 2003, the plugin in question (*Event Sink*) is registered on the SMTP server as a part of Internet Information Services (IIS). In Microsoft Exchange Server 2007/2010, the plugin is registered as a transport agent on the *Edge* or the *Hub* roles of the Microsoft Exchange Server.

SMTP server-level filtering by a transport agent provides protection in the form of antivirus, antispam and userdefined rules. As opposed to VSAPI filtering, the SMTP server-level filtering is performed before the scanned email arrives in the Microsoft Exchange Server mailbox.

1.3 Types of protection

There are three types of protection:

1.3.1 Antivirus protection

Antivirus protection is one of the basic functions of the ESET Mail Security product. It guards against malicious system attacks by controlling file, email and Internet communication. If a threat with malicious code is detected, the Antivirus module can eliminate it by first blocking it and then cleaning, deleting or moving it to quarantine.

1.3.2 Antispam protection

Antispam protection integrates several technologies (RBL, DNSBL, Fingerprinting, Reputation checking, Content analysis, Bayesian filtering, Rules, Manual whitelisting/blacklisting, etc.) to achieve maximum detection of email threats. The antispam scanning core's output is the spam probability value of the given email message expressed as a percentage (o to 100). Values of 90 and above are considered sufficient for ESET Mail Security to classify an email as spam.

Another component of the antispam protection module

is the Grevlisting technique (disabled by default). The technique relies on the RFC 821 specification, which states that since SMTP is considered an unreliable transport, every message transfer agent (MTA) should repeatedly attempt to deliver an email after encountering a temporary delivery failure. A substantial part of spam consists of one-time deliveries (using specialized tools) to a bulk list of email addresses generated automatically. A server employing Grevlisting calculates a control value (hash) for the envelope sender address, the envelope recipient address and the IP address of the sending MTA. If the server cannot find the control value for the triplet within its own database, it refuses to accept the message, returning a temporary failure code (temporary failure, for example, 451). A legitimate server will attempt a redelivery of the message after a variable time period. The triplet's control value will be stored in the database of verified connections on the second attempt, allowing any email with relevant characteristics to be delivered from then on.

1.3.3 Application of user-defined rules

Protection based on user-defined rules is available for scanning with both the VSAPI and the transport agent. You can use the ESET Mail Security user interface to create individual rules that may also be combined. If one rule uses multiple conditions, the conditions will be linked using the logical operator AND. Consequently, the rule will be executed only if all its conditions are fullfilled. If multiple rules are created, the logical operator OR will be applied, meaning the program will run the first rule for which the conditions are met.

In the scanning sequence, the first technique used is greylisting - if it is enabled. Consequent procedures will always execute the following techniques: protection based on user-defined rules, followed by an antivirus scan and, lastly, an antispam scan.

2. Installation

After purchase, the ESET Mail Security installer can be downloaded from ESET's website as an .msi package. Once you launch the installer, the installation wizard will guide you through the basic setup. There are two types of installation available with different levels of setup details:

1. Typical Installation

2. Custom Installation



2.1 Typical Installation

Typical installation provides configuration options appropriate for most users. The settings provide excellent security coupled with ease of use and high system performance. Typical installation is the default option and is recommended if you do not have the particular requirements for specific settings.

After selecting the installation mode and clicking Next, you will be prompted to enter your username and password for automatic updates of the program. This plays a significant role in providing constant protection of your system.

🙀 ESET Mail Security Setup	×
Automatic update Enter your Username and Password	
To ensure that protection is updated, er after purchase below. We recommend th email and paste them (Ctrl+V) to the ap	nter the Username and Password you received hat you copy them (Ctrl+C) from your registration propriate fields below.
⊍sername: If you are unsure about the correct valu	Password:
later. 🗖 Set update parameters later	
	< Back

Enter your Username and Password, i.e., the authentication data you received after the purchase or registration of the product, into the corresponding fields. If you do not currently have your username and password available, authentication data can be inserted at any time, directly from the program.

In the next step - **License Manager** - Add the license file delivered via email after product purchase.

🛃 ESET Mail Security Setup		×
License manager		
Add licenses to be used	611	
		<u>A</u> dd <u>R</u> emove
Owner: Number of licenses: Date of expiry:	< <u>B</u> ack	<u>C</u> ancel

The next step is configuration of the ThreatSense.Net Early Warning System. The ThreatSense.Net Early Warning System helps ensure that ESET is immediately and continuously informed about new infiltrations in order to quickly protect its customers. The system allows for submission of new threats to ESET's Threat Lab, where they are analyzed, processed and added to the virus signature database.

🚏 ESET Mail Security Setup	×
ThreatSense.Net Early Warning System Set parameters for ThreatSense.Net reporting	1
The ThreatSense.Net Early Warning System is the best way to help ESET protect you as well as keep you informed about new and evolving threats. This system can submit new threats to ESET's lab and provides feedback that can help protect your computer.	
Enable ThreatSense.Net Early Warning System	
Advanced setup For more information about the ThreatSense.Net Early Warning System, and to review our privacy statement, read the program help file after installation.	
< Back Cancel	

By default, the **Enable ThreatSense.Net Early Warning System** option is selected, which will activate this feature. Click **Advanced setup...** to modify detailed settings for the submission of suspicious files.

The next step in the installation process is to configure **Detection of potentially unwanted applications**. Potentially unwanted applications are not necessarily malicious, but can often negatively affect the behavior of your operating system.

These applications are often bundled with other programs and may be difficult to notice during the installation process. Although these applications usually display a notification during installation, they can easily be installed without your consent.

🔂 ESET Mail Security Setup	X
Detection of potentially unwanted applications	
Potentially unwanted applications are programs that usually require the user's consent before installation. They might not pose any security risk, however, they can affect your computer's performance, speed and reliability as well as change its behavior.	
Please select one of the options	
Please select one of the options Enable detection of potentially unwanted applications Disable detection of potentially unwanted applications	
< <u>B</u> ack <u>M</u> ext > <u>C</u> ancel	

Select the Enable detection of potentially unwanted

applications option to allow ESET Mail Security to detect this type of threat (recommended).

The final step in Typical installation mode is to confirm installation by clicking the **Install** button.



2.2 Custom Installation

Custom installation is designed for users who have experience with fine-tuning programs and who wish to modify advanced settings during installation.

After selecting the installation mode and clicking **Next**, you will be prompted to select a destination location for the installation. By default, the program installs in C:\Program Files\ESET\ESET Mail Security\. Click **Browse...** to change this location (not recommended).

FSET Mail Security Setup	×
Select Installation Folder This is the folder where ESET Mail Security will be installed.	
To install in this folder, click "Next". To install to a different folder, ent "Browse". Folder:	er it below or click
C:\Program Files\ESET\ESET Mail Security\	Browse
< <u>B</u> ack	Cancel

Next, Enter your **Username** and **Password**. This step is the same as in Typical installation (see <u>"Typical</u> installation" [6]).

In the next step - **License Manager** - Add the license file delivered via email after the product purchase.

🔂 ESET Mail Security Setup	×
License manager	
Add licenses to be used	
	Add
	Remove
Owner: Number of licenses: Date of expiry:	
< Back	Cancel

After entering your username and password, click **Next** to proceed to **Configure your Internet connection**.

