ESET MAIL SECURITY
FOR IBM DOMINO

Installation Manual and User Guide
Microsoft® Windows® Server 2008 SP2 / 2008 R2 SP1 / 2012 / 2012 R2 / 2016

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1. Preface

This guide is intended to help you make the best use of ESET Mail Security. To learn more about any window in the program, press F1 on your keyboard with the given window open. The help page related to the window you are currently viewing will be displayed.

For consistency and to help prevent confusion, terminology used throughout this guide is based on the ESET Mail Security parameter names. We also used a uniform set of symbols to highlight topics of particular interest or significance.

**NOTE**
A note is just a short observation. Although you can omit it, notes can provide valuable information, such as specific features or a link to some related topic.

**IMPORTANT**
This requires your attention and is not recommended to skip over it. Important notes include significant but non-critical information.

**WARNING**
Critical information you should treat with increased caution. Warnings are placed specifically to deter you from committing potentially harmful mistakes. Please read and understand text placed in warning brackets, as it references highly sensitive system settings or something risky.

**EXAMPLE**
This is a use case or a practical example that aims to help you understand how a certain function or feature can be used.

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<th>Convention</th>
<th>Meaning</th>
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<td><strong>Bold type</strong></td>
<td>Section headings, feature names or user interface items, such as buttons.</td>
</tr>
<tr>
<td><strong>Italic type</strong></td>
<td>Placeholders for the information that you provide. For example, file name or path means you type the actual path or a name of file.</td>
</tr>
<tr>
<td><strong>Courier New</strong></td>
<td>Code samples or commands.</td>
</tr>
<tr>
<td><strong>Hyperlink</strong></td>
<td>Provides quick and easy access to cross-referenced topics or external web locations. Hyperlinks are highlighted in blue and may be underlined.</td>
</tr>
<tr>
<td>%ProgramFiles%</td>
<td>The Windows system directory which stores installed programs of Windows and others.</td>
</tr>
</tbody>
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ESET Mail Security online help pages are divided into several chapters and sub-chapters. You can find relevant information by browsing the contents of the help pages. Alternatively, you can use full-text search by typing words or phrases.
1.1 Overview

ESET Mail Security 7 for IBM Domino (formerly IBM Lotus Domino) is an integrated solution that protects the databases and user mailboxes in the IBM Domino environment from various types of malicious content including email attachments infected by worms or trojans, documents containing harmful scripts, phishing schemes and spam. ESET Mail Security provides three types of protection: Antivirus, Antispam and user-defined rules. ESET Mail Security filters the malicious content at the mail server level, before it arrives in the recipient's email client inbox.

ESET Mail Security supports IBM Domino version 6.5.4 and newer as well as IBM Domino in a cluster environment. You can remotely manage ESET Mail Security in larger networks with the help of ESET Security Management Center.

While providing IBM Domino protection, ESET Mail Security also includes tools to ensure the protection of the server itself (resident protection, web-access protection and email client protection).

**IBM Domino Server + ESET Mail Security protection**

This is a basic diagram of how ESET Mail Security for IBM Domino works.

- Mail transport protection
  - Action taken on messages received through the SMTP protocol. The messages are scanned using the Greylisting technique, the antivirus and antispam module and user-defined rules.

- Database protection
  - All actions regarding the database (read/write). When the files are written into the database or retrieved from the database (read), they are scanned again by the antivirus module and user-defined rules.
### 1.2 Key Features

The following table provides a list of features that are available in the ESET Mail Security.

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<th>Description</th>
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<td><strong>True 64-bit product core</strong></td>
<td>Adding higher performance and stability to the product core components.</td>
</tr>
<tr>
<td>Antispam</td>
<td>This essential component went through a major redesign and is now using brand new award winning engine with improved performance. Validation of messages using SPF and DKIM and Mail server SMTP protection.</td>
</tr>
<tr>
<td><strong>Anti-Phishing protection</strong></td>
<td>A feature which prevents users from accessing web pages known for phishing. Email messages may contain links which lead to phishing web pages and ESET Mail Security uses sophisticated parser that searches message body and subject of incoming email messages to identify such links (URL's). The links are compared against phishing database.</td>
</tr>
<tr>
<td>Rules</td>
<td>The rules menu item allows administrators to manually define email filtering conditions and actions to take with filtered emails. Rules in the latest version of ESET Mail Security were redesigned to allow for greater flexibility giving the user even more possibilities.</td>
</tr>
<tr>
<td><strong>Mail quarantine manager</strong></td>
<td>Administrator can inspect objects in this storage section and decide to delete or release them. This feature offers simple management of emails quarantined by the transport agent.</td>
</tr>
<tr>
<td><strong>On-demand database scan</strong></td>
<td>On-demand database scanner is now using parallel scanning to improve the performance.</td>
</tr>
<tr>
<td>Mail Quarantine Web interface</td>
<td>A web-based alternative to Mail quarantine manager. You can also define quarantine administrators or delegate access. Additionally, users can view and manage their own spam after logging to the Mail Quarantine Web interface, having access to their quarantined spam messages only.</td>
</tr>
<tr>
<td>ESET Cluster</td>
<td>Similar to ESET File Security 6 for Microsoft Windows Server, joining workstations to nodes will offer additional automation of management due to the ability to distribute one configuration policy across all cluster members. The creation of clusters themselves is possible using the node installed, which can then install and initiates all nodes remotely. ESET server products are able to communicate with each other and exchange data such as configuration and notifications, and can Synchronize greylisting databases as well as synchronize data necessary for proper operation of a group of product instances. This allows for the same configuration of the product for all members of a cluster. Windows Failover Clusters and Network Load Balancing (NLB) Clusters are supported by ESET Mail Security. Additionally, you can add ESET Cluster members manually without the need for a specific Windows Cluster. ESET Clusters work in both domain and workgroup environments.</td>
</tr>
<tr>
<td><strong>Component-based installation</strong></td>
<td>Choose which components you want to add or remove.</td>
</tr>
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<td>Storage scan</td>
<td>Scans all shared files on a local server. This makes it easy to selectively scan only user data that is stored on the file server.</td>
</tr>
<tr>
<td>Processes exclusions</td>
<td>Excludes specific processes from Antivirus on-access scanning. Due to the critical role of dedicated servers (application server, storage server, etc.) regular backups are</td>
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### 1.3 What's new

New features and enhancements in ESET Mail Security compared to the previous generation (version 6.x):

- True 64-bit product core
- Anti-phishing mail protection
- **ESET Enterprise Inspector** support
- ESET RMM

### 1.4 Methods used

Communication between the IBM Domino server and ESET Mail Security is secured by an add-in (LMON.dll) that is loaded on the server startup as a part of the IBM Domino Extension manager. If this plug-in is loaded it is a part of every important process running on the server.

**NOTE**
The server configuration is stored in the notes.ini file on the server. This file contain information about add-ins in the EXTMGR_ADDINS line. The ESET Mail Security LMON.dll add-in is loaded into **protected Domino server tasks**. It is loaded when each Domino server task is started. This way, the add-in is notified about every important event, for example: a new connection, a new message in a mailbox, when a file in a database is accessed, etc. During the ESET Mail Security installation, LMON.dll, LMON_SCANNER.exe and LmonLang.dll files are copied into the Domino directory (the file LmonLang.dll is only present in localized versions of the product).

The following three methods are used to scan emails:

- Mail transport protection
- Database protection
- On-demand database scan
1.4.1 Mail transport protection
SMTP server-level filtering is secured by a specialized plugin which provides protection in the form of antivirus, antispam and user-defined rules.

**NOTE**
Mail transport protection is applied to Inbound messages. Whereas Outbound messages are scanned on the Database level.

When a message arrives through the SMTP, the following actions are taken in the scanning sequence:

1. The message is scanned using the Greylisting technique (if enabled). For more information, see the chapter antispam protection.
2. The message is then scanned by the user-defined rules. See the chapter rules for more information on how they work.
3. The message is scanned by the antispam module.
4. The message is scanned by the antivirus module.

If the message is infected or recognized as a spam, the appropriate action is taken. If the message is clean, it will be delivered to the recipient.

**NOTE**
In case an infected attachment is found, one of the following will happen:

- Attachment will be cleaned.
- Attachment will be removed.
- Note will be moved to ESET Quarantine.
- Note will be deleted.

Action that will be taken depends on Mail transport protection setting: Actions to take if cleaning not possible.

1.4.2 Database protection
ESET Mail Security protects the shared server databases when writing/reading notes on the IBM Domino server. When a note is opened or saved by the user, it is scanned again, by the antivirus module and for User-defined rules. First, the user-defined rules are applied, and then the antivirus module.

**NOTE**
Database protection is applied to all internal message as well as to Outbound messages.
1.4.3 On-demand database scan

You can select the databases you want to scan in this section. Click on your server in the Scan targets list to display every database on this server. Select the check box next to a database to include this database in the scan. Since running a full database scan in large environments could result in undesired system load, you can choose which databases and which mailboxes therein will be scanned.

Select time restriction from the drop-down menu to scan only Notes that were modified during specified time period:

- Scan all Notes (default value, scans all Notes without the time restriction)
- Scan Notes modified within last year
- Scan Notes modified within last 3 month
- Scan Notes modified within last month
- Scan Notes modified within last week
- Scan Notes modified within last 24hrs.

Scan excluded databases

Includes excluded databases in the scan. Excluded databases can be configured and reviewed here.

Save

Save the specific configuration and click OK to close this window and run the scan immediately.

NOTE

The On-demand scan is performed by the LMON_SCANNER task that was copied into the IBM Domino folder during the installation. The On-demand scan can also be operated from the Domino console. Enter tell LMON_SCANNER help for all supported commands.
1.5 Core modules

The core functionality of ESET Mail Security include the following protection types:

- **Antivirus**

  Antivirus protection is one of the basic functions of ESET Mail Security. Antivirus protection 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 blocking it and then cleaning it, deleting it, or moving it to Quarantine.

- **Antispam**

  Antispam protection incorporates multiple technologies (RBL, DNSBL, Fingerprinting, Reputation checking, Content analysis, Rules, Manual whitelisting/blacklisting, etc.) to maximize detection of email threats.

  ESET Mail Security Antispam is cloud based and most of the cloud databases are located in ESET data centers. Antispam cloud services allow for prompt data updates which provides quicker reaction time in case of an emergence of new spam. It also allows incorrect or false data to be removed from ESET blacklists. Communication with Antispam cloud services is done over a proprietary protocol on port 53535, whenever possible. If it is not possible to communicate through ESET's protocol, DNS services are used instead (port 53). However, using DNS is not as effective because it requires multiple requests to be sent during spam classification process of a single email message.

  **NOTE**

  We recommend you to open TCP/UDP port 53535 for the IP addresses listed in this [KB article](#). This port is used by ESET Mail Security to send requests.

  Normally, no email messages or their parts are sent during spam classification process. However, if ESET LiveGrid® is enabled and you have explicitly allowed samples to be submitted for analysis, only message marked as spam (or most likely spam) may be sent in order to help thorough analysis and cloud database enhancement.

  If you want to report spam false positive or negative classification, see our [KB article](#) for details.

  In addition, ESET Mail Security can also use **Greylisting** method (disabled by default) of spam filtering.

- **Rules**

  The availability of rules for Mailbox database protection, On-demand database scan and Mail transport protection on your system depend on which Microsoft Exchange Server version is installed on the server with ESET Mail Security.

  Rules enables you to manually define email filtering conditions and actions to take with filtered emails. There are different sets of conditions and actions. You can 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 met. 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. Preparing for installation

There are a few steps we recommend you to take in preparation of the product installation:

- After purchasing ESET Mail Security, download .msi installation package from ESET's website.
- Make sure that the server on which you plan to install ESET Mail Security meets system requirements.
- Log on to the server using an Administrator account.

**NOTE**
Please note that you must to execute the installer using the Built-in Administrator account or a domain Administrator account (in the event that local Administrator account is disabled). Any other user, despite being a member of Administrators group, will not have sufficient access rights. Therefore you need to use the Built-in Administrator account, as you will not be able to successfully complete installation under any other user account than local or domain Administrator.

- If you are going to do an upgrade from an existing installation of ESET Mail Security, we recommend you to backup its current configuration using the Export settings feature.
- Remove /uninstall any third-party antivirus software from your system, if applicable. We recommend that you use the ESET AV Remover. For a list of third-party antivirus software that can be removed using ESET AV Remover, see this KB article.
- If you are installing ESET Mail Security on Windows Server 2016, Microsoft recommends to uninstall Windows Defender Features and withdraw from Windows Defender ATP enrollment to prevent problems caused by having multiple antivirus products installed on a machine.
- You can check the number of mailboxes by running the Mailbox Count tool, see Mailbox count for information how to use the tool. Once your ESET Mail Security is installed, it will display current mailbox count at the bottom of the Monitoring window.

You can run ESET Mail Security installer in two installation modes:

- **Graphical user interface (GUI)**
  This is the recommended installation type in a form of an installation wizard.

- **Silent / Unattended installation**
  In addition to the installation wizard, you can choose to install ESET Mail Security silently via command line.

**IMPORTANT**
We highly recommend installing ESET Mail Security on a freshly installed and configured OS, if possible. If you do need to install it on an existing system, we recommend that you uninstall the version of ESET Mail Security, restart the server and install the new ESET Mail Security afterwards.

- **Upgrading to a newer version**
  If you are using an older version of ESET Mail Security, you can choose suitable upgrade method.

After you've successfully installed or upgraded your ESET Mail Security, further activities are:

- **Product activation**
  Availability of a particular activation scenario in the activation window may vary depending on the country, as well as the means of distribution.
• **Configuring server protection**
  You can fine-tune your ESET Mail Security by modifying advanced settings of each of its features to suite on your needs.

### 2.1 System requirements

Hardware requirements depend on the operating system version and the version of IBM Domino being used. We recommend reading IBM Domino product documentation for more detailed information on hardware requirements.

**Supported Operating Systems:**

- Microsoft Windows Server 2016
- Microsoft Windows Server 2012 R2
- Microsoft Windows Server 2012
- Microsoft Windows Server 2008 R2 SP1
- Microsoft Windows Server 2008 SP2 (x86 and x64)

- Supported IBM Domino version 6.5.4 and newer.

Hardware requirements depend on the operating system version in use. We recommend reading the Microsoft Windows Server and IBM Domino product documentation for detailed information on hardware requirements.

**NOTE**

We strongly recommend that you install the latest Service Pack for your Microsoft Server operating system and server application before installing ESET security product. We also recommend that you install the latest Windows updates and hotfixes whenever available.

### 2.2 ESET Mail Security installation steps

This is a typical GUI installation wizard. Double-click the `.msi` package and follow the steps to install ESET Mail Security:

1. Click **Next** to continue or click **Cancel** if you want to quit the installation.

2. The installation wizard runs in a language that is specified as **Home location** of a **Region > Location** setting of your operating system (or **Current location** of a **Region and Language > Location** setting in older systems). Use the drop-down menu to select **Product language** in which your ESET Mail Security will be installed. Selected language for ESET Mail Security is independent of the language you see in the installation wizard.
3. Click Next, the End-User License Agreement will be displayed. After you acknowledge your acceptance of the End-User License Agreement (EULA) and Privacy policy, click Next.

4. Choose one of available installation types (availability depend on your operating system):

**Complete**
Installs all ESET Mail Security features. Also called a full installation. This is the recommended installation type, available for Windows Server 2012, 2012 R2 and 2016.
Typical

NOTE
On Windows Server 2008 SP2 and Windows Server 2008 R2 SP1, installation of Network protection component is disabled by default (Typical installation). If you want to have this component installed, choose Custom installation type.
Lets you choose which features of ESET Mail Security will be installed on your system. A list of product modules and features will be displayed before the installation starts. It is useful when you want to customize ESET Mail Security with only the components you need.

5. You will be prompted to select the location where ESET Mail Security will be installed. By default, the program installs in `C:\Program Files\ESET\ESET Mail Security`. Click **Browse** to change this location (not recommended).

6. Click **Install** to begin the installation. When the installation finishes, ESET GUI starts and tray icon 🎨 is displayed in the notification area (system tray).
NOTE
During installation, the following files are copied into the IBM Domino folder:

- *LMON.dll* - Communication with the ESET Security product.
- *LmonLang.dll* - Localization for different languages.
- *LMON_SCANNER.exe* - On-Demand database scan.
- *EsetQuarantine.ntf* - Template for the ESET Quarantine.

Also, following changes are made in the server configuration:

- *LMON* is added to the *EXTMGR_ADDINS*.
- *LMON_SCANNER* is added to the Server Tasks configuration.

### 2.2.1 Modifying an existing installation

You can add or remove components included in your installation. To do so, either run the *msi* installer package you used during initial installation, or go to Programs and Features (accessible from the Windows Control Panel), right-click ESET Mail Security and select Change. Follow the steps below to add or remove components.

There are 3 options available. You can **Modify** installed components, **Repair** your installation of ESET Mail Security or **Remove** (uninstall) it completely.

![ESET Mail Security Setup](image)

- **Modify**
  
  Adds or Removes ESET Mail Security features.

- **Repair**
  
  Repairs errors in the most recent installation state - fixes missing or corrupt files, shortcuts and registry entries.

- **Remove**
  
  Removes ESET Mail Security from your computer.

If you choose **Modify**, a list of available program components is displayed. Choose the components you want to add or remove. You can add/remove multiple components at the same time. Click the component and select an option from the drop-down menu:
When you have selected an option, click **Modify** to perform the modifications.

**NOTE**
You can modify installed components at any time by running the installer. For most components, a server restart is not necessary to carry out the change. The GUI will restart and you'll only see only the components you chose to install. For components that require a server restart, the Windows Installer will prompt you to restart and new components will become available once the server is back online.

### 2.3 Silent / Unattended installation

In addition to the installation wizard, you can choose to install ESET Mail Security silently via command line. This installation type does not require any interaction and is also referred to as an unattended installation.

Run the following command to complete installation via command line:

```bash
msiexec /i <packagename> /qn /l*v msi.log
```

**NOTE**
On Windows Server 2008 SP2 and Windows Server 2008 R2 SP1 the **Network protection** feature will not be installed.