🖶 ESET Mail Security Setup	×
Internet Connection Configure your Internet connection	
Select options corresponding to your type of Internet connection. If you are unsure, select the settings used by Internet Explorer.	
Proxy server • I am unsure if my Internet connection uses a proxy server. Use the same settings as Internet Explorer. (Recommended) • I do not use a proxy server • I use a proxy server	
< <u>B</u> ack <u>N</u> ext > <u>C</u> ancel	

If you use a proxy server, it must be correctly configured for virus signature updates to work correctly. If you do not know whether you use a proxy server to connect to the Internet, select the default setting I am unsure if my Internet connection uses a proxy server. Use the same settings as Internet Explorer (Recommended) and click Next. If you do not use a proxy server, select the I do not use a proxy server option.

roxy server	
Enter proxy server parameters	
Proxy server settings:	
A <u>d</u> dress:	Po <u>r</u> t:
	3128
Username: P	assword:
Use Internet Explorer settings	
Address:	Port:
	Apply

To configure your proxy server settings, select **I use a proxy server** and click **Next**. Enter the IP address or URL of your proxy server in the **Address** field. In the **Port** field, specify the port where the proxy server accepts connections (3128 by default). In the event that the proxy server requires authentication, enter a valid **Username** and **Password** to grant access to the proxy server. Proxy server settings can also be copied from Internet Explorer if desired. To do this, click **Apply** and confirm the selection.

😸 ESET Mail Security Setup		x
Automatic update Configure automatic update se	ttings	
The installation Wizard will now sch updates. You can tailor the update	nedule tasks that will e e tasks to your needs i	nsure automatic program using Scheduler at any time.
Type of update		
Program components:	Offer	C <u>h</u> ange
	< <u>B</u> ack	Next > Cancel

Click **Next** to proceed to **Configure automatic update** settings. This step allows you to designate how automatic program component updates will be handled on your system. Click **Change...** to access the advanced settings.

If you do not want program components to be updated, select the **Never update program components** option.

Select the Ask before downloading program

components option to display a confirmation window before downloading program components. To download program component upgrades automatically, select the **Always update program components** option.

🚼 ESET Mail Security Setup	×
Updates can be performed automatically without user intervention, or you can choose to be notified before updating. After a program component has been updated, a computer restart may be required.	L
Program component update	
O Never update program components	
C Always update program components	
Ask before downloading program components	
Restart after program component upgrade	
○ Ne <u>v</u> er restart computer	
• Offer computer restart if necessary	
$\ensuremath{\mathbb{O}}$ If necessary, restart computer without notifying	
<u>OK</u> ancel	

NOTE: After a program component update, a restart is usually required. We recommend selecting the **If necessary, restart computer without notifying** option.

The next installation window offers the option to set a password to protect your program settings. Select the **Protect configuration settings with a password** option and choose a password to enter in the **New password** and **Confirm new password** fields.

F ESET Mail Security Setup			2
Password protect setting Enter password to protect	s settings		1
Protect configuration set	ings with a password		
N <u>e</u> w password: Confirm new password:			
	< <u>B</u> ack	Next >	Cancel

The next two installation steps, **ThreatSense.Net Early Warning System** and **Detection of potentially unwanted applications** are the same as in Typical installation (see <u>"Typical installation</u>" **(a)**). Click **Install** in the **Ready to install** window to complete installation.

2.3 License

A very important step is to enter the license file for ESET Mail Security for Microsoft Exchange Server. Without it, email protection on the Microsoft Exchange Server will not work properly. If you do not add the license file during installation, you can do so later in the advanced settings, under **Miscellaneous > Licenses**.



There are two types of licence available for ESET Mail Security. One unlocks all ESET Mail Security-related features except Antispam, the second one unlocks everything without restriction. If the first one is used, all antispam-related features will be unavailable within ESET Mail Security.

ESET Mail Security 4 for Microsoft Exchange Server (EMSX) compares the number of mailboxes for the active directory to your license count. Each Exchange server's active directory is checked to determine the total mailbox count. There is no way to determine which mailboxes are protected and which ones are excluded from protection. Resource mailboxes (i.e. a conference room mailbox) will be tallied in the mailbox count. Email aliases are not tallied in the mailbox count.

To determine how many Exchange enabled mailboxes you have, open **Active Directory users and computers** on the server. Right-click on the domain and click **Find...**. Then from the **Find** drop-down menu select **Custom search** and click the **Advanced** tab. Paste in the following Lightweight Directory Access Protocol (LDAP) query and click **Find Now**:

• (&(!cn=SystemMailbox{*})(&(&(! cn=SystemMailbox{*})(! userAccountControl:1.2.840.113556.1.4.803: =2))(&(&(&(&((mailnickname=*) (| (& (objectCategory=person)(objectClass=user)(| (homeMDB=*)(msExchHomeServerName=*)))))) (objectCategory=user)))))



If the number of mailboxes in your active directory exceeds your license count a message will be entered into your Microsoft Exchange Server log reading, "Protection status changed due to exceeded number of mailboxes (count) covered by your license (count)." Your ESET Mail Security will also notify you by changing its **Protection status** to **ORANGE** and displaying a message informing you that you have 42 days left before your protection will be disabled. If you receive this notification, please contact your sales representative to purchase additional licenses.

If the 42 days period has passed and you did not add the required licenses to cover the exceeding mailboxes, your **Protection status** will change to **RED**. The message will inform you that your protection has been disabled. If you receive this notification, immediately contact your sales representative to purchase additional licenses.

2.4 Post-Installation Configuration

There are several options that have to be configured after the product installation.

Antispam protection setup

This section describes the settings, methods and techniques you can use to protect your network from spam. We recommend reading the following instructions carefully before choosing the most suitable combination of settings for your network.

Spam management

To ensure a high level of Antispam protection you must set actions to be performed on messages already marked as SPAM.

There are three options available:

1. Deleting spam

The criteria for a message to be marked as SPAM by ESET Mail Security are set reasonably high, decreasing the chances of deleting legitimate email. The more specific the Antispam settings, the less likely it is to delete legitimate email. Advantages of this method include very low consumption of system resources and less administration. The drawback to this method is that if a legitimate email is deleted it cannot be restored locally.

2. Quarantine

This option excludes the risk of deleting legitimate email. Messages can be restored and resent to the original recipients immediately. The drawbacks of this method are higher consumption of system resources and additional time required for email quarantine maintenance. You can use two methods to quarantine email:

A. Internal Exchange Server quarantine: - If you want to use the internal server quarantine make sure the **Common message quarantine** field on the right pane in the advanced settings menu (under **Mail server protection > Message quarantine**) is left blank. Also make sure that the **Quarantine message to the mail server system quarantine** option is selected from the dropdown menu at the bottom.

B. Custom quarantine mailbox:

- If you type the desired mailbox in the **Common message quarantine** field ESET Mail Security will move all new spam messages into your custom mailbox.

3. Forwarding spam

Spam will be forwarded along to its recipient. However, ESET Mail Security will fill in the relevant MIME header with the SCL value into each message. Based on the SCL value the relevant action will be executed by the Exchange server IMF (Intelligent Message Filtering).

Spam filtering

Antispam Engine

The Antispam engine offers the three following configurations - **Recommended**, **Most accurate**, **Fastest**.

If there is no need to optimize your configuration to allow maximum throughput (e.g. high server load), we recommend you select the **Most accurate** option. When the **Recommended** configuration is set, the server will automatically adjust its settings based on scanned messages to balance the load. When **Most accurate** is enabled, the settings will be optimized in regard to the catch rate. Clicking **Custom > Open configuration file** allows a user to edit the spamcatcher.conf file. This option is recommended for advanced users only.

Before starting full operation, we recommend that you manually configure the lists of restricted and allowed IP addresses. To do so:

- Open the Advanced settings window and navigate to the section Antispam protection > Mail server protection.
- 2) Make sure to check the **Enable mail server antispam** protection field.
- Click the Setup... button to set Allowed, Ignored and Blocked IP addresses lists.
 - The Blocked IP addresses tab contains the list of

restricted IP addresses, i.e., if any non-ignored IP in *Received headers* matches the address on this list, the message scores 100 and no other checks are made.

- The **Allowed IP addresses** tab lists all IP addresses that are approved, i.e., if the first non-ignored IP in *Received headers* matches any address on this list, the message scores o and no other checks are made.
- The **Ignored IP addresses** tab lists addresses that should be ignored during *Real-time Blackhole List* (*RBL*) *checks*. The list should include all internal IP addresses in the firewall not directly accessible from the Internet. Doing so prevents unnecessary checks and helps to differentiate the external connecting IP addresses from the internal IP addresses.

Greylisting

Greylisting is a method protecting users from spam using the following technique: Transport agent sends a "temporarily reject" SMTP return value (default is 451/4.7.1) for any email from a sender it does not recognize. A legitimate server will attempt to redeliver the message. Spammers typically do not attempt to redeliver messages, because they go through thousands of email addresses at a time and typically cannot spend extra time on resending.

When evaluating the message source, the method takes into account the configurations of the Approved IP addresses list, the Ignored IP addresses list, the Safe Senders and Allow IP lists on the Exchange server and the AntispamBypass settings for the recipient mailbox. Greylisting must be thoroughly configured, or else unwanted operational flaws (e.g. delays in legitimate message deliveries etc.) may occur. These negative effects recede continuously as this method fills the internal whitelist with trusted connections. If you are not familiar with this method, or if you consider its negative sideeffect unacceptable, we recommend that you disable the method in the Advanced settings menu under Antispam protection > Mail server protection > Microsoft Exchange Server > Transport agent > Enable Greylisting.

We recommend disabling greylisting if you intend to test the product's basic functionalities and do not want to configure the advanced features of the program.

NOTE: Greylisting is an additional layer of antispam protection and does not have any effect on the spam evaluation capabilities of the antispam module.

Antivirus protection setup

Quarantine

Depending on the type of cleaning mode you are using we recommend that you configure an action to be performed on infected (not cleaned) messages. This option can be set in the Advanced settings window > Antivirus and antispyware > Mail server protection > Microsoft Exchange Server > Transport agent. If the option to move messages into email quarantine is enabled, you need to configure the quarantine under the section **Message quarantine** in the Advanced settings window.

Performance

If there are no other restrictions, our recommendation is to increase the number of ThreatSense scan engines according to this formula: *number of scan engines* = *number of scan threads* and increase the number of VSAPI scanning threads based on this formula: *number of scan threads* = (*number of physical CPUs* * 2) + 1 in the Advanced settings window under **Antivirus and antispyware** > **Performance**.

NOTE: We recommend that you set the number of ThreatSense scan engines equal to the number of scan threads used.

3. Update

Updating the virus signature database and updating program components are an important part of providing complete protection against malicious code. Please pay attention to their configuration and operation. From the main menu, select **Update** and then click **Update virus signature database** in the primary window to check for a newer database update. **Username and Password setup...** displays a dialog box where the username and password received at the time of purchase should be entered.

If the username and password were entered during installation of ESET Mail Security you will not be prompted for them at this point.



The Advanced Setup window (click **Setup** from the main menu and then click **Advanced setup...**, or press F5 on your keyboard) contains additional update options. Click **Update** from the Advanced Setup tree. The **Update server:** drop-down menu should be set to **Choose automatically**. To configure advanced update options such as the update mode, proxy server access, LAN connections and creating virus signature copies, click the **Setup...** button.



3.1 Proxy server setup

If you use a proxy server to control Internet connections on a system using ESET Mail Security, it must be specified in Advanced Setup. To access the Proxy server configuration window, press F5 to open the Advanced Setup window and click Miscellaneous > Proxy server from the Advanced Setup tree. Select the Use proxy server option and then fill in the Proxy server (IP address) and Port fields. If needed, select the Proxy server requires authentication option and then enter the Username and Password.

etup		ese
Address books Mail server protection Address books Mail server protection Adress and notifications Microsoft Exchange Server Urresport agent Logrides Scheduler Address Alext System updates Subduler Metris and notifications Hidden notification Remote administration Email cirk integration	Procy server Procy server Procy server: Procy server:	Port:

If this information is not available, you can attempt to automatically detect proxy server settings by clicking the **Detect proxy server** button.

NOTE: Proxy server options for various update profiles may differ. If this is the case, configure the different update profiles in **Advanced Setup** by clicking **Update** from the **Advanced Setup** tree.

4. ESET Mail Security - Microsoft Exchange Server protection

4.1 General settings

This section describes how to administer rules, log files, message quarantine and performance parameters.

4.1.1 Rules

The **Rules** menu item allows administrators to manually define email filtering conditions and actions to take with filtered emails. The rules are applied according to a set of combined conditions. Multiple conditions are combined with the logical operator AND, applying the rule only if all the conditions are met. The column **Number** (next to each rule name) displays the number of times the rule was successfully applied.

The rules are checked against a message when it is processed by transport agent (TA) or VSAPI. When both TA and VSAPI are enabled and the message matches the rule conditions, the rule counter may increase by 2 or more. This is because VSAPI accesses each part of the message individually (body, attachment) meaning the rules are consequently applied to each part individually. Furthermore, rules are also applied during background scanning (e.g. repeated mailbox-store scan after virus signature database update), which can increase the rule counter.

ESET Mail Security			<u>? ×</u>
Setup			eset
Mail server protection Mail server protection Grifes Gogifes Gogifes	Rules Rule Pole Prode_dot_bulk Pole Prode_quar@spam Pole Read more about applying mail server protection rules.	Number 0	Add Edit Bemove Clear Move up Move up
	QK	Cancel	Default

NOTE: You can also use system variables to apply Rules (for example: %PATHEXT%).

4.1.1.1 Adding new rules

This wizard guides you through adding user-specified rules with combined conditions.

Add new rule Choose conditions for applying the rule. The number of availa on the type and version of the installed mail server. By target mailbox By message recipient By message subject By message body By attachment name By attachment size By frequency of occurrence	2 ×
< <u>B</u> ack <u>N</u> ext > <u>Fin</u>	ish <u>C</u> ancel

Note, that not all of the conditions are applicable when the message is scanned by transport agent.