To make sure the installation was successful or in case of any issues with the installation, use Windows Event Viewer to check the **Application Log** (look for records from Source: MsiInstaller).

**EXAMPLE**

**Full installation** on a 64-bit system:

```bash
msiexec /i emsl_nt64.msi /qn /l*v msi.log ADDLOCAL=NetworkProtection,RealtimeProtection,^DeviceControl,DocumentProtection,Cluster,GraphicUserInterface,SysInspector,SysRescue,Rmm,eula
```

When the installation finishes, ESET GUI starts and tray icon 🕵️‍♂️ is displayed in the notification area (system tray).
Installation of the product in **specified language** (German):

```cmd
msiexec /i emsl_nt64.msi /qn ADDLOCAL=NetworkProtection,RealtimeProtection,^ 
DeviceControl,DocumentProtection,Cluster,GraphicUserInterface,^ 
SysInspector,SysRescue,Rmm,eula PRODUCT_LANG=1031 PRODUCT_LANG_CODE=de-de
```

See [Language parameters](#) in **Command line installation** for further details and the list of language codes.

---

**IMPORTANT**

When specifying values for `REINSTALL` parameter, you must list the rest of the features that are not used as values for `ADDLOCAL` or `REMOVE` parameter. It is necessary for the command line installation to run properly that you list all the features as values for `REINSTALL`, `ADDLOCAL` and `REMOVE` parameters. Adding or removing may not be successful if you do not use the `REINSTALL` parameter.

See [Command line installation](#) section for the complete list of features.

---

**EXAMPLE**

**Complete removal** (uninstallation) from a 64-bit system:

```cmd
msiexec /x emsl_nt64.msi /qn /l*xv msi.log
```

**NOTE**

Your server will reboot automatically after a successful uninstallation.

---

### 2.3.1 Command line installation

The following settings are intended for use only with the reduced, basic and none level of the user interface. See [documentation](#) for the msiexec version used for the appropriate command line switches.

**Supported parameters**

- **APPDIR=<path>**
  - path - Valid directory path
  - Application installation directory
  - For example: `emsl_nt64.msi /qn APPDIR=C:\ESET\ ADDLOCAL=DocumentProtection`

- **APPDATADIR=<path>**
  - path - Valid directory path
  - Application Data installation directory

- **MODULEDIR=<path>**
  - path - Valid directory path
  - Module installation directory

- **ADDLOCAL=<list>**
  - Component installation - list of non-mandatory features to be installed locally.
  - Usage with ESET.msi packages: `emsl_nt64.msi /qn ADDLOCAL=<list>`
  - For more information about the `ADDLOCAL` property see [https://docs.microsoft.com/en-gb/windows/desktop/Msi/addlocal](https://docs.microsoft.com/en-gb/windows/desktop/Msi/addlocal)
  - The `ADDLOCAL` list is a comma-separated list of all feature that will be installed.
  - When selecting a feature to be installed, the full path (all parent features) must be explicitly included in the list.
**REMOVE=<list>**
- Component installation - parent feature you do not want to have installed locally.
- Usage with ESET .msi packages: `emsl_nt64.msi /qn REMOVE=<list>`
- For more information about the `REMOVE` property see [https://docs.microsoft.com/en-gb/windows/desktop/Msi/remove](https://docs.microsoft.com/en-gb/windows/desktop/Msi/remove)
- The `REMOVE` list is a comma-separated list of parent features that will not be installed (or will be removed in case of existing installation).
- It is sufficient to specify parent feature only. There is no need to explicitly include every child feature to the list.

**ADDEXCLUDE=<list>**
- The `ADDEXCLUDE` list is a comma-separated list of all feature names not to be installed.
- When selecting a feature not to be installed, then the whole path (i.e., all its sub-features) and related invisible features must be explicitly included in the list.
- For example: `emsl_nt64.msi /qn ADDEXCLUDE=<list>`

**NOTE**
ADDEXCLUDE cannot be used with ADDLOCAL.

**Feature Presence**
- **Mandatory** - The feature is always installed.
- **Optional** - The feature may be deselected for install.
- **Invisible** - Logical feature mandatory for other features to work properly.

**List of ESET Mail Security features:**

<table>
<thead>
<tr>
<th>Feature Name</th>
<th>Feature Presence</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERVER</td>
<td>Mandatory</td>
</tr>
<tr>
<td>RealtimeProtection</td>
<td>Mandatory</td>
</tr>
<tr>
<td>WMIProvider</td>
<td>Mandatory</td>
</tr>
<tr>
<td>HIPS</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Updater</td>
<td>Mandatory</td>
</tr>
<tr>
<td>eShell</td>
<td>Mandatory</td>
</tr>
<tr>
<td>UpdateMirror</td>
<td>Mandatory</td>
</tr>
<tr>
<td>DeviceControl</td>
<td>Optional</td>
</tr>
<tr>
<td>DocumentProtection</td>
<td>Optional</td>
</tr>
<tr>
<td>WebAndEmail</td>
<td>Optional</td>
</tr>
<tr>
<td>ProtocolFiltering</td>
<td>Invisible</td>
</tr>
<tr>
<td>NetworkProtection</td>
<td>Optional</td>
</tr>
<tr>
<td>IdsAndBotnetProtection</td>
<td>Optional</td>
</tr>
</tbody>
</table>
If you want to remove any of the following features, you need to remove the whole group by specifying every feature that belongs to the group. Otherwise, the feature will not be removed. Here are two groups (each line represents one group):

- **GraphicUserInterface,ShellExt**
- **NetworkProtection,WebAccessProtection,IdsAndBotnetProtection,ProtocolFiltering,MailPlugins,EmailClientProtection**

**EXAMPLE**

Exclude **NetworkProtection** section (including child features) from the installation using `REMOVE` parameter and specifying only parent feature:

```
msiexec /i emsl_nt64.msi /qn ADDLOCAL=ALL REMOVE=NetworkProtection
```

Alternatively, you can use `ADDEXCLUDE` parameter, but you must also specify all child features:

```
msiexec /i emsl_nt64.msi /qn ADDEXCLUDE=NetworkProtection,WebAccessProtection,IdsAndBotnetProtection,ProtocolFiltering,MailPlugins,EmailClientProtection
```

If you want your ESET Mail Security to be automatically configured after the installation, you can specify basic configuration parameters within the installation command.

**EXAMPLE**

Install ESET Mail Security and disable ESET LiveGrid®:

```
msiexec /i emsl_nt64.msi /qn /l*v msi.log CFG_LIVEGRID_ENABLED=0
```

**List of all configuration properties:**

<table>
<thead>
<tr>
<th>Switch</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFG_POTENTIALLYUNWANTED_ENABLED</td>
<td>0 - Disabled, 1 - Enabled</td>
</tr>
</tbody>
</table>
### Switches

<table>
<thead>
<tr>
<th>Switch</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFG_LIVEGRID_ENABLED=1/0</td>
<td>0 - Disabled, 1 - Enabled</td>
</tr>
<tr>
<td>FIRSTSCAN_ENABLE=1/0</td>
<td>0 - Disable, 1 - Enable</td>
</tr>
<tr>
<td>CFG_PROXY_ENABLED=0/1</td>
<td>0 - Disabled, 1 - Enabled</td>
</tr>
<tr>
<td>CFG_PROXY_ADDRESS=&lt;ip&gt;</td>
<td>Proxy IP address</td>
</tr>
<tr>
<td>CFG_PROXY_PORT=&lt;port&gt;</td>
<td>Proxy port number</td>
</tr>
<tr>
<td>CFG_PROXY_USERNAME=&lt;user&gt;</td>
<td>User name for authentication</td>
</tr>
<tr>
<td>CFG_PROXY_PASSWORD=&lt;pass&gt;</td>
<td>Password for authentication</td>
</tr>
</tbody>
</table>

### Language parameters

Product language (you must specify both parameters)

<table>
<thead>
<tr>
<th>Switch</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRODUCT_LANG=</td>
<td>LCID Decimal (Locale ID), for example 1033 for <em>English - United States</em>, see the list of language codes.</td>
</tr>
<tr>
<td>PRODUCT_LANG_CODE=</td>
<td>LCID String (Language Culture Name) in lowercase, for example <em>en-us</em> for <em>English - United States</em>, see the list of language codes.</td>
</tr>
</tbody>
</table>
2.4 Product activation

When installation is complete, you will be prompted to activate your product.

You can use any of the following methods to activate ESET Mail Security:

**Enter a License Key**
A unique string in the format XXXX-XXXX-XXXX-XXXX-XXXX which is used for identification of the the license owner and for activation of the license.

**ESET Business Account**
Use this option if you are registered and have your ESET Business Account (EBA) where your ESET Mail Security license has been imported. You can also enter Security Admin credentials that you use on ESET License Administrator portal.

**Offline License file**
An automatically generated file that will be transferred to the ESET product to provide license information. Your offline License file is generated from the license portal and is used in environments where the application cannot connect to the licensing authority.

Click **Activate later** with ESET Security Management Center if your computer is a member of a managed network, and your administrator will perform remote activation via ESET Security Management Center. You can also use this option if you want to activate this client at a later time.

Select **Help and support > Manage license** in the main program window to manage your license information at any time. You will see the public license ID used to identify your product by ESET and for license identification. Your Username, under which the computer is registered, is stored in the About section, which you can view by right-clicking the system tray icon.
After you've successfully activated ESET Mail Security, the main program window will open and display your current status in the Monitoring page. Some attention may be required initially, for example, you'll be asked if you want to be part of ESET LiveGrid®.

The main program window will also display notifications about other items, such as system updates (Windows Updates) or detection engine updates. When all items that require attention are resolved, the monitoring status will turn green and display the status **You are protected**.

To activate your copy of ESET Mail Security directly from the program, click the system tray icon and select **Product is not activated** from the menu. You can also activate your product from the main menu under Help and support > Activate Product or Monitoring status > Product is not activated.

**NOTE**
ESET Security Management Center is able to activate client computers silently using licenses made available by the administrator.

2.4.1 ESET Business Account
ESET Business Account allows you to manage multiple licenses. If you do not have ESET Business Account, click Create account and you will be redirected to the ESET Business Account portal where you can register.

**NOTE**
For more information, see the ESET Business Account (EBA) User Guide.

If you are using Security Admin credentials and have forgotten your password, click I forgot my password and you will be redirected to the ESET License Administrator portal. Enter your email address and click Submit to confirm. After that you will obtain a message with instructions to reset your password.

2.4.2 Activation successful
Activation was successful and ESET Mail Security is now activated. From now on, ESET Mail Security will receive regular updates to identify the latest threats and keep your computer safe. Click Done to finish product activation.

2.4.3 Activation failure
Activation of ESET Mail Security was not successful. Make sure you have entered the proper License Key or attached an Offline License. If you have a different Offline License, please enter it again. To check the license key you entered, click recheck the License Key or enter a different license.

2.4.4 License
You will be prompted to select a license associated with your account that will be used for ESET Mail Security. Click Continue proceed with activation.
2.5 Upgrading to a newer version

New versions of ESET Mail Security are issued to provide improvements or fix issues that cannot be resolved by automatic updates of program modules.

Upgrade methods:

- **Uninstall / Install** - Removing the older version before installing the new one. Download the latest version of ESET Mail Security. Export settings from your existing ESET Mail Security if you want to preserve configuration. Uninstall ESET Mail Security and restart the server. Perform a **fresh installation** with the installer you have downloaded. Import settings to load your configuration. We recommend this procedure if you have a single server running ESET Mail Security.

- **In-place** - An upgrade method without removing the existing version and installing the new ESET Mail Security over it.

**IMPORTANT**

It is necessary that you have **no pending Windows Updates** on your server, as well as **no pending restart** due to Windows Updates or for any other reason. If you try performing in-place upgrade with a pending Windows Updates or restart, the existing version of ESET Mail Security may not be removed correctly. You will also experience problems if you decide to remove the old version of ESET Mail Security manually afterward.

**NOTE**

A server restart will be required during the upgrade of ESET Mail Security.

- **Remote** - For use in large network environments managed by ESET Security Management Center. This is basically a clean upgrade method, but carried out remotely. It is useful if you have multiple servers running ESET Mail Security.

- **ESET Cluster wizard** - Can also be used as an upgrade method. We recommend this method for 2 or more servers with ESET Mail Security. This is basically an in-place upgrade method, but carried out via ESET Cluster. Once the upgrade is completed, you can continue using ESET Cluster and take advantage of its features.

**IMPORTANT**

Upgrade from version 4.x does not retain certain settings, specifically rules cannot be migrated. This is due to changes in the rules feature that were introduced in later product versions. We recommend that you make note of your rules settings before upgrading from version 4.x. You can setup rules after the upgrade is finished. New rules gives you greater flexibility and even more possibilities compared to rules in previous version of ESET Mail Security.

The following settings are preserved from previous versions of ESET Mail Security:

- General ESET Mail Security configuration.

Antispam protection settings:

- All settings that are identical in previous versions, any new settings will use defaults.
- Whitelist and blacklist entries.

**NOTE**

Once you’ve upgraded your ESET Mail Security, we recommend you to go through all the settings to make sure it is configured correctly and according to your needs.
2.5.1 Upgrading via ESMC

The ESET Security Management Center allows you to upgrade multiple servers that are running older version of ESET Mail Security. This method has the advantage of upgrading large number of servers at the same time while making sure each ESET Mail Security is configured identically (if this is desired).

The procedure consists of the following phases:

- **Upgrade the first server** manually by installing the latest version of ESET Mail Security over your existing version in order to preserve all of the configuration including rules, numerous whitelists and blacklists, etc. This phase is performed locally on the server running ESET Mail Security.

- **Request configuration** of the newly upgraded ESET Mail Security to version 7.x and **Convert to policy** in ESET Security Management Center. The policy will later be applied to all upgraded servers. This phase is performed remotely using ESMC as well as the following phases.

- **Run Software Uninstall** task on all servers running old version of ESET Mail Security.

- **Run Software Install** task on all servers which you want the latest version ESET Mail Security to run.

- **Assign configuration policy** to all the servers running the latest version ESET Mail Security.

**Step-by-step procedure:**

1. Log onto one of the servers running ESET Mail Security and upgrade it by downloading and installing the latest version over your existing one. Follow the steps for regular installation. All of the original configuration of your old ESET Mail Security will be preserved during the installation.

2. Open the ESET Security Management Center Web Console, select a client computer from a Static or Dynamic group and click **Show Details**.
3. Navigate to Configuration tab and click the Request configuration button to collect all configuration of managed product. It will take a moment to get the configuration. Once the latest configuration appears in the list, click Security product and choose Open Configuration.

4. Create configuration policy by clicking Convert to policy button. Enter the Name for a new policy and click Finish.
5. Navigate to **Client Tasks** and choose **Software Uninstall** task. When creating the uninstall task, we recommend you to reboot the server after the uninstallation by selecting the check box **Automatically reboot when needed**. Once the task is created, add all desired target computers for uninstallation.

6. Make sure ESET Mail Security is uninstalled from all the targets.

7. Create **Software Install** task in order to install the latest version of ESET Mail Security to all desired targets.

8. Assign configuration policy to all the servers running ESET Mail Security, ideally to a group.

### 2.5.2 Upgrading via ESET Cluster

Creating an ESET Cluster lets you upgrade multiple servers using older versions of ESET Mail Security. It is an alternative to the ESMC upgrade. We recommend using the ESET Cluster method if you have 2 or more servers with ESET Mail Security in your environment. Another benefit of this upgrade method is that you can continue using the ESET Cluster in so the configuration of ESET Mail Security will be synchronized on all member nodes.

**Follow the steps below to upgrade using this method:**

1. Log on to one of the servers running ESET Mail Security and upgrade it by downloading and installing the latest version over your existing one. Follow the **steps for regular installation**. All of the original configuration of your old ESET Mail Security will be preserved during the installation.

2. Run the ESET Cluster wizard and add cluster nodes (servers you want to upgrade ESET Mail Security on). If required, you can add other servers that do not run ESET Mail Security yet (an installation will be performed on these). We recommend that you to leave the default settings in place when specifying your Cluster name and install type (make sure **Push license to nodes without activated product** is selected).

3. Review the **Nodes check log** screen. It will list servers with older product versions and that the product will be reinstalled. ESET Mail Security will also be installed on any added servers where it is not currently installed.
Node check log

[13:39:36] Node check started
[13:39:36] PING test:
[13:39:36] Administration share access test:
[13:39:36] Service manager access test:
[13:39:45] OK
[13:39:45] Warning: The product needs to be reinstalled on some machines before creating the cluster. This may cause those machines to be automatically restarted.
4. The **Nodes install and cluster activation** screen will display installation progress. When installation is successfully completed, it should finish with results similar to these:

**Nodes install and cluster activation**

**Product install log**

```
[15:53:58] Generating certificates for cluster nodes...
[15:54:01] All certificates created.
[15:54:01] Copying files to remote machines:
[15:54:05] All files have been copied to remote machines.
[15:54:05] Installing product
[15:55:00] ESET solutions are installed on all remote machines.
[15:55:00] Enrolling certificates:
[15:55:02] All certificates have been enrolled to remote machines.
[15:55:02] Activating cluster feature:
[15:55:03] Cluster feature has been activated on all machines.
[15:55:03] Pushing license to the nodes:
[15:55:05] License has been successfully pushed to the nodes.
[15:55:05] Synchronizing settings:
[15:55:06] Settings have been synchronized.
```

If your network or DNS isn't configured correctly, you may receive the error message **Failed to obtain activation token from the server**. Try running the ESET Cluster wizard again. It will destroy the cluster and create a new one (without reinstalling the product) and activation should finish successfully this time. If the issue persists, check your network and DNS settings.
2.6 Installation in cluster environment

You can deploy ESET Mail Security in a cluster environment (for example, in a failover cluster). We recommend that you install ESET Mail Security on an active node and then redistribute the installation on passive node(s) using the ESET Cluster feature of ESET Mail Security. Apart from the installation, the ESET Cluster will serve as a replication of ESET Mail Security configuration to ensure consistency between cluster nodes necessary for correct operation.