- By target mailbox applies to the name of a mailbox (VSAPI)
- By message recipient applies to a message sent to a specified recipient (VSAPI + TA)
- By message sender applies to a message sent by a specified sender (VSAPI + TA)
- By message subject applies to a message with a specified subject line (VSAPI + TA)
- **By message body** applies to a message with specific text in the message body (VSAPI)
- **By attachment name** applies to a message with a specific attachment name (VSAPI)
- **By attachment size** applies to a message with an attachment exceeding a defined size (VSAPI)
- **By frequency of occurrence** applies to objects (email body or attachment) for which the number of occurrences within the specified time interval exceeds the specified number (VSAPI + TA). This is particularly useful if you are constantly spammed with emails with the same email body or the same attachment.

When specifying the abovementioned conditions (except the **By attachment size** condition) it is sufficient to fill in only part of a phrase as long as the **Match whole words** option is not selected. Values are not case-sensitive, unless the **Match case** option is selected. If you are using values other than alphanumerical characters, use parentheses and quotes. You can also create conditions using the logical operators AND, OR and NOT.

NOTE: Microsoft Exchange Server 2000 (VSAPI 2.0) only evaluates displayed sender/recipient name and not the email address. Email addresses are evaluated starting with Microsoft Exchange Server 2003 (VSAPI 2.5) and higher.

Examples of entering conditions:

By target mailbox: smith By email sender: smith@mail.com By email recipient: "J.Smith" or "smith@mail.com" By email subject: " By attachment name:".com" OR ".exe" By email body: ("free" OR "lottery") AND ("win" OR "buy")

4.1.1.2 Actions

This section allows you to select actions to take with messages and/or attachments matching conditions defined in rules. You can take no action, mark the message as if it contained a threat/spam or delete the whole message.When a message or its attachment matches the rule conditions, it is not scanned by the antivirus or antispam modules by default, unless scanning is enabled explicitly by selecting the respective check boxes at the bottom (the action taken then depends on the antivirus/antispam settings).

Add new rule
Enter actions that will be taken when applying the rule. A rule for the whole message or files in attachment can be combined with other actions. However, only those supported by the given module will be performed.
No action
🔲 Quarantine file 🕣
Submit file for analysis
🔲 Send even <u>t</u> notification
Log
Evaluate other rules
Scan by antivirus and antispyware protection
Scan by antispam protection
< <u>Back Next></u> Einish Cancel

- No action no action will be taken with the message
- Mark as uncleaned threat the message will be marked as if it contained an uncleaned threat (regardless of whether it contained the threat or not)
- Mark as unsolicited email the message will be marked as if it were spam (regardless of whether it is spam or not)
- **Delete message** removes the entire message with content that meets the conditions
- Quarantine file quarantines the attachments

NOTE: Do not confuse this with mail quarantine (see chapter <u>Message quarantine</u>) 14

- **Submit file for analysis** sends suspicious attachments to ESET's lab for analysis
- Send event notification sends a notification to the administrator (based on settings in Tools > Alerts and notifications)
- Log writes information about the applied rule to the program log

- Evaluate other rules allows the evaluation of other rules, enabling the user to define multiple sets of conditions and multiple actions to take, given the conditions
- Scan by antivirus and antispyware protection scans the message and its attachments for threats
- Scan by antispam protection scans the message for spam

The last step in the new rule creation wizard is to name each created rule. You can also add a **Rule comment**. This information will be stored in the Microsoft Exchange Server log.

4.1.2 Log files

Log files settings let you choose how the log file will be assembled. More detailed protocol can contain more information but it may slow server performance.

ET Mail Security Setup	2 × (e501
Mail server protection Reles Confide Message quarantine Performance Antirus and antispyware Advanced setup Concent frostenin Advanced setup Concent protection Conce	Log degrostic information
Performance VisAPI 2.6 Actions Performance	

If Synchronized writing without using cache is

enabled, all the log entries will be immediately written in the log file without being stored in the log cache. By default, ESET Mail Security components running in Microsoft Exchange Server store log messages in their internal cache and send them to the application log at periodic time intervals to preserve performance. In this case, however, the diagnostic entries in the log might not be in the proper order. We recommend keeping this setting turned off unless it is necessary for diagnostics. You can specify the type of information stored in the log files in the **Content** menu.

4.1.3 Message quarantine

The **Message quarantine** mailbox is a special mailbox defined by the system administrator to store potentially infected messages and SPAM. Messages stored in quarantine can be analyzed or cleaned later using a newer virus signature database.



You can specify the message quarantine address in the **Common message quarantine** field (e.g.

main_quarantine@company.com). You can also use the Microsoft Exchange Server 2007/2010 internal quarantine system by leaving this field blank and choosing **Quarantine message to the mail server system quarantine** (if defined by administrator) from the dropdown menu at the bottom. Mails are then delivered to quarantine by Exchange's internal mechanism using its own settings.

In the **Message quarantine by recipient** field, you can define message quarantine mailboxes for multiple recipients. Every quarantine rule can be enabled or disabled by selecting or deselecting the check box in its row.

NOTE: You can also use system variables when administering the message quarantine (for example: % *PATH%*).

4.1.3.1 Adding a new quarantine rule

Enter the desired Recipient's email address and the desired Quarantine email address in the appropriate fields.

If you want to delete an email message addressed to a recipient who does not have a quarantine rule applied, you can select the **Delete message** option in the

Message intended for non-existing message quarantine pull-down menu.

4.1.4 Performance

In this section, you can define a folder in which to store temporary files to improve program performance. If no folder is specified, ESET Mail Security will create temporary files in the system's temporary folder.

ietup	es
Mail server protection - Rules - Log files - Microsoft Exchange Server - Microsoft Exchange Server - Transport agent Arthrives and antispyware - Real-time fre system protection - Brail dirent protection © Email dirents - Actions - Actions - Alarts and notifications - Alarts and notifications - Alarts and notifications - Microsoft Exchange Server - WAID Calor - Actions - Alarts and notifications - Performance - WIC206F - Actions - Performance	Performance The Performance section lets you configure mail server protection parameters affecting th Temporary folder:

NOTE: In order to reduce the potential I/O and fragmentation impact, we recommend placing the Temporary folder on a different hard drive than the one on which Microsoft Exchange Server is installed. We strongly recommend that you avoid assigning the Temporary folder to removable media such as floppy disk, USB, DVD, etc.

NOTE: You can use system variables (e.g., *%SystemRoot%* *TEMP*) when configuring Performance settings.

4.1.5 Transport Agent

In this section, you can set up automatic startup of the transport agent as well as the agent loading priority. On Microsoft Exchange Server 2007 and later, it is only possible to install a transport agent if the server is in one of two roles: *Edge Transport* or *Hub Transport*.

etup	(8)
Mail server protection - Rules - Log files - Ung files - Ung files - Message quarantine - Performance - Merosoft Exchange Server - Merosoft Exchange Server - Advons - Advons - Mail server protection - Advons - Advons - Advons - Advons - Performance - Merosoft Exchange Server - Advons - Performance - Merosoft PL2.6 - Advons - Performance - Merosoft PL2.	▲ Transport agent The transport agent enables email scanning before messages are saved in the store by Microsoft Exchange Server. ♥ Start transport agent automatically ♥ options

NOTE: Transport agent is not available in Microsoft Exchange Server 5.5 (VSAPI 1.0).