**NOTE**

In some cases, ESET Mail Security may encounter a conflict with IBM Domino cluster while writing to the database. If this happens, use the standard procedure for handling Domino cluster replication conflicts.

2.7 Terminal Server

If you are installing ESET Mail Security on a Windows Server that acts as a Terminal Server, you may want to disable the ESET Mail Security GUI to prevent it from starting up every time a user logs in. See Disable GUI on Terminal Server for specific steps to disable the GUI.
2.8 Mailbox count

You may need to know how many IBM Domino mailboxes you have in your organization, for licensing purposes for example. ESET Mail Security has its mailbox counter that shows you how many mailboxes need a license. You can see the **Mailbox count** information on the **Monitoring** page of the main GUI. This is useful as a quick check if you have standalone IBM Domino server in your environment. If you have multiple Partitions on your IBM Domino server or more than just one server (Domino cluster) and need more detailed information about mailboxes, we recommend you to use **Mailbox count tool**. These are the two ways to determine the number of mailboxes.

The mailbox count mechanism in ESET Mail Security reads the `names.nsf` file and searches for the “Person” note and counts users that have their mail server set to the current IBM Domino server. On single servers, all users with a mailbox are counted. On a Partition (in a partitioned environment), the count can include users from other Partitions with a different mail server, but these users are not included in the total mailbox count.

**NOTE**

Only mailboxes belonging to user type *Person* are counted. Mail-in databases are not counted.

The **Mailbox count** feature found in the **Monitoring** section:

- Counts all local mailboxes.
- Counts mailboxes on all Partitions, but the Partitions must be running and Database protection enabled. If you need the count to include Partitions that are not running, we recommend you to use Mailbox count tool.
- Does not count mailboxes on other servers if you have Domino cluster. To count all servers in the cluster, you can use **Mailbox count tool**.

**Mailbox count tool**:

- Counts all mailboxes, including mailboxes located on other servers if you have Domino cluster.
- Counts mailboxes on all Partitions, including Partitions that are not running.
- Provides detailed information such as Server name, Mail server name, other server information and a list of Databases with their paths.

**Protection**

*Transport layer* (SMTP) is protected by ESET Mail Security regardless of the number of mailboxes. Everything that goes through the *mail.box* is protected.

*Database protection* and On-demand database scan provides protection for all Domino databases stored locally (including mailbox replicas).

**NOTE**

The Mailbox count always displays the number of mailboxes that are protected by ESET Mail Security. However, there might be a case when the Mailbox count is lower than the actual number of protected mailboxes. For example, when you have mailbox replicas. This is to ensure that ESET Mail Security always protects the highest number of mailboxes possible.

**Examples**

**Standalone IBM Domino server:**

- A user has mail server set to the current IBM Domino server and has a mailbox, this user is counted.
- If there is a user who does not have a mailbox (no mail server specified for the user), this user is not counted.
- Protection by ESET Mail Security applies as described above.

**IBM Domino cluster:**

- Two servers in a cluster, *domino1* and *domino2*, only *domino1* has ESET Mail Security installed on it.
- *userA* is registered on *domino1* and has specified *mailserver1*. This user is counted on *domino1* server.
• userB is registered on domino1 and has specified mailserver2. This user is not counted on domino1 server.
• userA has mailbox located on domino1 and is protected (Database and On-demand database scan protection).
• userB has mailbox located on domino2, therefore is not protected.
• If userB has a replica mailbox on domino1 server, this user is protected even though not included in Mailbox count.
• Transport layer and Database protection is in place on domino1 only.

IMPORTANT
We recommend you to install ESET Mail Security on all nodes in Domino cluster.

IBM Domino server with multiple Partitions:
• The same as IBM Domino cluster, except all of the instances (Partitions) run on the same machine.
• User registered on domino1 with mailserver1 is counted on Partition 1.
• User registered on domino1 with mailserver2 is counted on Partition 2.
• User registered on domino2 with mailserver2 is counted on Partition 2.
• Transport layer protects all traffic that goes through mail.box of each Partition and Database protection is in place for all users.

NOTE
ESET Mail Security installed on IBM Domino server with multiple Partitions counts users separately for each Partition. Monitoring page Mailbox count shows the sum of all Partitions. If you use Mailbox count tool, it will list users for each Partition with a Total counted mailboxes number.

IMPORTANT
Normally, all Partitions are protected. However, if you have protection turned off for certain Partitions, these are not protected and users will not be counted. Users of unprotected Partitions will not be included in the Total counted mailboxes.

NOTE
If integration of LMON.d11 is disabled (Mail transport and all of the Database protection), Mailbox count on Monitoring page will show 0 mailboxes. However, On-demand database scan can be executed and will work.

2.8.1 Mailbox count tool
Use the Mailbox count tool to determine number of mailboxes in your organization. It provides more information than Mailbox count on the Monitoring page. It is a command line tool. Download 32-bit or 64-bit Mailbox count tool, depending on your IBM Domino installation:

• 32-bit Mailbox count tool
• 64-bit Mailbox Count tool

Run the tool with administrator privileges, or open a Windows Command Prompt (cmd) using Run as administrator. You can simply run the executable EMSL_VerifyMailboxCount_32.exe or EMSL_VerifyMailboxCount_64.exe to see the mailbox count.
If you need more detailed information, run the tool with one of the following parameters (options):

- /names - displays extended information that includes user names, mailboxes and mail servers
- /details - displays extended information and a list of Databases with their paths
- /help - lists available options, you can also use /?

**EXAMPLE**

Information shown when you use /names parameter on a standalone Domino server:

```plaintext
c:\SHARE>ENSL_VerifyMailboxCount_64.exe /names

Partition 1:
Server name: domino1/org1
Mail server name: domino1/org1
Mailboxes found: 13
1. admin1, mail\admin1, domino1/org1
2. user1, mail\user1, domino1/org1
3. user2, mail\user2, domino1/org1
4. user20, mail\user20, domino1/org1
5. user21, mail\user21, domino1/org1
6. user22, mail\user22, domino1/org1
7. user23, mail\user23, domino1/org1
8. user2, mail\user2, domino1/org1
9. user4, mail\user4, domino1/org1
10. user5, mail\user5, domino1/org1
11. user6, mail\ext\user6, domino1/org1
12. user7, mail\ext\user7, domino1/org1
13. user9, mail\mail\ext\user9, domino1/org1
Mailboxes on other mail servers (not included): 3
1. user10, mail\user10, domino2/org1
2. user12, mail\ext\user12, domino2/org1
3. user13, mail\ext\user13, domino2/org1
Total counted mailboxes: 13
```
Same parameter on a server with multiple Partitions:

Partition 1:
- Server name: test1/org
- Mail server name: test1/org
- Mailboxes found: 6
  1. admin\admin, test1/org
  2. user1, mail\user1, test1/org
  3. user2, mail\user2, test1/org
  4. user5, mail\user5, test1/org
  5. user6, mail\user6, test1/org
  6. user8, mail\user8, test1/org
- Mailboxes on other mail servers <not included>: 3
  1. user3, mail\user3, test2/org
  2. user4, mail\user4, test3/org
  3. user5, mail\user5, test4/org

Partition 2:
- Server name: test2/org
- Mail server name: test2/org
- Mailboxes found: 1
  1. user3, mail\user3, test2/org
- Mailboxes on other mail servers <not included>: 8
  1. admin\admin\admin, test1/org
  2. user1, mail\user1, test1/org
  3. user2, mail\user2, test1/org
  4. user6, mail\user6, test1/org
  5. user7, mail\user7, test1/org
  6. user8, mail\user8, test1/org
  7. user4, mail\user4, test3/org
  8. user5, mail\user5, test4/org

Partition 3:
- Server name: test3/org
- Mail server name: test3/org
- Mailboxes found: 1
  1. user4, mail\user4, test3/org
- Mailboxes on other mail servers <not included>: 8
  1. admin\admin\admin\admin, test1/org
  2. user1, mail\user1, test1/org
  3. user2, mail\user2, test1/org
  4. user6, mail\user6, test1/org
  5. user7, mail\user7, test1/org
  6. user8, mail\user8, test1/org
  7. user3, mail\user3, test4/org
  8. user5, mail\user5, test4/org

Partition 4:
- Server name: test4/org
- Mail server name: test4/org
- Mailboxes found: 1
  1. user5, mail\user5, test4/org
- Mailboxes on other mail servers <not included>: 8
  1. admin\admin\admin, test1/org
  2. user1, mail\user1, test1/org
  3. user2, mail\user2, test1/org
  4. user6, mail\user6, test1/org
  5. user7, mail\user7, test1/org
  6. user8, mail\user8, test1/org
  7. user3, mail\user3, test4/org
  8. user4, mail\user4, test3/org

Total counted mailboxes: 9

c:\shared>
C:\Install\EMSLServerMailboxCount_32.exe /names
Error: unable to obtain domino data dir.
Error: unable to get domino registry data.
Total counted mailboxes: 0
3. Getting started

The following part should help you get started with ESET Mail Security.

**Monitoring**

Gives you an immediate overview of the current status of ESET Mail Security. At the first glance, you will see if there any issues that require your attention.

**Managed via ESET Security Management Center**

You can use ESET Security Management Center to remotely manage ESET Mail Security.

### 3.1 Managed via ESET Security Management Center

ESET Security Management Center (ESMC) is an application that allows you to manage ESET products in a networked environment from one central location. The ESET Security Management Center task management system allows you to install ESET security solutions on remote computers and quickly respond to new problems and threats. ESET Security Management Center does not provide protection against malicious code on its own, it relies on the presence of ESET security solutions on each client. ESET security solutions support networks that include multiple platform types. Your network can include a combination of current Microsoft, Linux-based, Mac OS and mobile operating systems.

For more information about ESMC, see [ESET Security Management Center Online help](#).
3.2 Monitoring

The protection status shown in the Monitoring section informs you about the current protection level of your computer. A status summary about the operation of ESET Mail Security will be displayed in the primary window.

⚠️ The green You are protected status indicates that maximum protection is ensured.

⚠️ The red icon indicates critical problems - maximum protection of your computer is not ensured. For a list of possible protection statuses see the Status section.

⚠️ The orange icon indicates that your ESET product requires attention for a non-critical problem.

![Monitoring Screen]

Modules that are working properly are assigned a green check. Modules that are not fully functional are assigned a red exclamation point or an orange notification icon. Additional information about the module is shown in the upper part of the window. A suggested solution for fixing the module is also displayed. To change the status of an individual module, click Setup in the main menu and then click the desired module.

The Monitoring page also contains information about your system including:

- **Product version** - version number of ESET Mail Security.
- **Server Name** - machine Hostname or FQDN.
- **System** - operating system details.
- **Computer** - hardware details.
- **Server uptime** - shows how long the system is up and running, basically the opposite of downtime.
- **Mailbox count** - ESET Mail Security detects the number of mailboxes on local IBM Domino server. See Mailbox count for more details and Mailbox count tool for information how to use the tool.
NOTE
The Mailbox count is updated with every start of Domino and every 30 minutes thereafter. If you have Domino cluster or multiple Partitions, we recommend you to have these synchronized to get the correct Mailbox count.

If you are unable to solve a problem using the suggested solutions, click Help and support to access the help files or search the ESET Knowledgebase. If you still need assistance, you can Submit support request. ESET Technical Support will respond quickly to your questions and help find a resolution.

### 3.2.1 Status
A status summary for ESET Mail Security will be displayed in the primary window with detailed information about your system. Normally, when everything is working without any issues, the protection status is green. However, the protection status might change in certain circumstances. Protection status will change to orange or red warning message will be displayed if one of the following occurs:

<table>
<thead>
<tr>
<th>Warning message</th>
<th>Warning message detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mail server antivirus protection disabled</td>
<td>Click Enable antivirus protection in the Monitoring or re-enable Antivirus and antispyware protection in the Setup pane of the main program window. Mail server antivirus protection was disabled by the user.</td>
</tr>
<tr>
<td>Mail server integration disabled</td>
<td>Mail server integration was disabled by the user. Mail server integration was disabled by the user. Click Edit integration setting to enable Mail transport protection.</td>
</tr>
<tr>
<td>Antispam engine has limited cloud connectivity</td>
<td>This indicates connection issues. Make sure relevant ports are enabled.</td>
</tr>
<tr>
<td>Detection of potentially unwanted application is not configured</td>
<td>A potentially unwanted application (PUA) is a program that contains adware, installs toolbars or has other unclear objectives. There are some situations where a user may feel that the benefits of a potentially unwanted application outweigh the risks.</td>
</tr>
<tr>
<td>Product not activated or License expired</td>
<td>This is indicated by the protection status icon turning red. The program is not able to update after the license expires. Follow the instructions in the alert window to renew your license.</td>
</tr>
<tr>
<td>Real-time file system protection is paused</td>
<td>Click Enable Real-time protection in the Monitoring tab or re-enable Real-time file system protection in the Setup tab of the main program window.</td>
</tr>
<tr>
<td>Operating system is not up to date</td>
<td>The System updates window shows the list of available updates ready to be downloaded and installed.</td>
</tr>
<tr>
<td>Network attack protection (IDS) is paused</td>
<td>Click Enable Network attack protection (IDS) to re-enable this feature.</td>
</tr>
<tr>
<td>Botnet protection is paused</td>
<td>Click Enable Botnet protection to re-enable this feature.</td>
</tr>
<tr>
<td>Web access protection is paused</td>
<td>Click Enable Web access protection in the Monitoring or re-enable Web access protection in the Setup pane of the main program window.</td>
</tr>
<tr>
<td>Anti-Phishing protection is non-functional</td>
<td>This feature is not functional because other required program modules are not active.</td>
</tr>
</tbody>
</table>
### Warning message

<table>
<thead>
<tr>
<th>Warning message</th>
<th>Warning message detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy override active</td>
<td>The configuration set by the policy is temporarily overridden, possibly until troubleshooting is complete. If you are managing ESET Mail Security using ESMC and have a policy assigned to it, the status link will be locked (grayed out) depending on what features belong to the policy.</td>
</tr>
</tbody>
</table>

If you are unable to solve a problem, search the [ESET Knowledgebase](#). If you still need assistance, you can submit a support request. ESET Technical Support will respond quickly to your questions and help find a resolution.

#### 3.2.2 Windows update available

The System updates window shows the list of available updates ready to be downloaded and installed. The update priority level is shown next to the name of the update. Right-click any update row and click More information to display a pop-up window with additional info:

**System updates**

Total number of available updates: 7

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-12 Cumulative Security Update for Internet Explorer 11 for Windows Server 2012 R2 for x64-based systems (KB4481252)</td>
<td>Important</td>
</tr>
<tr>
<td>Windows Malicious Software Removal Tool x64 - February 2019 (KB890830)</td>
<td>Important</td>
</tr>
<tr>
<td>2019-02 Security and Quality Rollup for .NET Framework 3.5, 4.5.2, 4.6, 4.6.1, 4.6.2, 4.7, 4.7.1, 4.7.2 for Windows 8.1 and 10 (KB4033428)</td>
<td>Important</td>
</tr>
<tr>
<td>Update for Windows Server 2012 R2 (KB4033428)</td>
<td>Recommended</td>
</tr>
<tr>
<td>Microsoft .NET Framework 4.7.2 for Windows Server 2012 R2 for x64 (KB4054566)</td>
<td>Recommended</td>
</tr>
</tbody>
</table>

Click Run system update to open Windows Update window and proceed with system updates.
4. Using ESET Mail Security

This part contains detailed description of the program's user interface, and aims to explain how to use your ESET Mail Security.

The user interface enables you to quickly access commonly used features:

- Monitoring
- Log files
- Scan
- Update
- Mail quarantine
- Setup
- Tools

4.1 Scan

The On-demand scanner is an important part of ESET Mail Security. It is used to perform scans of files and folders on your computer. To ensure the security of your network, it is essential that computer scans are not just run when an infection is suspected, but regularly as part of routine security measures. We recommend that you perform regular (for example, once a month) in-depth scans of your system to detect viruses not detected by Real-time file system protection. This can occur if a threat is introduced when Real-time file system protection is disabled, the detection engine has not been updated, or if a file was not detected when it was first saved to the disk.

Select available On-demand scans for ESET Mail Security:

Database scan
Enables you run On-demand database scan. You can choose Targets to scan. Also, you can use Scheduler to run the Mailbox database scan at a specific time or at an event.

Storage scan
Scans all shared folders on the local server. If Storage scan is not available, there are no shared folders on your server.

Scan your computer
Allows you to quickly launch a computer scan and clean infected files with no need for user intervention. The advantage of Scan your computer is that it is easy to operate and does not require detailed scanning configuration. Scan checks all files on local drives and automatically cleans or deletes detected infiltrations. The cleaning level is automatically set to the default value. For more detailed information on types of cleaning, see Cleaning.

NOTE
We recommend that you run a computer scan at least once a month. Scanning can be configured as a scheduled task from Tools > Scheduler.

Custom scan
Custom scan is an optimal solution if you want to specify scanning parameters such as scan targets and scanning methods. The advantage of Custom scan is the ability to configure scan parameters in detail. Configurations can be saved to user-defined scan profiles, which can be useful if scanning is repeatedly performed using the same parameters.

NOTE
Performing computer scans with Custom scan is only recommended for advanced users with previous experience using antivirus programs.
Removable media scan
Similar to Smart scan - quickly launch a scan of removable media (such as CD/DVD/USB) that are connected to the computer. This may be useful when you connect a USB flash drive to a computer and want to scan its content for malware and other potential threats. This type of scan can also be initiated by clicking Custom scan and then selecting Removable media from the Scan targets drop-down menu and clicking Scan.

Hyper-V scan
This option is only visible in the menu if Hyper-V Manager is installed on the server that runs ESET Mail Security. Hyper-V scan allows for scanning of Virtual Machine (VM) disks on Microsoft Hyper-V Server without the need to have any "Agent" installed on the particular VM.

Repeat last scan
Repeats your last scan operation using exactly the same settings.

NOTE
Repeat last scan function is not available if On-demand database scan is present.