In the **Agent priority setup** menu, you can set the priority of ESET Mail Security agents. The agent priority number range depends on the version of Microsoft Exchange Server (the lower the number, the higher the priority).

Write spam confidence level (SCL) to the header of

scanned messages based on spam score – SCL is a normalized value assigned to a message that indicates the likelihood of the message being spam (based on the characteristics of the message header, its subject, content, etc.). A rating of o indicates that the message is highly unlikely to be spam, while a rating of 9 indicates that the message is very likely spam. SCL values can be processed further by the Microsoft Exchange Server's Intelligent Message Filter (or Content Filter Agent). For additional information please refer to the Microsoft Exchange Server documentation.

The When deleting messages, send SMTP reject response option:

- If unchecked, the server sends an OK SMTP response to the sender's Mail Transfer Agent (MTA) in the format '250 2.5.0 Requested mail action okay, completed' and then performs a silent drop.
- If checked, an SMTP reject response is sent back to the sender's MTA. You can type a response message in the following format:

Primary	Compleme	Description
response	ntary	
code	status code	
250	2.5.0	Requested mail action okay,
		completed
451	4.5.1	Requested action aborted: local
		error in processing
550	5.5.0	Requested action not taken:
		mailbox unavailable

Warning: Incorrect syntax of the SMTP response codes can lead to malfunctioning of program components and decrease effectiveness.

NOTE: You can also use system variables when configuring SMTP Reject Responses.

4.2 Antivirus and antispyware settings

You can enable antivirus and antispyware mail server protection by selecting the **Enable antivirus and antispyware mail server protection** option. Note that antivirus and antispyware protection is turned on automatically after every service/computer restart.



4.2.1 Actions

In this section you can choose to append a scan task ID and/or scan result information to the header of scanned messages.

ET Mail Security		? >
ietup		eser
Mail server protection Houles Log files Horssape quarantime Performance Horcosoft Exchange Server Longent agent Arthrise and antisgyware Advanced setup Counterprotection Enail clients Actions Pool Server protection Actions Pool Server Actions Pool Server Microsoft Exchange Server Oversoft Exchange Server Oversoft Exchange Server Actions Pool Server protection Aerise Microsoft Exchange Server Oversoft Exch	Actions	messages

4.2.2 Alerts and notifications

ESET Mail Security allows you to append text to the original subject or body of infected messages.

ESET Mail Security	<u>? ×</u>
Setup	eser
Mail server protection Lues Log fies Log fies Log fies Log fies Determance Morsost Exchange Server Transport agent Arthirus and antispyware Real-time file system protection Lod ark	Alerts and notifications dakt to the body of scanned messages: Append to all scanned messages digdt to the subject of infected messages [verus %vTRUSNAME%]
	QK Cancel Default

By enabling **Add to the subject of infected messages**, ESET Mail Security will append a notification tag to the email subject with the value defined in the **Template added to the subject of infected messages** text field (by default [virus %VIRUSNAME%]). The above-mentioned modifications can automate infected-email filtering by filtering email with a specific subject (if supported in your email client) to a separate folder.

NOTE: You can also use system variables when adding a template to the message subject.

4.2.3 Performance

In this section, you can set the number of ThreatSense scan engines that should be used for virus scanning. More ThreatSense scan engines on multiprocessor machines can increase the scan rate.



4.2.4 Virus-Scanning Application Programming Interface (VSAPI)

Microsoft Exchange Server provides a mechanism to make sure that every message component is scanned against the current virus signature database. If a message component is not scanned, its corresponding component is submitted to the scanner before the message is released to the client. Every supported version of Microsoft Exchange Server (5.5/2000/2003/2007/2010) offers a different version of VSAPI.

4.2.4.1 Microsoft Exchange Server 5.5 (VSAPI 1.0)

This version of Microsoft Exchange Server includes VSAPI version 1.0.



The **Background scanning** option allows scanning of all messages in the system background. Microsoft Exchange Server decides whether a background scan will run or not, based on various factors, such as the current system load, the number of active users, etc. Microsoft Exchange Server keeps a record of scanned messages and the virus signature database version used. If you are opening a message that has not been scanned by the most current virus signature database, Microsoft Exchange Server sends the message to ESET Mail Security to be scanned before opening the message in your e-mail client. Since background scanning can affect system load (scanning is performed after each virus signature database update), we recommend using scheduled scanning outside working hours. Scheduled background scanning can be configured via a special task in the Scheduler/Planner. When you schedule a Background scanning task you can set the launch time, the number of repetitions and other parameters available in the Scheduler/Planner. After the task has been scheduled, it will appear in the list of scheduled tasks and, as with the other tasks, you can modify its parameters, delete it or temporarily deactivate the task.

4.2.4.1.1 Actions

In this section you can specify the actions to be performed when a message and/or attachment is evaluated as infected.

etup		(eset
Mail server protection Rules Log files Autors and artispyware Read-time file system protection Advanced stup - Document protection Email clients Ladvanced Mail server protection Read-time file system	Actions Actions Action take if cleaning not possible: Delete Deletion Action Action Rescan Messages and files will be rescanned even if already scanned before. Bescan	

The Actions to take if cleaning not possible field allows you to block infected content or delete the message. This action will be applied only if the automatic cleaning (defined in ThreatSense engine parameter setup > Cleaning) did not clean the message.

The **Deletion** option allows you to truncate a file attachment to zero size or replace an infected file with a virus protocol or rule description.

By activating **Rescan**, you can scan messages and files that have already been scanned again.

4.2.4.1.2 Performance

During a scan, Microsoft Exchange Server allows you to limit a time for opening message attachments. This time is set in the **Response time limit (ms)** field and represents the period after which the client will retry accessing the file that had previously been inaccessible due to scanning.



4.2.4.2 Microsoft Exchange Server 2000 (VSAPI 2.0)

This version of Microsoft Exchange Server includes VSAPI version 2.0.



If the **Proactive scanning** option is enabled, new inbound messages will be scanned in the same order in which they were received.

The **Background scanning** option allows scanning of all messages in the system background. Microsoft Exchange Server decides whether a background scan will run or not, based on various factors, such as the current system load, the number of active users, etc. Microsoft Exchange Server keeps a record of scanned messages and the virus signature database version used. If you are opening a message that has not been scanned by the most current virus signature database, Microsoft Exchange Server sends the message to ESET Mail Security to be scanned before opening the message in your e-mail client. Since background scanning can affect system load (scanning is performed after each virus signature database update), we recommend using scheduled scanning outside working hours. Scheduled background scanning can be configured via a special task in the Scheduler/Planner. When you schedule a Background scanning task you can set the launch time, the number of repetitions and other parameters available in the Scheduler/Planner. After the task has been scheduled, it will appear in the list of scheduled tasks and as with the other tasks, you can modify its parameters, delete it or temporarily deactivate the task.

If you want to scan plain text messages, select the **Scan plain text message bodies** option.

Enabling the **Scan RTF email bodies** option activates scanning of RTF message bodies.