You can use options and shows more information about the scan statuses:

<table>
<thead>
<tr>
<th>Drag and drop files</th>
<th>You can also drag and drop files into the ESET Mail Security scan window. These files will be virus scanned immediately.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dismiss/ Dismiss all</td>
<td>Dismissing of give messages.</td>
</tr>
<tr>
<td>Scan statuses</td>
<td>Show the status of initial scan. This scan has finished completed or has been interrupted by user.</td>
</tr>
</tbody>
</table>
Drag and drop files

You can also drag and drop files into the ESET Mail Security scan window. These files will be virus scanned immediately.

**Show log**

Shows more detailed information.

**More info**

During a scan to see details such as the User who executed the scan, number of Objects scanned and the scan Duration.

**Open scan windows**

The scan progress window shows the current status of the scan and information about the number of files found that contain malicious code.

### 4.1.1 Scan window and scan log

The scan window shows currently scanned objects including their location, number of threats found (if any), number of scanned objects and scan duration. The bottom part of the window is a scan log that shows detection engine version number, date and time when the scan started and target selection.

Once the scan is in progress, you can click **Pause** if you want to temporarily interrupt the scan. **Resume** option is available when the scan process is paused.

#### Scroll scan log

Leave this option enabled to auto scroll old logs and view active logs in the Log files window.

**NOTE**

It is normal that some files, such as password protected files or files exclusively being used by the system (typically pagefile.sys and certain log files), cannot be scanned.
After the scan has finished, you will see the scan log with all relevant information related to the particular scan.

Click the switch icon [Filtering] to open Log filtering window where you can define filtering or search criteria. To view the context menu, right-click a specific log entry:

<table>
<thead>
<tr>
<th>Action</th>
<th>Usage</th>
<th>Shortcut</th>
<th>See also</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter same records</td>
<td>This activates log filtering, showing only records of the same type as the one selected.</td>
<td>Ctrl + Shift + F</td>
<td></td>
</tr>
<tr>
<td>Filter...</td>
<td>After clicking this option, the Log filtering window will allow you to define filtering criteria for specific log entries.</td>
<td></td>
<td>Log filtering</td>
</tr>
<tr>
<td>Enable filter</td>
<td>Activates filter settings. The first time you activate filtering, you must define settings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disable filter</td>
<td>Turns filtering off (same as clicking the switch at the bottom).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copy</td>
<td>Copies information of selected/highlighted record(s) into the clipboard.</td>
<td>Ctrl + C</td>
<td></td>
</tr>
<tr>
<td>Copy all</td>
<td>Copies information from all records in the window.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export...</td>
<td>Exports information of selected/highlighted record(s) into an XML file.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export all...</td>
<td>Exports all the information in the window into an XML file.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.2 Log files

Log files contain information about important program events that have occurred, provide an overview of scan results, detected threats, etc. Logs are an essential tool in system analysis, threat detection and troubleshooting. Logging is performed actively in the background with no user interaction. Information is recorded based on the current log verbosity settings. It is possible to view text messages and logs directly from the ESET Mail Security environment or export them for viewing elsewhere.

Choose the appropriate log type from the drop-down menu. The following logs are available:

**Detections**

The threat log offers detailed information about infiltrations detected by ESET Mail Security modules. The information includes the time of detection, name of infiltration, location, the performed action and the name of the user logged in at the time the infiltration was detected. Double-click any log entry to display its details in a separate window.

**Events**

All important actions performed by ESET Mail Security are recorded in the event log. The event log contains information about events and errors that have occurred in the program. It is designed to help system administrators and users resolve problems. Often the information found here can help you find a solution for a problem occurring in the program.

**Computer scan**

All scan results are displayed in this window. Each line corresponds to a single computer control. Double-click any entry to view the details of the respective scan.

**Blocked files**

Contains records of files that were blocked and could not be accessible. The protocol shows the reason and the source module that blocked the file, as well as the application and user that executed the file.

**Sent files**

Contains records of files Cloud-based protection, ESET Dynamic Threat Defense and ESET LiveGrid®.

**HIPS**

Contains records of specific rules that are marked for recording. The protocol shows the application that called the operation, the result (whether the rule was permitted or prohibited) and the name of the rule created.

**Network protection**

Contains records of files that were blocked by Botnet protection and IDS (Network attack protection).

**Filtered websites**

List of websites that were blocked by Web access protection and Anti-phishing mail protection. These logs display the time, URL, user and application that opened a connection to the particular website.

**Device control**

Contains records of removable media or devices that were connected to the computer. Only devices with a Device control rule will be recorded to the log file. If the rule does not match a connected device, a log entry for a connected device will not be created. Here you can also see details such as device type, serial number, vendor name and media size (if available).

**Mail server protection**

All messages detected by ESET Mail Security as infiltration or as a spam are recorded here. These logs apply to following protection types: Antispam, Anti-Phishing, Rules and Antivirus. When you double-click an item, a pop-up window will open with Additional information about detected email message, such as IP address, HELO domain, Message ID, Scan type showing the protection layer it was detected on. Also, you can see the result of Antivirus, Anti-Phishing and Antispam scan and the reason why it was detected or whether a Rule was activated.
NOTE
Not all processed messages are being logged into a Mail server protection log. However, all of the messages that were actually modified (deleted attachment, custom string added to a message header, etc.) are written into the log.

Mailbox database scan
Contains the version of the detection engine, date, scanned location, number of scanned objects, number of threats found, number of rule hits and time of completion.

SMTP protection
All messages that have been evaluated using the greylisting method. SPF and Backscatter are also displayed here. Each record contains HELO Domain, IP sender's and recipient's address, Actions statuses (rejected, rejected [not verified] and verified incoming messages).

Hyper-V scan
Contains a list of Hyper-V scan results. Double-click any entry to view the details of the respective scan.

<table>
<thead>
<tr>
<th>Action</th>
<th>Usage</th>
<th>Shortcut</th>
<th>See also</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show</td>
<td>Shows more detailed information about the selected log in a new window (same as double-click).</td>
<td>Ctrl + F</td>
<td></td>
</tr>
<tr>
<td>Filter same records</td>
<td>This activates log filtering, showing only records of the same type as the one selected.</td>
<td>Ctrl + Shift + F</td>
<td></td>
</tr>
<tr>
<td>Filter...</td>
<td>After clicking this option, the Log filtering window will allow you to define filtering criteria for specific log entries.</td>
<td></td>
<td>Log filtering</td>
</tr>
<tr>
<td>Action</td>
<td>Usage</td>
<td>Shortcut</td>
<td>See also</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------------------------------------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Enable filter</td>
<td>Activates filter settings. The first time you activate filtering, you must define settings.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disable filter</td>
<td>Turns filtering off (same as clicking the switch at the bottom).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copy</td>
<td>Copies information of selected/highlighted record(s) into the clipboard.</td>
<td>Ctrl + C</td>
<td></td>
</tr>
<tr>
<td>Copy all</td>
<td>Copies information from all records in the window.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delete</td>
<td>Deletes selected/highlighted record(s) - this action requires administrator privileges.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delete all</td>
<td>Deletes all record(s) in the window - this action requires administrator privileges.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export...</td>
<td>Exports information of selected/highlighted record(s) into an XML file.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export all...</td>
<td>Exports all the information in the window into an XML file.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Find...</td>
<td>Opens Find in log window and lets you define search criteria. You can use the find feature to locate a specific record even while filtering is on.</td>
<td>Ctrl + F</td>
<td>Find in log</td>
</tr>
<tr>
<td>Find next</td>
<td>Finds the next occurrence of your defined search criteria.</td>
<td>F3</td>
<td></td>
</tr>
<tr>
<td>Find previous</td>
<td>Finds the previous occurrence.</td>
<td>Shift + F3</td>
<td></td>
</tr>
</tbody>
</table>

### 4.2.1 Log filtering

The log filtering feature will help you find the information you are looking for, especially when there are many records. It lets you narrow down log records, for example, if you are looking for a specific type of event, status or time period. You can filter log records by specifying certain search options, only records that are relevant (according to those search options) will be displayed in the Log files window.

Type the keyword you are searching for into the **Find text** field. Use the **Search in columns** drop-down menu to refine your search. Choose one or more record from the **Record log types** drop-down menu. Define the **Time period** from which you want the results to be displayed. You can also use further search options, such as **Match whole words only** or **Case sensitive**.
Log filtering

Find text:
Type a string (word, or part of a word). Only records that contain this string will be shown. Other records will be omitted.

Search in columns:
Select what columns will be taken into account when searching. You can check one or more columns to be used for searching.

Record types:
Choose one or more log record types from the drop-down menu:
- **Diagnostic**: Logs information needed to fine-tune the program and all records above.
- **Informative**: Records informative messages, including successful update messages, plus all records above.
- **Warnings**: Records critical errors and warning messages.
- **Errors**: Errors such as "Error downloading file" and critical errors will be recorded.
- **Critical**: Logs only critical errors (error starting antivirus protection).

Time period:
Define the time period from which you want the results to be displayed:
- **Not specified** (default) - Does not search within time period, searches the whole log.
- **Last day**
- **Last week**
- **Last month**
- **Time period** - You can specify the exact time period (From: and To:) to filter only the records of the specified time period.

Match whole words only
Use the check box if you want to search whole words for more precise results.

**Case sensitive**
Enable this option if it is important for you to use capital or lower case letters while filtering. Once you have configured your filtering/search options, click OK to show filtered log records or Find to start searching. The log files are searched from top to bottom, starting from your current position (the record that is highlighted). The search stops when it finds the first corresponding record. Press F3 to search for the next record or right-click and select Find to refine your search options.

### 4.3 Update

In the Update section, you can see the current update status of your ESET Mail Security, including the date and time of the last successful update. Regularly updating ESET Mail Security is the best method to maintain the maximum level of security on your server. The Update module ensures that the program is always up to date in two ways, by updating detection engine and system components. Updating detection engine and program components is an important part of providing complete protection against malicious code.

**NOTE**
If you did not enter License key yet, you will not be able to receive updates and will be prompted to activate your product. To do so, navigate to Help and support > Activate Product.

---

**Current version**
The ESET Mail Security build version.

**Last successful update**
The date of the last update. Make sure it refers to a recent date, which means that the modules is current.

**Last successful check for updates**
The date of the last attempt to update modules.

**Show all modules**
To open the list of installed modules.

**Check for Updates**
Updating modules is important parts of maintaining complete protection against malicious code.

**Change update frequency**
You can edit task timing for scheduler task Regular automatic update.

If you do not check for Updates as soon as possible, one of the following messages will be displayed:

<table>
<thead>
<tr>
<th>Error message</th>
<th>Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modules update is out of date</td>
<td>This error will appear after several unsuccessful attempts to module update. We recommend that you check the update settings. The most common reason for this error is incorrectly entered authentication data or incorrectly configured connection settings.</td>
</tr>
<tr>
<td>Modules update failed - Product is not activated</td>
<td>The license key has been entered incorrectly in update setup. We recommend that you check your authentication data. The Advanced setup (F5) contains additional update options. Click Help and support &gt; Manage license from the main menu to enter a new license key.</td>
</tr>
<tr>
<td>An error occurred while downloading update files</td>
<td>This can be caused by Internet connection settings. We recommend that you check your Internet connectivity by opening any website in your web browser. If the website does not open, it is likely that an Internet connection is not established or there are connectivity problems with your computer. Please check with your Internet Service Provider (ISP) if you do not have an active Internet connection.</td>
</tr>
<tr>
<td>Modules update failed Error 0073</td>
<td>Click Update &gt; Check for updates, for more information visit this Knowledgebase article.</td>
</tr>
</tbody>
</table>

**NOTE**
Proxy server options for various update profiles may differ. If this is the case, configure the different update profiles in Advanced setup (F5) by clicking Update > Profile.
4.4 Setup

The Setup menu window contains the following sections:

- **Server**
- **Computer**
- **Network**
- **Web and email**
- **Tools - Diagnostic logging**

To temporarily disable individual modules, next to the appropriate module, click the green slider bar. This may decrease the protection level of your server.

To re-enable the protection of a disabled security component, next to the appropriate module, click the red slider bar. The component is returned to an enabled state.

To access detailed settings of a specific security component, click the gear icon.

**Import/Export settings**

Load setup parameters using an .xml configuration file or save the current setup parameters to a configuration file.

**Advanced setup**

Configure advanced settings and options based on your needs. To access the Advanced setup screen from anywhere in the program, press F5.
4.4.1 Server

You will see a list of components that you can enable/disable using the slider bar. To configure settings for a specific item, click the gear icon.

Antivirus protection
Guards against malicious system attacks by controlling file, email and Internet communication.

Antispam protection
Integrates several technologies (RBL, DNSBL, Fingerprinting, Reputation checking, Content analysis, Rules, Manual whitelisting/blacklisting, etc.) to achieve maximum detection of email threats.

Anti-phishing protection
 Parses message body of incoming emails for phishing links (URL's).

Automatic exclusions
Identifies critical server applications and server operating system files and automatically adds them to the list of exclusions. This functionality will minimize the risk of potential conflicts and increase the overall performance of the server when running antivirus software.

Cluster
To configure and activate the ESET Cluster.

To temporarily disable individual modules, next to the appropriate module, click the green slider bar. This may decrease the protection level of your server.

To re-enable the protection of a disabled security component, next to the appropriate module, click the red slider bar. The component is returned to an enabled state.

To access detailed settings of a specific security component, click the gear icon.

Import/Export settings
Load setup parameters using an .xml configuration file or save the current setup parameters to a configuration file.

Advanced setup
Configure advanced settings and options based on your needs. To access the Advanced setup screen from anywhere in the program, press F5.

4.4.2 Computer

ESET Mail Security has all of the necessary components to ensure significant protection of the server as a computer. This module allows you to enable/disable and configure the following components:

Real-time file system protection
All files are scanned for malicious code when they are opened, created or run on your computer. For Real-time file system protection, there is also an option to Configure or Edit exclusions which will open the exclusions setup window where you can exclude files and folders from scanning.

Device control
This module allows you to scan, block or adjust extended filters/permissions and define a user's ability to access and work with a given device.

Host Intrusion Prevention System (HIPS)
System monitors events that occur within the operating system and reacts to them according to a customized set of rules.
• Advanced memory scanner
• Exploit blocker
• Ransomware shield

Presentation mode
A feature for users that demand uninterrupted usage of their software, do not want to be disturbed by pop-up windows, and want to minimize CPU usage. You will receive a warning message (potential security risk) and the main program window will turn orange after enabling Presentation mode.

Pause Antivirus and antispyware protection
Any time that you temporarily disable Antivirus and antispyware protection, you can select the period of time for which you want the selected component to be disabled using the drop-down menu and then click Apply to disable the security component. To re-enable protection, click Enable Antivirus and antispyware protection or enable using the slider bar.

To temporarily disable individual modules, next to the appropriate module, click the green slider bar. This may decrease the protection level of your server.

To re-enable the protection of a disabled security component, next to the appropriate module, click the red slider bar. The component is returned to an enabled state.

To access detailed settings of a specific security component, click the gear icon.

Import/Export settings
Load setup parameters using an .xml configuration file or save the current setup parameters to a configuration file.

Advanced setup
Configure advanced settings and options based on your needs. To access the Advanced setup screen from anywhere in the program, press F5.

4.4.3 Network
This is accomplished by allowing or denying individual network connections based on your filtering rules. It provides protection against attacks from remote computers and blocks some potentially dangerous services.

The Network module allows you to enable/disable and configure the following components:

Network attack protection (IDS)
Analyzes the content of network traffic and protects from network attacks. Traffic that is considered harmful will be blocked.

Botnet protection
Detection and blocking of Botnet communication. Quickly and accurately identifies malware in the system.

Temporary IP address blacklist (blocked addresses)
View a list of IP addresses that have been detected as the source of attacks and added to the blacklist to block connection for a certain period of time.

Troubleshooting wizard (recently blocked applications or devices)
Helps you resolve connectivity problems caused by network attack protection.

To temporarily disable individual modules, next to the appropriate module, click the green slider bar. This may decrease the protection level of your server.

To re-enable the protection of a disabled security component, next to the appropriate module, click the red slider bar. The component is returned to an enabled state.
To access detailed settings of a specific security component, click the gear icon 🛠.

**Import/Export settings**
Load setup parameters using an .xml configuration file or save the current setup parameters to a configuration file.

**Advanced setup**
Configure advanced settings and options based on your needs. To access the Advanced setup screen from anywhere in the program, press F5.

### 4.4.3.1  Network troubleshooting wizard

The troubleshooting wizard monitors all blocked connections, and will guide you through the troubleshooting process to correct network attack protection issues with specific applications or devices. Next, the wizard will suggest a new set of rules to be applied if you approve them.

### 4.4.4  Web and email

Web and email allows you to enable/disable and configure the following components:

**Web access protection**
If enabled, all HTTP or HTTPS traffic is scanned for malicious software.

**Email client protection**
Monitors communication received through the POP3 and IMAP protocols.

**Anti-Phishing protection**
Protects you from attempts to acquire passwords, banking data and other sensitive information by illegitimate websites disguised as legitimate ones.

To temporarily disable individual modules, next to the appropriate module, click the green slider bar. This may decrease the protection level of your server.

To re-enable the protection of a disabled security component, next to the appropriate module, click the red slider bar. The component is returned to an enabled state.

To access detailed settings of a specific security component, click the gear icon 🛠.

**Import/Export settings**
Load setup parameters using an .xml configuration file or save the current setup parameters to a configuration file.

**Advanced setup**
Configure advanced settings and options based on your needs. To access the Advanced setup screen from anywhere in the program, press F5.
4.4.5 Tools - Diagnostic logging

You can enable Diagnostic logging when you need detailed information about the behavior of a specific ESET Mail Security feature, for example, when troubleshooting. When you click the gear icon, you can configure for what features should diagnostic logs be collected.

Choose how long it will be enabled (10 minutes, 30 minutes, 1 hour, 4 hours, 24 hours, until next server restart or permanently). Once diagnostic logging is turned on, ESET Mail Security will be collecting detailed logs according to what features are enabled.

To temporarily disable individual modules, next to the appropriate module, click the green slider bar. This may decrease the protection level of your server.

To re-enable the protection of a disabled security component, next to the appropriate module, click the red slider bar. The component is returned to an enabled state.

To access detailed settings of a specific security component, click the gear icon.

Import/Export settings

Load setup parameters using an .xml configuration file or save the current setup parameters to a configuration file.

Advanced setup

Configure advanced settings and options based on your needs. To access the Advanced setup screen from anywhere in the program, press F5.
4.4.6 Import and export settings

Import/export settings feature is useful if you need to back up current configuration of your ESET Mail Security. You can also use the import feature to distribute/apply the same settings to other server(s) with ESET Mail Security. Settings are exported to an .xml file.

NOTE

If you do not have rights to write the exported file to specified directory, you may encounter an error when exporting settings.

4.5 Tools

The following features are available for ESET Mail Security administration:

- Running processes
- Watch activity
- Protection statistics
- Cluster
- ESET Shell
- ESET SysInspector
- ESET SysRescue Live
- Scheduler
- Submit sample for analysis
- Quarantine
<table>
<thead>
<tr>
<th>Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Running processes</strong></td>
</tr>
<tr>
<td>Reputation information powered by ESET Live Grid®</td>
</tr>
<tr>
<td><strong>Watch activity</strong></td>
</tr>
<tr>
<td>Watch activity</td>
</tr>
<tr>
<td><strong>ESET Shell</strong></td>
</tr>
<tr>
<td>Command-line user interface</td>
</tr>
<tr>
<td><strong>ESET SysInspector</strong></td>
</tr>
<tr>
<td>Tool to collect detailed information about system</td>
</tr>
<tr>
<td><strong>Submit sample for analysis</strong></td>
</tr>
<tr>
<td>Send file to ESET Research Lab</td>
</tr>
</tbody>
</table>
### 4.5.1 Running processes

Running processes displays the running programs or processes on your computer and keeps ESET immediately and continuously informed about new infiltrations. ESET Mail Security provides detailed information on running processes to protect users with ESET LiveGrid® technology enabled.

![Running processes](image)

**NOTE**

Known applications marked as Best reputation (green) are clean (whitelisted) and will be excluded from scanning, as this will improve the scanning speed of on-demand computer scan or Real-time file system protection on your computer.

<table>
<thead>
<tr>
<th>Reputation</th>
<th>Process</th>
<th>PID</th>
<th>Number of users</th>
<th>Time of disc.</th>
<th>Application name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>explorer.exe</td>
<td>220</td>
<td>1 month ago</td>
<td>Microsoft® Windows® 0p..</td>
<td></td>
</tr>
<tr>
<td></td>
<td>explorer.exe</td>
<td>300</td>
<td>7 years ago</td>
<td>Microsoft® Windows® 0p..</td>
<td></td>
</tr>
<tr>
<td></td>
<td>wminet.exe</td>
<td>340</td>
<td>7 years ago</td>
<td>Microsoft® Windows® 0p..</td>
<td></td>
</tr>
<tr>
<td></td>
<td>winlogon.exe</td>
<td>380</td>
<td>3 months ago</td>
<td>Microsoft® Windows® 0p..</td>
<td></td>
</tr>
<tr>
<td></td>
<td>services.exe</td>
<td>440</td>
<td>2 years ago</td>
<td>Microsoft® Windows® 0p..</td>
<td></td>
</tr>
<tr>
<td></td>
<td>bsas.exe</td>
<td>455</td>
<td>3 month ago</td>
<td>Microsoft® Windows® 0p..</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lsass.exe</td>
<td>464</td>
<td>2 years ago</td>
<td>Microsoft® Windows® 0p..</td>
<td></td>
</tr>
<tr>
<td></td>
<td>iexplore.exe</td>
<td>552</td>
<td>3 years ago</td>
<td>Microsoft® Windows® 0p..</td>
<td></td>
</tr>
<tr>
<td></td>
<td>logonlue.exe</td>
<td>784</td>
<td>7 years ago</td>
<td>Microsoft® Windows® 0p..</td>
<td></td>
</tr>
<tr>
<td></td>
<td>spoolsv.exe</td>
<td>264</td>
<td>3 months ago</td>
<td>Microsoft® Windows® 0p..</td>
<td></td>
</tr>
<tr>
<td></td>
<td>iexplorer.exe</td>
<td>1872</td>
<td>7 years ago</td>
<td>IBM wrist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>inservices.exe</td>
<td>1200</td>
<td>5 years ago</td>
<td>IBM Lotus Notes/Domino</td>
<td></td>
</tr>
<tr>
<td></td>
<td>msieexec.exe</td>
<td>1200</td>
<td>7 years ago</td>
<td>IBM wrist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>controller.exe</td>
<td>1220</td>
<td>7 years ago</td>
<td>IBM Lotus Notes/Domino</td>
<td></td>
</tr>
<tr>
<td></td>
<td>inetwrapper.exe</td>
<td>1220</td>
<td>7 years ago</td>
<td>IBM Lotus Notes/Domino</td>
<td></td>
</tr>
<tr>
<td></td>
<td>corhost.exe</td>
<td>1800</td>
<td>2 month ago</td>
<td>Microsoft® Windows® 0p..</td>
<td></td>
</tr>
</tbody>
</table>

**Reputation**

In most cases, ESET Mail Security and ESET LiveGrid® technology determines object reputation using a series of heuristic rules that examine the characteristics of each object (files, processes, registry keys, etc.) and then weigh their potential for malicious activity. Based on these heuristics, objects are assigned a reputation level from 9 - best reputation (green) to 0 - worst reputation (red).

**Process**

Image name of the program or process that is currently running on your computer. You can also use the Windows Task Manager to see all running processes on your computer. You can open Task Manager by right-clicking an empty area on the taskbar and then clicking Task Manager, or by pressing Ctrl + Shift + Esc on your keyboard.

**PID**

Is an ID of processes running in Windows operating systems.

**Number of users**

The number of users that use a given application. This information is gathered by ESET LiveGrid® technology.
Reputation | In most cases, ESET Mail Security and ESET LiveGrid® technology determines object reputation using a series of heuristic rules that examine the characteristics of each object (files, processes, registry keys, etc.) and then weigh their potential for malicious activity. Based on these heuristics, objects are assigned a reputation level from 9 - best reputation (green) to 0 - worst reputation (red).

| Time of discovery | Period of time since the application was discovered by ESET LiveGrid® technology.

| Application name | Given name of a program this process belongs to.

---

**NOTE**

When an application is marked as Unknown (orange), it is not necessarily malicious software. Usually, it is just a newer application. If you are not sure about the file, use the [Submit sample for analysis](#) feature to send the file to the ESET Virus Lab. If the file turns out to be a malicious application, its detection will be added to one of the upcoming detection engine updates.

**Show details**

The following information will appear at the bottom of the window:

- **Path** - Location of an application on your computer.
- **Size** - File size either in kB (kilobytes) or MB (megabytes).
- **Description** - File characteristics based on the description from the operating system.
- **Company** - Name of the vendor or application process.
- **Version** - Information from the application publisher.
- **Product** - Application name and/or business name.
- **Created on** - Date and time when an application was created.
- **Modified on** - Last date and time when an application was modified.

**Add to processes exclusions**

Right-click a process in the Running processes window to exclude it from scanning. Its path will be added to the list of Processes exclusions.

**4.5.2 Watch activity**

To Watch activity contain activity in graph form, select from drop-down menu following activity:

**File system activity**

Amount of read or written data. The vertical axis of graph represents read data (blue) and written data (red).

**Network activity**

Amount of received of sent data. The vertical axis of graph represents received data (blue) and sent data (red).

**Mail server activity**

Amount of processed data by Transport protection (blue) and Database protection (red).

At the bottom of the graph is a timeline that records file system activity in real-time based on the selected time span. Use the **Refresh rate** drop-down menu to change the frequency of updates.
The following options are available:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 second</td>
<td>The graph refreshes every second and the timeline covers the last 10 minutes.</td>
</tr>
<tr>
<td>1 minute (last 24 hours)</td>
<td>The graph is refreshed every minute and the timeline covers the last 24 hours.</td>
</tr>
<tr>
<td>1 hour (last month)</td>
<td>The graph is refreshed every hour and the timeline covers the last month.</td>
</tr>
<tr>
<td>1 hour (selected month)</td>
<td>The graph is refreshed every hour and the timeline covers the selected month. Select a month (and a year) from the drop-down menu to see activity. Click <strong>Change</strong>.</td>
</tr>
</tbody>
</table>
4.5.3 Protection statistics

To view statistical data related to protection modules of ESET Mail Security, select the applicable protection module from the drop-down menu. The statistics include information such as the number of all scanned objects, number of infected objects, number of cleaned objects and the number of clean objects. Hover your mouse over an object next to the graph and only the data for that specific object will display in the graph. To clear statistics information for the current protection module, click **Reset**. To clear data for all modules, click **Reset all**.

The following statistic graphs are available in ESET Mail Security:

**Antivirus and antispyware protection**
Displays the overall number of infected and cleaned objects.

**File system protection**
Displays objects that were read or written to the file system only.

**Hyper-V protection**
Displays the overall number of infected, cleaned and clean objects (on systems with Hyper-V only).

**Email client protection**
Displays objects that were sent or received by email clients only.

**Web access and Anti-Phishing protection**
Displays objects downloaded by web browsers only.

**Mail server protection**
Displays antivirus and antispyware mail server statistics.

**Mail server antispam protection**
Displays the history of antispam statistics. Number of Not scanned refers to objects excluded from scan (based on rules, internal messages, authenticated connections, etc.).

**Mail server greylisting protection**
Includes antispam statistic generated using the greylisting method.

**Mail transport protection activity**
Displays objects verified/blocked/deleted by the mail server.

**Mail transport protection performance**
Displays data processed by VSAPI/Transport Agent in B/s.

**Mailbox database protection activity**
Displays objects processed by VSAPI (number of verified, quarantined and deleted objects).

**Mailbox database protection performance**
Displays data processed by VSAPI (number of different averages for today, for last 7 days and averages since last reset).

### 4.5.4 Cluster

The **ESET Cluster** is a P2P communication infrastructure of the ESET line of products for Microsoft Windows Server.

This infrastructure enables ESET server products to communicate with each other and exchange data such as configuration and notifications, and can Synchronize greylisting databases as well as synchronize data necessary for correct operation of a group of product instances. An example of such group is a group of nodes in a Windows Failover Cluster or Network Load Balancing (NLB) Cluster with ESET products installed where there is a need to have the same configuration of the product across the whole cluster. ESET Cluster ensures this consistency between instances.

**NOTE**
Settings of the User interface are not synchronized between ESET Cluster nodes.

The ESET Cluster status page is accessible from the main menu in **Tools > Cluster** when properly configured, the status page should look like this:
NOTE
The creation of ESET Clusters between ESET Mail Security and ESET File Security for Linux is not supported.

When setting up the ESET Cluster, there are two ways to add nodes:

**Autodetect**
If you have an existing Windows Failover Cluster / NLB Cluster, Autodetect will automatically add its member nodes to the ESET Cluster.

**Browse**
You can add nodes manually by typing in the server names (either members of the same Workgroup or members of the same Domain).

NOTE
Servers don't have to be members of a Windows Failover Cluster / NLB Cluster to use the ESET Cluster feature. A Windows Failover Cluster or NLB Cluster is not required in your environment for you to use ESET Clusters.

Once you have added nodes to your ESET Cluster, the next step is the installation of ESET Mail Security on each node. This is done automatically during ESET Cluster setup. Credentials that are required for remote installation of ESET Mail Security on other cluster nodes:

**Domain scenario**
Domain administrator credentials.

**Workgroup scenario**
You need to make sure that all nodes use the same local administrator account credentials.
In an ESET Cluster, you can also use a combination of nodes added automatically as members of an existing Windows Failover Cluster / NLB Cluster and nodes added manually (provided they are in the same Domain).

**IMPORTANT**
It is not possible to combine domain nodes with workgroup nodes.

Another requirement for the use of an ESET Cluster is that **File and Printer Sharing** must be enabled in Windows Firewall before pushing ESET Mail Security to ESET Cluster nodes.

You can add new nodes to an existing ESET Cluster anytime by running the **Cluster wizard**.

**Import certificates**
Certificates are used to provide strong machine to machine authentication when HTTPS is used. There is an independent certificate hierarchy for each ESET Cluster. The hierarchy has one root certificate and a set of node certificates signed by the root certificate. The private key of the root certificate is destroyed after all node certificates are created. When you add a new node to the cluster a new certificate hierarchy is created. Navigate to the folder that contains the certificates (that were generated during Cluster wizard). Select the certificate file and click **Open**.

**Destroy cluster**
ESET Clusters can be dismantled. Each node will write a record in their event log about the ESET Cluster being destroyed. After that, all ESET firewall rules are removed from the Windows Firewall. Former nodes will be ted to their previous state and can be used again in another ESET Cluster if necessary.

4.5.4.1 **Cluster wizard - Select nodes**
The first step when setting up an ESET Cluster is adding nodes. You can either use the **Autodetect** option or **Browse** to add nodes. Alternatively, you can type the server name into the text box and click **Add**.

**Autodetect**
Automatically adds nodes from an existing Windows Failover Cluster / Network Load Balancing (NLB) Cluster. The server you are using to create the ESET Cluster from needs to be a member of this Windows Failover Cluster / NLB Cluster in order to automatically add the nodes. The NLB Cluster must have the **Allow remote control** feature enabled in cluster properties for the ESET Cluster to detect the nodes correctly. Once you have the list of newly added nodes, you can remove unwanted ones.

**Browse**
To find and select computers within a Domain or a Workgroup. This method allows for the manual addition of nodes to the ESET Cluster. Another way to add nodes is by typing the host name of the server you want add and clicking **Add**.

**Load**
To import list of nodes from file.
To modify **Cluster nodes** in the list, select the node you want to remove and click **Remove**, or to clear the list completely click **Remove all**.

If you already have an existing ESET Cluster, you can add new nodes to it at any time. The steps are the same as described above.

---

**NOTE**

All nodes that remain in the list must be online and reachable. Localhost is added into the cluster nodes by default.

---

### 4.5.4.2 Cluster wizard - Cluster settings

Define cluster name, and network specifics (if required).

**Cluster name**

Type a name for your cluster and click **Next**.

**Listening port (default port is 9777)**

If you are already using port 9777 in your network environment, specify other port number that is not being used.

**Open port in Windows firewall**

When selected a rule is created in the Windows Firewall.
4.5.4.3  Cluster wizard - Cluster setup settings
Define certificate distribution mode and whether to install the product on other nodes or not.

Certificate distribution

- **Automatic remote** - Certificate will be installed automatically.

- **Manual** - Click **Generate** and select the appropriate folder to store the certificates. A root certificate as well as a certificate for each node, including the one (local machine) from which you are setting up the ESET Cluster, will be created. To enroll the certificate on the local machine, click **Yes**.

Product install to other nodes

- **Automatic remote** - ESET Mail Security will be installed automatically on each node (provided their operating systems are the same architecture).

- **Manual** - Manually install ESET Mail Security (for example, when you have different OS architectures on some nodes).

Push license to nodes without activated product

ESET Security automatically activates ESET Solutions installed on nodes without licenses.

NOTE
To create an ESET Cluster with a mixed operating system architecture (32 bit and 64 bit), install ESET Mail Security manually. Operating systems in use will be detected during next steps and you will see this information in the log window.

4.5.4.4  Cluster wizard - Nodes check
After specifying installation details a node check is run. The following information will be displayed in the **Nodes check log**:

- verify that all existing nodes are online
- verify that new nodes are accessible
- node is online
- admin share is accessible
- remote execution is possible
- correct product versions (or no product) are installed
- verify that the new certificates are present
You will see the report once the node check is finished:
Nodes check

Node check log

[2:07:55 PM] Node check started
[2:07:55 PM] PING test:
[2:07:55 PM] OK
[2:07:55 PM] Administration share access test:
[2:07:57 PM] OK
[2:07:57 PM] Service manager access test:
[2:08:04 PM] OK
[2:08:04 PM] Checking installed product version and features:
[2:08:07 PM] W2012R2-NODE2: Install will be performed.
[2:08:08 PM] OK
4.5.4.5  Cluster wizard - Nodes install

When installing to a remote machine during ESET Cluster initialization, the wizard will attempt to locate the installer in the directory %ProgramData\ESET\<Product_name>\Installer. If the installer package is not found there, you will be asked to locate the installer file.

NOTE
When trying to use automatic remote installation for a node with different architecture (32-bit vs 64-bit), this will be detected and you will be prompted to perform manual installation.
Once you have correctly configured the ESET Cluster, it will appear in Setup > Server page as enabled.

NOTE
If an older version of ESET Mail Security is already installed on some nodes, you will be notified that the latest version is required on these machines. Updating ESET Mail Security may cause an automatic restart.
Additionally, you can check its current status from the Cluster status page (Tools > Cluster).

4.5.5 ESET Shell

eShell (short for ESET Shell) is a command line interface for ESET Mail Security. It is an alternative to the graphical user interface (GUI). eShell includes all the features and options that the GUI normally gives you. eShell lets you configure and administer the whole program without the use of the GUI.

Apart from all the functions and features that are available in the GUI, it also provides you with the option of using automation by running scripts in order to configure, modify configuration or perform an action. Also, eShell can be useful for those who prefer to use the command line over the GUI.

NOTE
For full functionality we recommend you to open the eShell using Run as administrator. The same applies when executing a single command via Windows Command Prompt (cmd). Open the prompt using Run as administrator. Failing to run the command prompt as Administrator will stop you from running commands due to lack of permissions.

There are two modes in which eShell can be run:

1. **Interactive mode** - This is useful when you want to work with eShell (not just execute a single command) for tasks such as changing configuration, viewing logs, etc. You can use interactive mode if you are not familiar with all the commands yet. Interactive mode will make it easier for you when navigating through eShell. It also shows you available commands you can use within a particular context.

2. **Single command / Batch mode** - You can use this mode if you only need to execute a command without entering the interactive mode of eShell. This can be done from the Windows Command Prompt by typing in `eshell` with the appropriate parameters.
In order to run certain commands (such as the second example above) in batch/script mode, there are a couple of settings that you need to configure first. Otherwise, you'll get an Access Denied message. This is for security reasons.