4.2.4.2.1 Actions

In this section you can specify the actions to be performed when a message and/or attachment is evaluated as infected.

r mail securicy		3
tup		es
Mail server protection →Rules →Log files →Log files →Missage quarantine →Performance →Introsoft Exchange Server →Transport agent →Arbitics and artispywere →Red-traine Broychem protection → Beal-time Resystem protection → Enail dent protection → Enail dents → Actions → Address → Address	Actions Actions to take if clearing not possible: Delete Delete Delete Message body Message deletion method: Delete message to zero length Tuncate message to zero length Rescan Messages and files will be rescanned even if already scanned before. Bescan	

The Actions to take if cleaning not possible field allows you to block infected content or delete the message. This action will be applied only if the automatic cleaning (defined in ThreatSense engine parameter setup > Cleaning) did not clean the message.

The **Message body deletion method** option offers the choice to either delete the message body or rewrite the message body with action information.

Attachment deletion method lets you decide to delete the message, truncate file attachment to zero size or replace the infected file with action information.

By activating **Rescan**, you can scan messages and files that have already been scanned again.

4.2.4.2.2 Performance

In this section you can set the number of independent scan threads used at a single time. More threads on multiprocessor machines can increase the scan rate. For the best program performance we advise using an equal number of ThreatSense scan engines and scan threads.

The **Response time limit (sec.)** allows you to set the maximum amount of time a thread waits for a message scan to complete. If the scan is not finished within this time limit, Microsoft Exchange Server will deny the client access to the email. Scanning will not be interrupted and, after it is finished, every other attempt to access the file will be successful.



TIP: To determine the **Number of scan threads** the Microsoft Exchange Server provider recommends, use the following formula: [number of physical processors] x 2 + 1.

NOTE: Performance is not improved significantly if there are more ThreatSense scanning engines than scanning threads.

4.2.4.3 Microsoft Exchange Server 2003 (VSAPI 2.5)

This version of Microsoft Exchange Server includes VSAPI version 2.5.



If the **Proactive scanning** option is checked, new inbound messages will be scanned in the same order in which they were received.

The **Background scanning** option allows scanning of all messages in the system background. Microsoft Exchange Server decides whether a background scan will run or not, based on various factors, such as the current system load, the number of active users, etc. Microsoft Exchange Server keeps a record of scanned messages and the virus signature database version used. If you are opening a message that has not been scanned by the most current virus signature database, Microsoft Exchange Server sends the message to ESET Mail Security to be scanned before opening the message in your e-mail client. Since background scanning can affect system load (scanning is performed after each virus signature database update), we recommend using scheduled scanning outside working hours. Scheduled background scanning can be configured via a special task in the

Scheduler/Planner. When you schedule a Background scanning task you can set the launch time, the number of repetitions and other parameters available in the Scheduler/Planner. After the task has been scheduled, it will appear in the list of scheduled tasks and as with the other tasks, you can modify its parameters, delete it or temporarily deactivate the task.

If you want to scan plain text messages, select the **Scan plain text email bodies** option.

Enabling the **Scan RTF email bodies option** activates scanning of RTF message bodies. RTF message bodies may contain macro viruses.

The **Scan transported messages** option enables scanning for messages that are not stored on the local Microsoft Exchange Server and are delivered to other email servers through the local Microsoft Exchange Server. If scanning for transported messages is enabled, ESET Mail Security also scans these messages. This option is only available when the transport agent is disabled.

NOTE: Plain text email bodies are not scanned by VSAPI.

4.2.4.3.1 Actions

In this section you can specify the actions to be performed if a message and/or attachment is evaluated as infected.

•		
→ Rules → Rules → Rules → Rules → Rules → Copfiles → Message quarantime → Performance → Marcosoft Exchange Server → Transport agent → Advince and antisprevare → Real-time file system protection → Enal client protection → Enal client protection → Enal client protection → Actiones ⇒ PACID → Actiones → Actiones → Actiones → Actiones → Performance → Microsoft Exchange Server → Actiones → Performance → Performance → Performance	Action Action Action Action Action Delete Deletee Delete Deletee Deletee Deletee Deletee D	

The Actions to take if cleaning not possible field allows you to block infected content or delete the message. This action will be applied only if the automatic cleaning (in **ThreatSense engine parameter setup > Cleaning**) did not clean the message.

The **Message body deletion method** option offers the choice to either delete the message body or rewrite the message body with action information.

Attachment deletion method lets you decide to delete the message, truncate file attachment to zero size or replace the infected file with action information.

By activating **Rescan**, you can scan the messages and files that have already been scanned again.

4.2.4.3.2 Performance

In this section you can set the number of independent scan threads used at a single time. More threads on multiprocessor machines can increase the scan rate. For the best program performance we advise using an equal number of ThreatSense scan engines and scan threads.

The **Response time limit (sec.)** allows you to set the maximum amount of time a thread waits for a message scan to complete. If the scan is not finished within this time limit, Microsoft Exchange Server will deny the client access to the email. Scanning will not be interrupted and after it is finished, every other attempt to access the file will be successful.



TIP: To determine the **Number of scan threads** the Microsoft Exchange Server provider recommends, use the following formula: [number of physical processors] x + 1.

NOTE: Performance is not improved significantly if there are more ThreatSense scanning engines than scanning threads.

4.2.4.4 Microsoft Exchange Server 2007/2010 (VSAPI 2.6)

This version of Microsoft Exchange Server includes VSAPI version 2.6.



If the **Proactive scanning** option is enabled, new inbound messages will be scanned in the same order in which they were received.

The Background scanning option allows scanning of all

messages in the system background. Microsoft Exchange Server decides whether a background scan will run or not, based on various factors, such as the current system load, the number of active users, etc. Microsoft Exchange Server keeps a record of scanned messages and the virus signature database version used. If you are opening a message that has not been scanned by the most current virus signature database, Microsoft Exchange Server sends the message to ESET Mail Security to be scanned before opening the message in your e-mail client. You can choose to **Scan only messages with attachment** and filter based on time received.

Since background scanning can affect system load (scanning is performed after each virus signature database update), we recommend using scheduled scanning outside working hours. Scheduled background scanning can be configured via a special task in the Scheduler/Planner. When you schedule a Background scanning task you can set the launch time, the number of repetitions and other parameters available in the Scheduler/Planner. After the task has been scheduled, it will appear in the list of scheduled tasks and as with the other tasks, you can modify its parameters, delete it or temporarily deactivate the task.

Enabling the **Scan RTF email bodies** option activates scanning of RTF message bodies. RTF message bodies may contain macro viruses.

NOTE: Plain text email bodies are not scanned by VSAPI.

4.2.4.4.1 Actions

In this section you can specify the actions to take if a message and/or attachment is evaluated as infected.

Mail server protection Rules Log fies Hessage quarantine Hessage quarantine Herormance Microsoft Exchange Server Antivirus and antispyware	Actions Action to take if cleaning not possible: No action Deletion Desistion Deletion Deleti
Real-time file system protection	Attachment deletion method: Truncate message to zero length Use VSAPI Qurantine Rescan Messages and files will be rescanned even if already scanned before. Bescan
Microsoft Exchange Server VSAP12.6 Server Performance	QKSancel Defax

The Actions to take if cleaning not possible field allows you to block infected content or delete the message. This action will be applied only if the automatic cleaning (defined in ThreatSense engine parameter setup > Cleaning) did not clean the message.