**NOTE**
Settings changes are required to allow the use of eShell commands from a Windows Command Prompt. For further information about running batch files click [here](#).

There are two ways to enter interactive mode in eShell:

1. **Via Windows Start menu:** Start > All Programs > ESET > ESET Mail Security > ESET Shell
2. **From Windows Command Prompt** by typing in `eshell` and pressing the Enter key

**IMPORTANT**
If you get an error 'eshell' is not recognized as an internal or external command, this is due to new Environment Variables not being loaded by your system after the installation of ESET Mail Security. You can open new Command Prompt and try starting eShell again. If you are still getting an error or have Core installation of ESET Mail Security, start eShell using absolute path, for example `%PROGRAMFILES%\ESET\ESET Mail Security\eShell.exe` (you must use "" in order for the command to work).

When you run eShell in interactive mode for the first time, a first run (guide) screen will display.

**NOTE**
If you want to display the first run screen in future, type in `guide` command. It shows you some basic examples how to use eShell with Syntax, Prefix, Command path, Abbreviated forms, Aliases, etc.

Next time you run eShell, you'll see this screen:
NOTE

Commands are not case sensitive. You can use upper case (capital) or lower case letters and the command will execute regardless.

Customizing eShell

You can customize eShell in ui eshell context. You can configure aliases, colors, language, execution policy for scripts, settings for hidden commands and more.

4.5.5.1 Usage

Syntax

Commands must be formatted in the correct syntax to function and can be composed of a prefix, context, arguments, options, etc. This is the general syntax used throughout eShell:

```
[prefix] <command path> <command> [arguments]
```

Example (this activates document protection):

```
SET ANTIVIRUS DOCUMENT STATUS ENABLED
```

- **SET** - a prefix
- **ANTIVIRUS DOCUMENT** - path to a particular command, a context where this command belongs
- **STATUS** - the command itself
- **ENABLED** - an argument for the command

Using `?` as an argument for command will display the syntax for that particular command. For example, `STATUS ?` will show you the syntax for `STATUS` command:

```
SYNTAX:

[get] | status
set status enabled | disabled
```

You may notice that `[get]` is in brackets. It designates that the prefix `get` is default for the `status` command. This means that when you execute `status` without specifying any prefix, it will actually use the default prefix (in this case `get status`). Using commands without a prefix saves time when typing. Usually `get` is the default prefix for...
most commands, but you need to be sure what the default prefix is for a particular command and that it is exactly what you want to execute.

NOTE

Commands are not case sensitive, you can use upper case (capital) or lower case letters and the command will execute regardless.

Prefix / Operation

A prefix is an operation. The \texttt{GET} prefix will give you information about how a certain feature of ESET Mail Security is configured or show you the status (such as \texttt{GET ANTIVIRUS STATUS} will show you current protection status). The \texttt{SET} prefix will configure functionality or change its status (\texttt{SET ANTIVIRUS STATUS ENABLED} will activate protection).

These are the prefixes that eShell lets you use. A command may or may not support any of the prefixes:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>\texttt{GET}</td>
<td>returns current setting/status</td>
</tr>
<tr>
<td>\texttt{SET}</td>
<td>sets value/status</td>
</tr>
<tr>
<td>\texttt{SELECT}</td>
<td>selects an item</td>
</tr>
<tr>
<td>\texttt{ADD}</td>
<td>adds an item</td>
</tr>
<tr>
<td>\texttt{REMOVE}</td>
<td>removes an item</td>
</tr>
<tr>
<td>\texttt{CLEAR}</td>
<td>removes all items/files</td>
</tr>
<tr>
<td>\texttt{START}</td>
<td>starts an action</td>
</tr>
<tr>
<td>\texttt{STOP}</td>
<td>stops an action</td>
</tr>
<tr>
<td>\texttt{PAUSE}</td>
<td>pauses an action</td>
</tr>
<tr>
<td>\texttt{RESUME}</td>
<td>resumes an action</td>
</tr>
<tr>
<td>\texttt{RESTORE}</td>
<td>restores default settings/object/file</td>
</tr>
<tr>
<td>\texttt{SEND}</td>
<td>sends an object/file</td>
</tr>
<tr>
<td>\texttt{IMPORT}</td>
<td>imports from a file</td>
</tr>
<tr>
<td>\texttt{EXPORT}</td>
<td>exports to a file</td>
</tr>
</tbody>
</table>

NOTE

Prefixes such as \texttt{GET} and \texttt{SET} are used with many commands, but some commands (such as \texttt{EXIT}) do not use a prefix.

Command path / Context

Commands are placed in contexts which form a tree structure. The top level of the tree is root. When you run eShell, you are at the root level:

\begin{verbatim}
  eShell>
\end{verbatim}
You can either execute a command from here, or enter the context name to navigate within the tree. For example, when you enter **TOOLS** context, it will list all commands and sub-contexts that are available from here.

Yellow items are commands you can execute and grey items are sub-contexts you can enter. A sub-context contains further commands.

If you need to return back to a higher level, use `. .` (two dots).

**EXAMPLE**

Say you are here:

```
eShell antivirus startup>
```

Type `. .` to go up one level, to:

```
eShell antivirus>
```

If you want to get back to root from `eShell antivirus startup>` (which is two levels lower than root), simply type `. . .` (two dots and two dots separated by space). By doing so, you will get two levels up, which is root in this case. Use backslash `\` to return directly to root from any level no matter how deep within the context tree you are. If you want to get to a particular context in upper levels, simply use the appropriate number of `. .` commands to get to the desired level, using space as a separator. For example, if you want to get three levels higher, use `. . . . `. The path is relative to the current context. If the command is contained in the current context, do not enter a path. For example, to execute `GET ANTIVIRUS STATUS` enter:

```
GET ANTIVIRUS STATUS - if you are in the root context (command line shows `eShell>`)
GET STATUS - if you are in the context `ANTIVIRUS` (command line shows `eShell antivirus>`)  
.. GET STATUS - if you are in the context `ANTIVIRUS STARTUP` (command line shows `eShell antivirus startup>`) 
```

You can use single `. (dot) instead of two `. because single dot is an abbreviation of two dots.

**EXAMPLE**
Argument

An argument is an action which is performed for a particular command. For example, command `CLEAN-LEVEL` (located in `ANTIVIRUS REALTIME ENGINE`) can be used with following arguments:

- `no` - No cleaning
- `normal` - Normal cleaning
- `strict` - Strict cleaning

Another example are the arguments `ENABLED` or `DISABLED`, which are used to enable or disable a certain feature or functionality.

Abbreviated form / Shortened commands

eShell allows you to shorten contexts, commands and arguments (provided the argument is a switch or an alternative option). It is not possible to shorten a prefix or argument that are concrete values such as a number, name or path. You can use numbers `1` and `0` instead of enabled and disabled arguments.

**EXAMPLE**

```
set status enabled => set stat 1
set status disabled => set stat 0
```

Examples of the short form:

**EXAMPLE**

```
set status enabled => set stat en
add antivirus common scanner-excludes C:\path\file.ext => add ant com scann C:\path\file.ext
```

In a case where two commands or contexts start with the same letters (such as `ABOUT` and `ANTIVIRUS`, and you enter `A` as shortened command), eShell will not be able to decide which command of these two you want to run. An error message will display and list commands starting with "A" which you can choose from:

```
eShell>a
The following command is not unique: a
```

The following commands are available in this context:

- **ABOUT** - Shows information about program
- **ANTIVIRUS** - Changes to context antivirus

By adding one or more letters (for example, `AB` instead of just `A`) eShell will execute `ABOUT` command since it is unique now.

**NOTE**
When you want to be sure that a command executes the way you need, we recommend that you do not abbreviate commands, arguments, etc. and use the full form. This way it will execute exactly as you need and prevent unwanted mistakes. This is especially true for batch files / scripts.

Automatic completion

This new feature was introduced in eShell 2.0 and is very similar to automatic completion in Windows Command Prompt. While Windows Command Prompt completes file paths, eShell completes commands, context and operation names. Argument completion is not supported. When typing command simply, press Tab to complete or cycle through available variations. Press Shift + Tab to cycle backwards. Mixing abbreviated form and automatic completion is not supported. Use either one or the other. For example, when you type `antivir real scan` hitting Tab will do nothing. Instead, type `antivir` and then Tab to complete `antivirus`, continue typing `real + Tab` and `scan + Tab`. You can then cycle through all available variations: `scan-create`, `scan-execute`, `scan-open`, etc.

Aliases

An alias is an alternative name which can be used to execute a command (provided that the command has an alias assigned). There are a few default aliases:

```
(global) close - exit
(global) quit - exit
(global) bye - exit
warnlog - tools log events
virlog - tools log detections
antivirus on-demand log - tools log scans
```

"(global)" means that the command can be used anywhere regardless of current context. One command can have multiple aliases assigned, for example the command `EXIT` has aliases `CLOSE`, `QUIT` and `BYE`. When you want to exit eShell, you can use the `EXIT` command itself or any of its aliases. The alias `VIRLOG` is an alias for the command `DETECTIONS` which is located in the `TOOLS LOG` context. This way the detections command is available from the `ROOT` context, making it easier to access (you don't have to enter `TOOLS` and then `LOG` context and run it directly from `ROOT`).

eShell allows you to define your own aliases. Command `ALIAS` can be found in `UI ESHELL` context.

Password protected settings

ESET Mail Security settings can be protected by a password. You can set a password using GUI or eShell using the `set ui access lock-password`. You'll then have to enter this password interactively for certain commands (such as those that change settings or modify data). If you plan to work with eShell for a longer period of time and do not want to enter the password repeatedly, you can get eShell to remember the password using the `set password` command. Your password will then be filled-in automatically for each executed command that requires a password. It is remembered until you exit eShell, this means that you'll need to use `set password` again when you start a new session and want eShell to remember your password.

Guide / Help

When you run the `GUIDE` or `HELP` command, it will display a "first run" screen explaining how to use eShell. This command is available from the `ROOT` context (`eShell>`).

Command history

eShell keeps a history of previously executed commands. This applies only to the current eShell interactive session. Once you exit eShell, the command history will be dropped. Use the Up and Down arrow keys on your keyboard to navigate through the history. Once you find the command you were looking for, you can execute it again, or modify it without having to type in the entire command from the beginning.

CLS / Clear screen
The CLS command can be used to clear the screen. It works the same way as it does with Windows Command Prompt or similar command line interfaces.

**EXIT / CLOSE / QUIT / BYE**

To close or exit eShell, you can use any of these commands (EXIT, CLOSE, QUIT or BYE).

### 4.5.5.2 Commands

This section lists a few basic eShell commands with descriptions.

**NOTE**

Commands are not case sensitive, you can use uppercase (capital) or lowercase letters and the command will execute regardless.

Example commands (contained within the ROOT context):

**ABOUT**

Lists information about the program. It shows information such as:

- Name of your ESET security product installed and its version number.
- Operating system and basic hardware details.
- Username (including domain), Full computer name (FQDN, if your server is a member of a domain) and Seat name.
- Installed components of your ESET security product, including version number of each component.

**CONTEXT PATH:**

```plaintext
root
```

**PASSWORD**

Normally, to execute password-protected commands, you are prompted to type in a password for security reasons. This applies to commands such as those that disable antivirus protection and those that may affect ESET Mail Security configuration. You will be prompted for a password every time you execute such a command. You can define this password in order to avoid entering a password every time. It will be remembered by eShell and automatically entered when a password-protected command is executed.

**NOTE**

Your password only works for the current eShell interactive session. Once you exit eShell, this defined password will be dropped. When you start eShell again, the password needs to be defined again.

Defined password can also be used when running unsigned batch files or scripts. Make sure to set ESET Shell execution policy to Full access when running unsigned batch files. Here is an example of such a batch file:

```
eshell set password plain <yourpassword> "&" set status disabled
```

This concatenated command above defines a password and disables protection.

**IMPORTANT**

We recommend you to use signed batch files whenever possible. This way, you'll avoid having plain text passwords in the batch file (if using the method described above). See [Batch files / Scripting](#) (Signed batch files section) for more details.

**CONTEXT PATH:**
SYNTAX:

[get] | restore password
set password [plain <password>]

OPERATIONS:

get - Show password
set - Set or clear password
restore - Clear password

ARGUMENTS:

plain - Switch to enter password as parameter
password - Password

EXAMPLES:

set password plain <yourpassword> - Sets a password which will be used for password-protected commands
restore password - Clears password

EXAMPLES:

get password - Use this to see whether the password is configured or not (this only shows asterisks "*", it does not list the password itself), when no asterisks are visible, it means that there is no password set
set password plain <yourpassword> - Use this to set a defined password
restore password - This command clears the defined password

STATUS

Shows information about the current protection status of ESET Mail Security (similar to GUI).

CONTEXT PATH:

root

SYNTAX:

[get] | restore status
set status disabled | enabled

OPERATIONS:

get - Show antivirus protection status
set - Disable/Enable antivirus protection
restore - Restores default settings

ARGUMENTS:

disabled - Disable antivirus protection
enabled - Enable antivirus protection
EXAMPLES:

- `get status` - Shows current protection status
- `set status disabled` - Disables protection
- `restore status` - Restores protection to default setting (Enabled)

VIRLOG
This is an alias of the `DETECTIONS` command. It is useful when you need to view information about detected infiltrations.

WARNLOG
This is an alias of the `EVENTS` command. It is useful when you need to view information about various events.

4.5.5.3 Batch files / Scripting
You can use eShell as a powerful scripting tool for automation. To use a batch file with eShell, create one with an eShell and command in it.

```
EXAMPLE

eshell get antivirus status
```

You can also chain commands, which is sometimes necessary, for instance if you want to type a particular scheduled task, enter the following:

```
eshell select scheduler task 4 "&" get scheduler action
```

Item selection (task number 4 in this case) usually applies only to a currently running instance of eShell. If you were to run these two commands one after the other, the second command would fail with the error "No task selected or selected task no longer exists".

For security reasons, the execution policy is set to Limited Scripting by default. This allows you to use eShell as a monitoring tool, but it won't let you make configuration changes to ESET Mail Security by running a script. If you try executing a script with commands that can affect security, for example, by disabling protection, an Access Denied message will be displayed. We recommend that you use signed batch files to execute commands that make configuration changes.

To change configuration using a single command entered manually in the Windows Command Prompt, you must grant eShell full access (not recommended). To grant full access, use `ui eshell shell-execution-policy` in the Interactive mode of eShell itself, or via GUI in Advanced Setup (F5)> User interface > ESET Shell.

Signed batch files

eShell allows you to secure common batch files (*.bat) with a signature. Scripts are signed with the same password that is used for settings protection. In order to sign a script you need to enable settings protection first. This can be done via the GUI, or from within eShell using `set ui access lock-password` command. Once the settings protection password is set up you can start signing batch files.

**NOTE**
If you change your settings protection password, you must sign all scripts again, otherwise the scripts will fail to execute the following the password change. The password entered when signing a script must match the settings protection password on the target system.
To sign a batch file, run `sign <script.bat>` from the root context of eShell, where `script.bat` is the path to the script you want to sign. Enter and confirm the password that will be used for signing. This password must match your settings protection password. A signature is placed at the end of the batch file in the form of a comment. If this script has already been signed, the signature will be replaced with a new one.

**NOTE**
When you modify a previously signed batch file, it must be signed again.

To execute a signed batch file from a Windows Command Prompt or as a scheduled task, use following command:

```
eshell run <script.bat>
```

Where `script.bat` is the path to the batch file.

**EXAMPLE**

```
eshell run d:\myeShellScript.bat
```

### 4.5.6 ESET SysInspector

ESET SysInspector is an application that thoroughly inspects your computer and gathers detailed information about system components such as installed drivers and applications, network connections or important registry entries and assesses the risk level of each component. This information can help determine the cause of suspicious system behavior that may be due to software or hardware incompatibility or malware infection.

Click **Create** and enter a short **Comment** describing the log to be created. Wait until the ESET SysInspector log is generated (status will be shown as Created). Log creation may take some time depending on your hardware configuration and system data.

The ESET SysInspector window displays the following information about created logs:

- **Time** - The time of log creation.
- **Comment** - A short comment.
- **User** - The name of the user who created the log.
- **Status** - The status of log creation.

The following actions are available:

- **Show** - Opens the created log. You can also right-click a log and select Show from the context menu.
- **Compare** - Compares two existing logs.
- **Create** - Creates a new log. Enter a short comment describing the log to be created and click **Create**. Please wait until the ESET SysInspector log is complete (Status will be shown as Created).
- **Delete** - Removes selected logs from the list.

After right-clicking one or more selected logs, the following options are available from the context menu:

- **Show** - Opens the selected log in ESET SysInspector (same function as double-clicking a log).
- **Compare** - Compares two existing logs.
- **Create** - Creates a new log. Enter a short comment describing the log to be created and click **Create**. Please wait until the ESET SysInspector log is complete (Status will be shown as Created).
- **Delete** - Removes selected logs from the list.
- **Delete all** - Deletes all logs.
- **Export** - Exports the log to an `.xml` file or zipped `.xml`.
4.5.7 ESET SysRescue Live

ESET SysRescue Live is a utility that enables you to create a bootable disk containing one of the ESET Security solutions - ESET NOD32 Antivirus, ESET Smart Security or certain server-oriented products. The main advantage of ESET SysRescue Live is the fact that the ESET Security solution runs independent of the host operating system but has direct access to the disk and file system. This makes it possible to remove infiltrations which normally could not be deleted, for example, when the operating system is running, etc.

4.5.8 Scheduler

Scheduler manages and launches scheduled tasks according to defined parameters. You can see a list of all scheduled tasks in the form of a table which shows their parameters such as Task type and name, the launch time and last run when it was performed. You can also create new scheduled tasks by clicking Add task. To edit the configuration of an existing scheduled task click Edit button. Revert the list of scheduled tasks to the default settings, click Default and then Revert to default all changes that have been made will be lost and cannot be undone.

There is a set of predefined default tasks:

- Log maintenance
- Regular automatic update (use this task to update frequency)
- Automatic update after dial-up connection
- Automatic update after user logon
- Automatic startup file check (after user logs in)
- Automatic startup file check (after successful modules update)

**NOTE**
Select the appropriate check boxes to activate or deactivate tasks.
To perform the following actions, right-click a task:

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show task details</td>
<td>Displays detailed information about a scheduled task when you double-click or right-click the scheduled task.</td>
</tr>
<tr>
<td>Run now</td>
<td>Runs a selected scheduler task and perform the task immediately.</td>
</tr>
<tr>
<td>Add...</td>
<td>Launches a wizard that will help you create a new scheduler task.</td>
</tr>
<tr>
<td>Edit...</td>
<td>Edit the configuration of an existing scheduled task (both default and user-defined).</td>
</tr>
<tr>
<td>Delete</td>
<td>Deletes an existing task.</td>
</tr>
</tbody>
</table>
4.5.8.1 Scheduler - Add task

To create a new scheduled task:

1. Click **Add task**.
2. Enter a **Task name** and configure your custom scheduled task.
3. **Task type** - Select the applicable **Task type** from drop down menu.

**NOTE**
To deactivate a task, click the slide bar next to **Enabled**. To activate the task later, use the check box in the **Scheduler view**.

4. **Task Timing** - Select one of the options to define when you want your task to run. Depending on your choice, you will be prompted to choose a specific time, day, interval or an event.
5. **Skipped task** - If the task could not be run at the predefined time, you can specify when it will be performed.

6. **Run application** - If the task is scheduled to run an external application, choose an executable file from the directory tree.

7. If you need to make changes, click **Back** to return to previous step(s) and modify parameters.

8. Click **Finish** to create the task or apply changes.

The new scheduled task will appear in the **Scheduler view**.
4.5.8.1.1 Task type
The configuration wizard is different for each Task type of a scheduled task. Enter Task name and select your desired Task type from the drop-down menu:

- **Run external application** - Schedules the execution of an external application.
- **Log maintenance** - Log files also contains leftovers from deleted records. This task optimizes records in log files on a regular basis to work effectively.
- **System startup file check** - Checks files that are allowed to run at system startup or logon.
- **Create a computer status snapshot** - Creates an ESET SysInspector computer snapshot - gathers detailed information about system components (for example, drivers, applications) and assesses the risk level of each component.
- **On-demand computer scan** - Performs a computer scan of files and folders on your computer.
- **Update** - Schedules an update task to perform an update of detection engine and program modules.
- **Mailbox database scan** - Lets you schedule a database scan and choose items that will be scanned. It is basically an On-demand database scan.
- **Hyper-V scan** - Schedules a scan of the virtual disks within Hyper-V.

To deactivate a task once it is created, click the switch next to Enabled. To activate the task later, click the check box in the Scheduler view. Click Next to proceed to the next step.

4.5.8.1.2 Task timing
Select one of the following timing options:

- **Once** - The task will be performed only once at specified date and time. To run the task one time only, at a given moment. Specify the start date and time for one-time in Task execution.
- **Repeatedly** - The task will be performed at the specified time interval (in minutes). Specify the time at which the task will be executed every day in Task execution.
- **Daily** - The task will run repeatedly every day at the specified time.
- **Weekly** - The task will run one or more times a week, on the selected day(s) and time. To run the task repeatedly only in certain days of the week starting with specified day and time. Specify the start time in the Time of task execution. Select the day or days of week on which the task should be run.
- **Event triggered** - The task will be performed after a specified event.

If you enable Skip task when running on battery power, a task will not start if the system is running on batteries at the time the task should launch. For example, computers running on UPS.
4.5.8.1.3 Event triggered

When scheduling a task triggered by an event, you can specify the minimum interval between two completions of the task.

The task can be triggered by any of the following events:

- Every time the computer starts
- The first time the computer starts each day
- Dial-up connection to the Internet/VPN
- Successful module update
- Successful product update
- User logon - The task will deploy when the user logs on to the system. If you log on to your computer several times a day, choose 24 hours to perform the task only on the first logon of the day and then the next day.
- Threat detection

4.5.8.1.4 Run application

This task schedules the execution of an external application.

- Executable file - Choose an executable file from the directory tree, click browse (...) or enter the path manually.
- Work folder - Define the external application's working directory. All temporary files of the selected Executable file will be created within this directory.
- Parameters - Command line parameters for the application (optional).

4.5.8.1.5 Skipped task

If the task could not be run at the predefined time, you can specify when it will be performed:

- At the next scheduled time - The task will be executed at the specified time (for example after 24 hours).
- As soon as possible - The task will run as soon as possible, when the actions that prevent the task from executing are no longer valid.
- Immediately, if time since last run exceeds a specified value - Time since last run (hours) - After you select this option, your task will be always repeated after the specified amount of time (in hours).

4.5.8.1.6 Scheduled task overview

This dialog window displays detailed information about a scheduled task when you double-click the task in Scheduler view, or right-click the scheduled task and choose Show task details.
4.5.9 Submit samples for analysis

The sample submission dialog allows you to send a file or site to ESET for analysis. If you find a suspiciously behaving file on your computer or suspicious site on the Internet, submit it to the ESET Virus Lab for analysis. If the file turns out to be a malicious application or website, the detection will be added to an upcoming update.

To submit the file by email, compress the file(s) using a program like WinRAR or WinZip, protect the archive with the password infected and send it to samples@eset.com. Use a descriptive subject and enclose as much information about the file as possible (for example, the website you downloaded it from).

Before submitting a sample to ESET, verify it meets one or both of the following criteria:

- the file or website is not detected at all
- the file or website is incorrectly detected as a threat

If at least one of the requirements above is not met, you will not receive a response until further information is supplied.

Select the description that best fits your message from the Reason for submitting the sample drop-down menu:

- Suspicious file
- Suspicious site (a website that is infected by malware)
- False positive file (a file that is detected as infected, but it is not)
- False positive site
- Other

File/Site
The path to the file or website you intend to submit.

Contact email
This contact email is sent along with suspicious files to ESET, and may be used to contact you if further information is required for analysis. Entering a contact email is optional. You will not get a response from ESET, unless more information is required. This is because our servers receive tens of thousands of files every day, which makes it impossible to reply to all submissions.

Submit anonymously
Use the check box next to Submit anonymously to send suspicious file or website without entering your email address.

4.5.9.1 Suspicious file

Observed signs and symptoms of malware infection
Enter a description of the suspicious file behavior observed on your computer.

File origin (URL address or vendor)
Enter the file origin (source) and how you encountered this file.

Notes and additional information
Here you can enter additional info or a description that will help with the process of identifying the suspicious file.

NOTE
The first parameter - Observed signs and symptoms of malware infection - is required, but providing additional information will significantly help our laboratories with the identification process of samples.
4.5.9.2  Suspicious site

Select one of the following from the What’s wrong with the site drop-down menu:

Infected
A website that contains viruses or other malware distributed by various methods.

Phishing
Often used to gain access to sensitive data such as bank account numbers, PIN numbers and more. Read more about this type of attack in the glossary.

Scam
A swindle or a fraudulent website.

Other
Use this option if none of the options above apply to the site you are going to submit.

Notes and additional information
You can enter further information or a description that might help analyzing the suspicious website.

4.5.9.3  False positive file

We request that you submit files that are detected as an infection but are not infected to improve our antivirus and antispyware engine and help others to be protected. False positives (FP) may occur when a pattern of a file matches the same pattern contained in a detection engine.

NOTE
The first three parameters are required to identify legitimate applications and distinguish them from malicious code. By providing additional information, you will help our laboratories significantly in the identification process and in the processing of samples.

Application name and version
Program title and its version (for example number, alias or code name).

File origin (URL address or vendor)
Enter a file origin (source) and note how you encountered this file.

Application’s purpose
The general application description, type of application (for example, browser, media player, ...) and its functionality.

Notes and additional information
Here you can add additional information or descriptions that will help while processing the suspicious file.

4.5.9.4  False positive site

We encourage you to submit sites that are detected as an infected, scam or phishing sites but are not. False positives (FP) may occur when a pattern of a file matches the same pattern contained in a detection engine. Please provide this website to improve our antivirus and anti-phishing engine and help others to be protected.

Notes and additional information
Here you can add additional information or descriptions that will help while processing the suspicious file.
4.5.9.5  Other

Use this form if the file cannot be categorized as a **Suspicious file** or **False positive**.

**Reason for submitting the file**

Enter a detailed description and the reason for sending the file.

4.5.10  Quarantine

The main function of the quarantine is to safely store infected files. Files should be quarantined if they cannot be cleaned, if it is not safe or advisable to delete them, or if they are being falsely detected by ESET Mail Security. You can choose to quarantine any file. This is advisable if a file behaves suspiciously but is not detected by the antivirus scanner. Quarantined files can be submitted for analysis to the ESET Virus Lab.

Files stored in the quarantine folder can be viewed in a table that displays: the date and time of quarantine, the path to the original location of the infected file, its size in bytes, reason (for example, object added by user), and number of threats (for example, if it is an archive containing multiple infiltrations).

In the event an email message objects are put into the file quarantine, a path to the mailbox/folder/filename is displayed.

**Quarantining files**

ESET Mail Security automatically quarantines deleted files (if you have not disabled this option in the alert window). To manually quarantine any suspicious file, click **Quarantine**. Quarantined files will be removed from their original location. The context menu can also be used for this purpose; right-click in the **Quarantine** window and select **Quarantine**.

**Restoring from Quarantine**
Quarantined files can also be restored to their original location. Use the **Restore** feature, available from the context menu by right-clicking a given file in the Quarantine window, to do so. If a file is marked as a **potentially unwanted application** [1], the **Restore and exclude from scanning** option will be available. The context menu also offers the **Restore to...** option, which allows you to restore a file to a location other than the one from which it was deleted.

**NOTE**
If the program quarantines a harmless file by mistake, exclude the file from scanning after restoring it and send the file to ESET Customer Care.

**Submitting a file from the Quarantine**
If you have quarantined a suspicious file that was not detected by the program, or if a file was determined to be infected incorrectly (for example, by heuristic analysis of the code) and subsequently quarantined, please send the file to the ESET Virus Lab. To submit a file from quarantine, right-click the file and select **Submit for analysis** from the context menu.

**Deleting from Quarantine**
Right-click on a given item and select **Delete from Quarantine**. Or select the applicable item(s) and press **Delete** on your keyboard.
5. Server protection settings

ESET Mail Security provides significant protection for your IBM Domino server using handful of features. This section allows you to enable or disable integration of Mail transport protection, Database protection and On-demand database scan as well as edit Protected tasks or Protected partitions.

NOTE
If you disable Mail transport protection integration, it will affect incoming messages only. Outgoing messages will be scanned regardless, because these are protected with Database protection.

ESET Mail Security provides significant protection for your IBM Domino server using the following features:

- Antivirus and antispyware
- Antispam protection
- Anti-phishing protection
- Rules
- Mail transport protection
- Database protection
- On-demand database scan
- Mail quarantine
5.1 Protected tasks

You can configure which IBM Domino server tasks are being protected. You can see a list of all important server tasks protected by the ESET Mail Security. These are protected by default. However, you can disable protection for a specific task if needed. Once you've made changes, you need to restart affected tasks in order for the change to take effect.

To restart a task, you need to stop and start it. To stop it, use `tell [taskname] quit` command from within Domino Console. For example `tell router quit`. Then it needs to be started again, use `load [taskname]`, for example `load router`.

If you want to add other Domino tasks, click Add task at the bottom of the window and specify its name.
NOTE
When receiving email messages via IMAP and in case an infiltration is found in an attachment which is being cleaned, email message won’t appear in user's Inbox (Outlook) or will be listed in Inbox, but email body won’t be visible (Thunderbird). In order to see email message, which had its attachment cleaned, user needs to click other folder (for example Sent Items) and click Inbox again to reload messages. The email will appear properly this time and user will be able to open it.

5.2 Protected partitions

If you are using partitioned IBM Domino running multiple instances of the Domino server on a single machine, you can choose which of the Domino Partitions are protected by ESET Mail Security.

Once you've made changes, restart of the Domino Server service is needed for the settings to take effect.

5.3 Antivirus and antispyware

You can configure Antivirus and antispyware for the following types of protection:

Mail transport protection

If you disable Enable antivirus and antispyware mail transport protection, the ESET Mail Security plug-in for IBM Domino will not be unloaded from IBM Domino server task. It will only pass through the messages without scanning for viruses on the SMTP transport layer. Messages will still be scanned for viruses on the database layer and existing rules will be applied.
If you disable **Mail transport protection**, it will affect incoming messages only. Incoming messages won't be scanned. Outgoing messages will be scanned because these are protected with Database protection.

**Database protection**
If you disable **Enable antivirus and antispyware mailbox database protection**, the ESET Mail Security plug-in for IBM Domino will not be unloaded from the IBM Domino server task. Messages will not be scanned for viruses on database layer. This applies not only to internal messages, but also to outgoing messages as well.

**On-demand database scan**
If you do not want to run Antivirus scan when executing On-demand database scan, use the slider bar to disable this feature.

**ThreatSense parameters**
Modify scan parameters for the Mail transport protection, Database protection and On-demand database scan.
5.4 Antispam protection

Antispam protection for your mail server is enabled by default. To turn it off, click the slider bar next to Enable antispam protection.

**NOTE**
Disabling Antispam protection will not change the protection status. Even though the Antispam is disabled, you'll see the green You are protected is still displayed in the Monitoring section of the main GUI. Disabled Antispam is not considered a reduction in protection level.

Use Domino server whitelists to automatically bypass antispam protection

You can define whitelists (IP addresses or hostnames) which are automatically checked when the IBM Domino starts (and every minute thereafter). Exclusions are in place for antispam and greylisting according to values defined in the whitelists.

**NOTE**
It is necessary that the Antispam database be updated regularly for the Antispam module to provide the best possible protection. To allow regular updates to the Antispam database, make sure that ESET Mail Security has access to the correct IP addresses on the necessary ports. For further information on what IPs and ports to enable on your third-party firewall, see our KB article.

You'll find further settings for each feature in its own section:

- Filtering and verification
- Advanced settings
- Greylisting settings
- SPF and DKIM
5.4.1 Filtering and verification

You can configure **Approved**, **Blocked** and **Ignored** lists by specifying criteria such as IP address or range, domain name, etc. To add, modify or remove criteria, click **Edit** for the list you want to manage.

**NOTE**
IP addresses or Domains included in the **Ignored lists** will not be tested against RBL or DNSBL, but other antispam protection techniques will be applied.

Ignored lists should contain all internal infrastructure IP addresses / domain names. You can also include IP addresses / domain names of your ISP’s or external sending mail servers that are currently blacklisted by one of the RBL or DNSBL (ESET’s Blackhole List or third-party Blackhole List). This allows you to receive emails from sources included in the ignored lists, even though they are blacklisted. Such incoming emails are received and their content is further inspected by other antispam protection techniques.

<table>
<thead>
<tr>
<th>List Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved IP list</td>
<td>Automatically whitelists emails originating from specified IP addresses.</td>
</tr>
<tr>
<td>Blocked IP list</td>
<td>Automatically blocks emails originating from specified IP addresses.</td>
</tr>
<tr>
<td>Ignored IP list</td>
<td>List of IP addresses which will be ignored during classification.</td>
</tr>
<tr>
<td>Blocked Body Domain list</td>
<td>Blocks email messages that contain specified domain in the message body.</td>
</tr>
<tr>
<td>Ignored Body Domain list</td>
<td>Specified domains in the message body will be ignored during classification.</td>
</tr>
<tr>
<td>Blocked Body IP list</td>
<td>Blocks email messages that contain specified IP address in the message body.</td>
</tr>
<tr>
<td>Ignored Body IP list</td>
<td>Specified IP addresses in the message body will be ignored during classification.</td>
</tr>
<tr>
<td>Approved Senders list</td>
<td>Whitelists emails originating from specified sender.</td>
</tr>
<tr>
<td>Blocked Senders list</td>
<td>Blocks emails originating from specified sender.</td>
</tr>
<tr>
<td>Approved Domain to IP list</td>
<td>Whitelists emails originating from IP addresses that are resolved from specified domains in this list. SPF (Sender Policy Framework) records are being recognized when resolving IP addresses.</td>
</tr>
<tr>
<td>Blocked Domain to IP list</td>
<td>Blocks emails originating from IP addresses that are resolved from specified domains in this list. SPF records are being recognized when resolving IP addresses.</td>
</tr>
<tr>
<td>Ignored Domain to IP list</td>
<td>List of domains that resolves to IP addresses which in turn will not be checked during classification. SPF records are being recognized when resolving IP addresses.</td>
</tr>
<tr>
<td>Blocked countries list</td>
<td>Blocks emails from specified countries. Blocking is based on GeolP. If a spam message is sent from mail server with IP address listed in geolocation database for a country you have selected in the Blocked countries, it will automatically be marked as spam and an action will be taken according to <strong>Action to take on spam messages</strong> setting under Mail transport protection.</td>
</tr>
</tbody>
</table>

If you want to add more entries at once, click **Enter multiple values** in the **Add** pop-up window and choose what separator should be used, it can be Newline, Comma or Semicolon.
Objective: Exclude your infrastructure’s local IP addresses from antispam protection by adding them into the Ignore IP list

Navigate to Advanced setup (F5) > Server > Antispam protection > Filtering and verification.

Click Edit next to Ignored IP list.

Click Add and specify IP address range of your network infrastructure (IP address range format 1.1.1.1-1.1.1.255). You can keep adding more ranges (or single IP addresses) to the list, if required.

Use the slider bar Is part of internal infrastructure.

Greylisting
Specify Domain to IP whitelist or IP whitelist to automatically bypass Greylisting and SPF. You can see Log files in the SMTP protection log.

Use antispam lists to automatically bypass Greylisting and SPF
When enabled, Approved and Ignored IP list will be used together with IP whitelists to automatically bypass Greylisting and SPF.

IP whitelist
You can add IP address, IP address with mask, IP range. You can modify the list by clicking Add, Edit or Remove. Alternatively, you can Import or Export files. Use the browse button ... to select a location on your computer to open or save the configuration file.