The **Message body deletion method** option offers the choice to either delete the message body or rewrite the message body with action information.

Attachment deletion method lets you decide to delete the message, truncate file attachment to zero size or replace the infected file with action information.

If the Use VSAPI Quarantine option is enabled, infected

messages will be stored in the email server quarantine. Please note that this is the server's managed quarantine (not the client's quarantine or the quarantine mailbox). Infected messages stored in mail server quarantine are inaccessible until they are cleaned with the latest virus signature database.

By activating **Rescan**, you can scan messages and files that have already been scanned again.

4.2.4.4.2 Performance

In this section you can set the number of independent scan threads used at a single time. More threads on multiprocessor machines can increase the scan rate. For the best program performance we advise using an equal number of ThreatSense scan engines and scan threads.



TIp: To determine the **Number of scan threads** the Microsoft Exchange Server provider recommends, use the following formula:

[number of physical processors] x 2 + 1.

NOTE: Performance is not improved significantly if there are more ThreatSense scanning engines than scanning threads.

4.2.5 Transport Agent

In this section you can enable or disable antivirus and antispyware protection by the transport agent. For Microsoft Exchange Server 2007 and higher it is only possible to install a transport agent if the server is in one of two roles: *Edge Transport* or *Hub Transport*.



it to the quarantine mailbox or retain it.

If a threat is found, you can choose to write a spam score to the scanned message and specify the value (in %). Since botnets are responsible for sending the majority of infected messages, the messages distributed this way are to be categorized as spam. Write spam confidence level (SCL) to scanned messages based on spam score option (in Mail server protection > Microsoft Exchange Server > Transport agent) must be enabled in order for this feature to work effectively.

You can also choose to scan messages received from authenticated sources or local servers.

4.3 Antispam settings

In the Mail server protection section you can enable spam protection for the installed mail server, configure antispam engine parameters and set other levels of protection.

	(85
etup	
Performance Transport agent Web access protection Web interse protection Protocol filtering Protocol filtering Artispan protection Protocol filtering Artispan protection Address books Mail Server protection Ments and notifications More protection Mo	▲ Mail server protection The Mail server protection section lets you enable or disable antispam protection of the installed mail server, configue antispam engine parameters as well as other protection parameters. ✓ Enable mail server antisgam protection Antispam core parameter setup:

4.3.1 Antispam engine parameter setup

You can select a profile from a set of preconfigured profiles (such the Recommended, Most accurate or Fastest profiles). The list of profiles is loaded from the Antispam module.

The **Recommended** profile is comprised of the recommended settings, striking a balance between security and impact on system performance.

The **Most accurate** profile is focused solely on mail server security. This profile requires more system resources than the Recommended profile.

The **Fastest** profile is preconfigured for a minimal usage of system resources, achieved through the disabling of some scanning features.

Custom > Open configuration file allows a user to edit the spamcatcher.conf file. This option is recommended for advanced users only.

Antispam engine setup
Configuration:
Recommended
Open configuration file
The antispam engine also contains a list of allowed, ignored and blocked IP addresses.
Allowed IP addresses Ignored IP addresses Blocked IP addresses
Allowed IP addresses
Address A Add
Edit
<u>K</u> emove
The antispam engine also contains a list of allowed, ignored and blocked domain addresses that are found in the message body. Allowed domains Ignored domains Blocked domains
Allowed domains
Address A Add

Address A Add...
Edity,,,
Remove
QK Cancel

In the **Allowed IP addresses** tab you can specify IPs that should be approved, i.e., if the first non-ignored IP in Received headers matches any address in this list, the message scores o and no other checks are made.

In the **Ignored IP addresses** tab you can specify IPs that should be ignored during Real-time Blackhole List (RBL) checks. You should include all internal IP addresses within the firewall not directly accessible from the Internet. Doing so prevents unnecessary checks and helps identify actual connecting IP addresses. Internal IP addresses are already skipped by the engine (192.168.x.y and 10.x).

In the **Blocked IP addresses** tab you can specify IPs that should be blocked, i.e., if any non-ignored IP in Received headers matches the address in this list, the message scores 100 and no other checks are made.

In the **Allowed domains** tab you can specify domains used in the message body that should be approved.

In the **Ignored domains** tab you can specify domains used in the message body that should always be excluded from the DNSBL and MSBL checks and ignored.

In the **Blocked domains** tab you can specify domains used in the message body that should always be blocked.

NOTE: Unlike IP addresses, wildcards cannot be used for domains.

4.3.2 Alerts and notifications

Each email scanned by ESET Mail Security and marked as spam can be flagged by appending a notification tag to the email subject. By default, the tag is [SPAM], although it can be a user-defined string.

ET Mail Security		<u>?)</u>
etup	Alerts and notifications If Add note to the gubject of spam email Immplate added to the subject of spam email: [[SPAM]]	
Email client protection Address books Mail server protection Address hooks Microsoft Exchange Server Transport agent Update Tools		
Log files Quarantine Scheduler Alerts and notifications ThreatSense.Net	x	
	<u></u>	K <u>C</u> ancel <u>D</u> efault

NOTE: You can also use system variables when adding a template to the message subject.

4.3.3 Transport Agent

In this section you can set up options for spam protection using the transport agent.

ESET Mail Security		? ×
Setup		eset
Moroardt Exchange Server VSAPI 2.6 Actors Performace Transport agent Web access protection BHTTP, HTTPS On-demail Computer son Exclusions BP rotocol Rilering Antispan protection Email (and re protection Matrix and notifications Moroard Exchange Server Urgesport Board Custantine Schuduer Custantine Schuduer Aetrs and notifications	Transport agent ✓ Inable gritispan protection by transport agent Options Acjoin to take on span messages: Quarantine message ✓ Write span score to the header of scanned messages ✓ Brable greylisting SMTP reported for temporarily denied connections: Ime limit for the initial connection denial (min.): Jime limit for the initial connection denial (min.): Quarified connections expiration time (days):	0 44 44 44 44
	QK <u>Cancel</u>	Default

NOTE: The transport agent is not available in Microsoft Exchange Server 5.5.

You can take any of the following actions with spam messages:

- Retain the message even if it is marked as spam
- Send the message to the quarantine mailbox
- Delete the message

If you want to include information about a message's spam score in its header, enable the **Write spam score to scanned messages** option.

The **Enable Greylisting** function activates a feature that protects users from spam using the following technique: The transport agent will send a "temporarily reject" SMTP return value (default is 451/4.7.1) for any received email that is not from a recognized sender. A legitimate server will try to resend the message after a delay. Spam servers

will typically not attempt to resend the message, as they usually go through thousands of email addresses and do not waste time resending. Greylisting is an additional layer of antispam protection and does not have any effect on the spam evaluation capabilities of the antispam module.

When evaluating the message source the method takes into account the configurations of the **Approved IP addresses** list, the **Ignored IP addresses** list, the **Safe Senders** and the **Allow IP** lists on the Exchange server and the AntispamBypass settings for the recipient mailbox. Emails from these IP addresses/senders lists or emails delivered to a mailbox that has the

AntispamBypass option enabled will be bypassed by the greylisting detection method.

The **SMTP response for temporarily denied connections** field defines the SMTP temporary denial response sent to the SMTP server if a message is refused.

Example of SMTP response message:

Primary response code	Complementary status code	Description
451	4.7.1	Requested action aborted: local error in processing

Warning: Incorrect syntax in SMTP response codes may lead to malfunctioning of greylisting protection. As a result, spam messages may be delivered to clients or messages may not be delivered at all.

Time limit for the initial connection denial (min.) - when a message is delivered for the first time and temporarily refused, this parameter defines the time period during which the message will always be refused (measured from the first refusal). After the defined time period has elapsed, the message will be successfully received. The minimum value you can enter is 1 minute.

Unverified connections expiration time (hours) – this parameter defines the minimum time interval for which the triplet data will be stored. A valid server must resend a desired message before this period expires. This value must be greater than the value of **Time limit for the initial connection denial**.

Verified connections expiration time (days) – the minimum number of days for which the triplet information is stored, during which emails from a particular sender will be received without any delay. This value must be greater than the value of **Unverified** connections expiration time.

NOTE: You can also use system variables when defining the SMTP reject response.

4.4 FAQ

Q: After installing EMSX with Antispam, emails stopped being delivered into mailboxes.

A: If Greylisting is enabled, this is normal behavior. In the first hours of full operation emails may arrive with several hours of delay. If the issue continues for a longer period, we recommend you turn off (or reconfigure) Greylisting.

Q: When the VSAPI scans email attachments, does it also scan email message bodies?

A: In Microsoft Exchange Server 2000 SP2 and later, the VSAPI scans email message bodies as well.

Q: Why does message scanning continue after the VSAPI option has been disabled?

A: Changes to VSAPI settings run asynchronously, meaning the modified VSAPI settings have to be called by the Microsoft Exchange Server to go into effect. This cyclic process runs in intervals of approximately one minute. The same applies to all other VSAPI settings.

Q: Can VSAPI remove an entire message containing an infected attachment?

A: Yes, VSAPI can remove the entire message. However, it is necessary to select the **Delete whole message** option in the **Actions** section of the VSAPI settings first. This option is available in Microsoft Exchange Server 2003 and later. Older versions of Microsoft Exchange Server do not support removal of entire messages.

Q: Is outgoing email also scanned by VSAPI for viruses? **A:** Yes, VSAPI scans outgoing emails unless you have configured an SMTP server in your mail client that is different from your Microsoft Exchange Server. This feature is applied in Microsoft Exchange Server 2000 Service Pack 3 and later.

Q: Is it possible to add a notification tag text via VSAPI to each scanned message, in the same manner as the Transport agent?

A: Adding text to messages scanned by VSAPI is not supported in Microsoft Exchange Server.

Q: Sometimes I cannot open a particular email in Microsoft Outlook. Why is that?

A: The Action to take if cleaning not possible option in your VSAPI settings in the Actions section is most likely set to **Block** or you have created a rule that includes the **Block** action. Either of these settings will mark and block both infected messages and/or messages that fall under the aforementioned rule.

Q: What does the **Response time limit** item in the **Performance** section stand for?

A: If you have Microsoft Exchange Server 2000 SP2 or later, the value **Response time limit** represents the maximum time in seconds required to finish the VSAPI scanning of one thread. If the scan is not finished within this time limit, Microsoft Exchange Server will deny the client access to the email. Scanning will not be interrupted and after it is finished, every other attempt to access the file will be successful. If you have Microsoft Exchange Server 5.5 SP3 or SP4, the value will be expressed in milliseconds and represents the period after which the client will retry to access the file that had been previously inaccessible due to scanning..

Q: How long can the list of file types be in one rule? **A:** The file extensions list can contain a maximum of 255 characters in a single rule.

Q: I have enabled the **Background scanning** option in VSAPI. Until now, messages on Microsoft Exchange Server were always scanned after each virus signature database update. This did not happen after the last update. Where is the problem?

A: The decision to scan all messages immediately or at the user's attempt to access a message depends on several factors, including server load, CPU time required to scan all messages in bulk and the total number of messages. The Microsoft Exchange Server will scan every message before it reaches the client's inbox.

Q: Why did the rule counter increase by more than one after receiving a single message?

A:The rules are checked against a message when it is processed by transport agent (TA) or VSAPI. When both TA and VSAPI are enabled and the message matches the rule conditions, the rule counter may increase by 2 or more. VSAPI accesses the parts of the message individually (body, attachment) meaning the rules are consequently applied to each part individually. Furthermore, rules can be applied during a background scan (e.g. repeated mailbox-store scan after a virus signature database update), which can increase the rule counter.

Q: Is ESET Mail Security 4 for Microsoft Exchange Server compatible with Intelligent Message Filter? A: Yes, ESET Mail Security 4 for Microsoft Exchange Server (EMSX) is compatible with Intelligent Message Filter (IMF). The processing of emails in this case is as follows:

- If ESET Mail Security Antispam has the **Delete message** (or **Quarantine message**) option enabled the action will be executed regardless of the action set in Microsoft Exchange IMF.

- If ESET Mail Security Antispam has the **Retain message** action set, the settings Microsoft Exchange IMF will be used and the relevant action executed (e. g. Delete, Reject, Archive...).

Q: How do I setup ESET Mail Security to move unsolicited emails into the user-defined Microsoft Outlook spam folder?

A: ESET Mail Security default settings cause Microsoft Outlook to store unwanted email in the Junk E-mail folder. To enable this functionality select the Write spam score to the header of scanned email option (under F5 > Antispam protection > Mail server protection > Microsoft Exchange Server > Transport agent). If you want the unwanted email to be stored in a different folder, please read the following instructions:

1) In ESET Mail Security:

- disable the Write spam score to the header of scanned email option, ,

- enable the **Retain message** action for messages marked as spam,

- define a text tag that will be added into unwanted messages, e.g. "[SPAM]" (under Antispam protection > Mail server protection > Alerts and notifications).

2) In Microsoft Outlook:

- setup a rule to ensure messages with a specific text in the subject ("[SPAM]") will be moved into the defined folder.

Q: In the antispam protection statistics many messages fall into the **Not scanned** category. What email is not scanned by the antispam protection?

A: The Not scanned category comprises of:

- All messages that were scanned while the antispam protection has been disabled.
- All messages sent within the organization (all will be scanned by antivirus protection)
- All messages sent into the mailbox, that has the **AntispamBypass** option enabled.
- All messages from senders on the **Safe Senders** list.
- All messages from servers on the Whitelist list (e. g. MS Exchange IPAllow list or the Allowed IP addresses).

Q: Users download messages to their email clients via POP3 (bypassing Microsoft Exchange server), but the mailboxes are stored on Microsoft Exchange Server. Will these emails be subject to antivirus and antispam scanning by ESET Mail Security?

A: In this type of configuration ESET Mail Security will scan the emails stored on the Microsoft Exchange Server only for the presence of viruses (via VSAPI). Antispam scanning will not be realized as this requires an SMTP server.