Domain to IP whitelist
This option allows you to specify domains (e.g. domainname.local). To manage the list, use Add, Remove or Remove all. If you want to import your custom list from a file instead of adding every single entry manually, right-click in the middle of the window and select Import from the context menu, then browse for your file (.xml or .txt) that contains entries you want to add to the list. Likewise, if you need to export your existing list to a file, select Export from the context menu.

5.4.2 Advanced settings
These settings allow for messages to be verified by external servers (defined as RBL - Realtime Blackhole List and DNSBL - DNS Blocklist) according to their predetermined criteria.

Maximum number of verified addresses from Received: headers
You can limit the number of IP addresses that are checked by antispam. This concerns the IP addresses written in Received: from headers. The default value is 0 which is no limit.

Verify sender’s address against end-user blacklist
Email messages that are not sent from mail servers (computers that are not listed as mail servers) are verified to make sure the sender is not on the blacklist. This option is enabled by default. You can disable it if required, but messages not sent from mail servers will not be checked against the blacklist.

Additional RBL servers
Is a list of Realtime Blackhole List (RBL) servers which are queried when analyzing messages.

NOTE
When adding Additional RBL servers, enter the server’s domain name (for example. sbl.spamhaus.org). It will work with any return codes that are supported by the server.
Alternatively, you can specify a server name with a return code in the format `server:response` (for example, `zen.spamhaus.org:127.0.0.4`). When using this format, we recommend that you add each server name and return code separately, so that you'll have a complete list. Click **Enter multiple values** in the **Add** window to specify all server names with their return codes. Entries should look like the example below, your actual RBL server host names and return codes may vary:

**RBL query execution limit (in seconds)**
This option allows you to set a maximum time for RBL queries. RBL responses are only used from those RBL servers which respond in time. If the value is set to "0" no timeout is enforced.

**Maximum number of verified addresses against RBL**
This option allows you to limit how many IP addresses are queried against the RBL server. Note that the total number of RBL queries will be the number of IP addresses in the Received: headers (up to a maximum of RBL maxcheck IP addresses) multiplied by the number of RBL servers specified in RBL list. If the value is set to "0" an unlimited number of received headers are checked. Note that IPs on the ignored IP list do not count towards the RBL IP addresses limit.

**Additional DNSBL servers**
Is a list of DNS Blocklist (DNSBL) servers which are queried with domains and IP addresses extracted from the message body.

**NOTE**
When adding Additional DNSBL servers, enter the server's domain name (for example, dbl.spamhaus.org). It will work with any return codes that are supported by the server.

Alternatively, you can specify a server name with a return code in a form of server:response (for example, zen.spamhaus.org:127.0.0.4). In this case we recommend that you add each server name and return code separately, so that you have a complete list. Click Enter multiple values in the Add window to specify all server names with their return codes. Entries should look like the example below, your actual DNSBL server host names and return codes may vary:

Add

Allowed input: server or server:response

zen.spamhaus.org:127.0.0.2
zen.spamhaus.org:127.0.0.3
zen.spamhaus.org:127.0.0.4
dbl.spamhaus.org:127.0.1.2
dbl.spamhaus.org:127.0.1.3

Separator for multiple values Newline

DNSBL query execution limit (in seconds)
Allows you to set a maximum timeout for all DNSBL queries to complete.

Maximum number of verified addresses against DNSBL
Allows you to limit how many IP addresses are queried against the DNS Blocklist server.

Maximum number of verified domains against DNSBL
Allows you to limit how many domains are queried against the DNS Blocklist server.

Maximum message scan size (kB)
Limits Antispam scan for messages larger than the specified value. These messages will not be scanned by the Antispam engine. Default value 0 means unlimited message size scan. Normally, there is no reason to limit Antispam scan, but if you need to limit it in certain situations, change the value to required size. The smallest
message size that can be excluded from Antispam scan is 12 kB. If you set the value from 1 to 12, it will always limit messages sized 12 kB and larger, even if specified value is lower than 12.

Enable temporary rejecting of undetermined messages
If the Antispam engine is not able to determine whether the message is or isn't SPAM, which means the message has some suspicious SPAM characteristics but not enough to be marked as SPAM (for example the first email of a campaign, or an email originating from an IP range with mixed ratings), then this setting (when enabled) allows ESET Mail Security to temporarily reject the message - the same way Greylisting does - and keep rejecting it for a specific time period, until:
   a) The interval has elapsed and the message is accepted upon the next delivery attempt. This message is left with the initial classification (SPAM or HAM).
   b) Antispam cloud gathers enough data and is able to properly classify the message before the interval elapses.

The rejected message is not kept by ESET Mail Security as it must be re-sent by the sending mail server in accordance with the SMTP RFC.

Enable submitting of temporary rejected messages for analysis
The message content is automatically sent for further analysis. This helps improve message classification of future email messages.

**IMPORTANT**
It is possible that temporarily rejected messages which are sent for analysis could in fact be HAM. In rare cases, temporarily rejected messages may be used for manual evaluation. Enable this feature only if there are no risks of leaking any potentially sensitive data.

5.4.3 Greylisting settings
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 Greylisting method takes into account the Approved IP list, the Ignored IP list, Safe Senders and the Allow IP lists on the Exchange server as well as 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.

Use only domain part of sender address
Ignores sender's name in the email address; only domain is taken into account.

Synchronize greylisting databases across the ESET cluster
Greylisting database entries are shared in real time between the servers in ESET cluster. When on one of the servers receives a message that is processed by greylisting, this information is broadcast by ESET Mail Security over to the rest of the nodes in ESET cluster.

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.

SMTP response (for temporarily denied connections)

Specify a Response code, Status code and Response message, which define the SMTP temporary denial response sent to the SMTP server if a message is refused. Example of a SMTP reject response message:

<table>
<thead>
<tr>
<th>Response code</th>
<th>Status code</th>
<th>Response message</th>
</tr>
</thead>
<tbody>
<tr>
<td>451</td>
<td>4.7.1</td>
<td>Please try again later</td>
</tr>
</tbody>
</table>

**WARNING**
Incorrect syntax in SMTP response codes may lead to the malfunction of Greylisting protection. As a result, spam messages may be delivered to clients or messages may not be delivered at all.

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

All messages that have been evaluated using the greylisting method are recorded in the SMTP protection log.

5.4.4 SPF and DKIM

Sender Policy Framework (SPF) and DomainKeys Identified Mail (DKIM) are used as validation methods to check that an email message claimed to come from a specific domain was authorized by the owner of that domain. This helps protect recipients from receiving spoofed email messages. ESET Mail Security also uses Domain-based Message Authentication (DMARC), Reporting and Conformance evaluation to further enhance upon SPF and DKIM.

**SPF**

Check is performed to verify if an email was sent by a legitimate sender. A DNS lookup for SPF records of the sender's domain is performed to get a list of IP addresses. If any of the IP addresses from SPF records matches the actual IP address of the sender, the result of the SPF check is a Pass. If the sender's actual IP address does not match, the result is a Fail. However, not all domains have SPF records specified in DNS. If there are no SPF records present in DNS, the result is Not available. A DNS request may timeout occasionally, in which case the result is also Not available.

**DKIM**

Is used to prevent email message spoofing by adding a digital signature to the headers of outgoing messages according to the DKIM standard. This involves using a private domain key to encrypt your domain's outgoing mail headers, and adding a public version of the key to the domain's DNS records. Recipient servers can then retrieve the public key to decrypt incoming headers and verify that the message really comes from your domain and hasn't been changed along the way.

**DMARC**

Is built on top of the two existing mechanisms, SPF and DKIM. You can use Mail Transport protection rules to evaluate DMARC result and Apply DMARC policy action.
Auto detect DNS servers
Uses settings of your network adapter.

DNS server IP address
If you want to use specific DNS servers for SPF and DKIM, enter the IP address (in IPv4 or IPv6 format) of the DNS server you want to use.

DNS query timeout (seconds)
Specify timeout for DNS reply.

Automatically reject messages if SPF check failed
If your SPF check results in an immediate fail, an email message can be rejected before it is downloaded.

EXAMPLE
SPF check is done on the SMTP layer. However, it can be rejected either automatically on the SMTP layer or during rules evaluation.

It is not possible to log rejected messages into the Events log if you use automatic rejection on the SMTP layer. This is because logging is done by rule action and the automatic reject is done directly on the SMTP layer which happens before rule evaluation. Since the messages will get rejected before rules are evaluated, there is no information to be logged at the time of rule evaluation.

You can log rejected messages, but only if you reject the messages by a rule action. To reject messages that did not pass SPF check and log such rejected messages, disable Automatically reject messages if SPF check failed and create the following rule for Mail transport protection:
**Condition**

Type: SPF result  
Operation: is  
Parameter: Failed

**Actions**

Type: Reject message  
Type: Log to events

---

**Use From header if MAIL FROM is empty**

The header MAIL FROM can be empty, and can also be easily spoofed. When this option is enabled and MAIL FROM is empty, the message is downloaded and the header From: is used instead.

**Automatically bypass Greylisting if SPF check passed**

There is no reason to use Greylisting for a message if its SPF check result was Pass.

**SMTP reject response**

You can specify a **Response code**, **Status code** and **Response message** which define the SMTP temporary denial response sent to the SMTP server if a message is refused. You can enter a response message in the following format:

<table>
<thead>
<tr>
<th>Response code</th>
<th>Status code</th>
<th>Response message</th>
</tr>
</thead>
<tbody>
<tr>
<td>550</td>
<td>5.7.1</td>
<td>SPF check failed</td>
</tr>
</tbody>
</table>

---

### 5.5 Anti-Phishing mail protection

Phishing is an attempt to obtain sensitive information such as usernames, passwords, bank account or credit card details and PIN numbers via email or web pages disguised as a trustworthy entity. This activity is usually done for malicious reasons. It is a form of social engineering (manipulation of users in order to obtain confidential information).

ESET Mail Security includes anti-phishing protection which prevents users from accessing web pages known for phishing. In case of email messages that may contain links which lead to phishing web pages, ESET Mail Security uses sophisticated parser that searches message body and subject of incoming email messages to identify such links (URL's). The links are compared against phishing database. If the result of evaluation is positive, email is considered to be a phishing message and ESET Mail Security deals with it according to **Action to take on phishing message** setting for each protection layer (Mail transport protection, Mailbox database protection and On-demand database scan).

Supported email body format standards:

- Plain text
- HTML
- TNEF

Phishing messages might contain **HTML entities** to obfuscate anti-phishing engine. The anti-phishing protection also parses and translates symbols of HTML entities to find and correctly evaluate obfuscated URL's.

A single character can be represented in different forms. For example, a period can be represented in the following forms:
<table>
<thead>
<tr>
<th>How links usually appear in the email message to the user</th>
<th>Value</th>
<th>Obsfuscated links contained in the message body</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://www.example-phishing-domain.com/Fraud">http://www.example-phishing-domain.com/Fraud</a></td>
<td>&amp;perio d;</td>
<td><a href="http://www.example-phishing-domain&amp;period;com/Fraud">http://www.example-phishing-domain&amp;period;com/Fraud</a></td>
<td>entity name</td>
</tr>
<tr>
<td><a href="http://www.example-phishing-domain.com/Fraud">http://www.example-phishing-domain.com/Fraud</a></td>
<td>&amp;x002E;</td>
<td><a href="http://www.example-phishing-domain&amp;#x002E;com/Fraud">http://www.example-phishing-domain&amp;#x002E;com/Fraud</a></td>
<td>entity hexadecimal number</td>
</tr>
<tr>
<td><a href="http://www.example-phishing-domain.com/Fraud">http://www.example-phishing-domain.com/Fraud</a></td>
<td>&amp;46;</td>
<td><a href="http://www.example-phishing-domain&amp;#46;com/Fraud">http://www.example-phishing-domain&amp;#46;com/Fraud</a></td>
<td>entity decimal number</td>
</tr>
</tbody>
</table>

To see the activity of Anti-phishing mail protection, check Log files > Mail server protection log. It will contains information about email messages and their phishing links that were found.

**Report a phishing site**

Click Report opens a window where you can report the phishing site for analysis.

**5.6 Rules**

Allows you to manually define email filtering conditions and actions to take with filtered emails. There are three separate sets of rules, one for each:

- Mail transport protection
- Database protection
- On-demand database scan

**IMPORTANT**

Incorrectly defined rules for On-demand database scan can cause irreversible changes to Mailbox databases. Always make sure you have the most recent backup of your Mailbox databases before running On-demand database scan with rules in place for the first time. Also, we highly recommend you to verify the rules are running according to expectations.

For verification, define rules with Log to events action only, because any other actions can make changes to your Mailbox databases. Once verified, you can add destructive rule actions such as Delete attachment.

Rules are classified into three levels and are evaluated in this order:

- Filtering rules (1) - rule evaluated before antispam and antivirus scan
- Attachment processing rules (2) - rule evaluated during antivirus scan
- Result processing rules (3) - rule evaluated after antivirus scan

Rules with the same level are evaluated in the same order as they are displayed in the rules window. You can only change the rule order for rules of the same level. When you have multiple filtering rules, you can change the order they are applied in. You cannot change their order by putting Attachment processing rules before Filtering rules, the Up/Down buttons will not be available. In other words, you cannot mix rules of different Levels.

The Hits column displays the number of times the rule was successfully applied. Deselecting a check box (to the left of each rule name) deactivates the corresponding rule until you select the check box again.
Click **Reset** the counter for the selected rule (the **Hits** column). Select **View** allows you to view a configuration assigned from ESET Security Management Center policy.

### IMPORTANT
Normally, if a rule's conditions are met, rules evaluation stops for further rules with lower priority. However, if required, you can use special **Rule action** called **Evaluate other rules** to let the evaluation to continue.

Rules are checked against a message when it is processed by the Mail transport protection, Database protection or On-demand database scan. Each protection layer has a separate set of rules.

### Rule wizard

1. Click **Add** and a **Rule condition** window will appear where you can select condition type, operation and value. Define condition(s) first, then action(s).

### IMPORTANT
You can define multiple conditions. If you do so, all of the conditions must be met for the rule to be applied. All conditions are connected using the logical operator **AND**. Even if most of the conditions are met and only a single one isn't, the condition evaluation result is considered **not met** and the rule's action cannot be taken.

1. Click **Add** (at the bottom) to add a **Rule action**.

### NOTE
It is possible to add multiple actions for one rule.
3. Once conditions and actions are defined, type a **Name** for the rule (something that you'll recognize the rule by), this name will be displayed in the Rules list. **Name** is a mandatory field, if it is highlighted in red, type a rule name into the text box and click **OK** to create the rule. Red highlight does not disappear even though you've entered rule name, it disappears only after you've clicked **OK**.

4. If you want to prepare rules but plan to use them later, you can click the slider bar next to **Active** to deactivate the rule. To activate the rule, select the check box next to the rule you want to activate.

**NOTE**
If a new rule is added or an existing rule has been modified, message rescan will automatically start using the new/modified rules.

See **Rule examples** that show how rules can be used.

If you disable **Antivirus protection** in Setup menu or **Advanced setting (F5) > Server > Antivirus and Antispyware** for Mail transport and Database protection layer, it will affect these rule **conditions**:

- Attachment name
- Attachment size
- Attachment type
- Antivirus scan result
- Attachment is password protected
- Attachment is damaged archive
- Contains damaged archive
- Contains password protected archive

Also, if you disable **Antivirus protection** in Setup menu or **Advanced setting (F5) > Server > Antivirus and Antispyware** for Mail transport layer, it will affect these rule **actions**:

- Quarantine attachment
- Delete attachment
5.6.1 Rule condition

This wizard lets you add conditions for a rule. Select condition Type and an Operation from the drop-down list. The list of operations changes depending on what rule type you've chosen. Then select a Parameter. Parameter fields will change depending on rule type and operation. For example, choose File size > is greater than and under Parameter specify 10 MB. Using these settings, any file that is larger than 10 MB will be processed using rule actions you have specified. For this reason you should specify the action that is taken when a given rule is triggered if you have not done so when setting parameters for that rule.

Condition type has associated the following Operations:

- **String**: is, is not, contains, doesn't contain, matches, doesn't match, is in, is not in, matches regular expression, does not match regular expression
- **Number**: is less than, is greater than, is between
- **Text**: contains, doesn't contain, matches, doesn't match
- **Date-time**: is less than, is greater than, is between
- **Enum**: is, is not, is in, is not in

Alternatively, you can specify Regular expression, select Operation: matches regular expression or does not match regular expression.

---

**NOTE**

ESET Mail Security uses std::regex. Refer to ECMAScript syntax for constructing regular expressions. Regular expression syntax is not case sensitive.

---

**IMPORTANT**

You can define multiple conditions. If you do so, all of the conditions must be met for the rule to be applied. All conditions are connected using the logical operator AND. Even if most of the conditions are met and only a single one isn't, the condition evaluation result is considered not met and the rule's action cannot be taken.

---

The following conditions are available for Mail transport protection, Database protection and On-demand database scan (some of the options might not display depending on your previously selected conditions):
<table>
<thead>
<tr>
<th>Condition name</th>
<th>Mail transport protection</th>
<th>Database protection</th>
<th>On-demand database scan</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Applies to messages which contain or do not contain a specific string (or a regular expression) in the subject.</td>
</tr>
<tr>
<td>Sender</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>Applies to messages sent by a specific sender.</td>
</tr>
<tr>
<td>SMTP sender</td>
<td>✓</td>
<td></td>
<td></td>
<td>MAIL FROM envelope attribute used during SMTP connection. Also used for SPF verification.</td>
</tr>
<tr>
<td>Sender's IP address</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>Applies to messages sent from a specific IP address.</td>
</tr>
<tr>
<td>Sender's domain</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Applies to messages from a sender with a specific domain in their email addresses.</td>
</tr>
<tr>
<td>SMTP sender's domain</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>Applies to messages from a sender with a specific domain in their email addresses.</td>
</tr>
<tr>
<td>From header - address</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>&quot;From:&quot; value contained in message headers. This is the address that is visible to the recipient, but no checks are done that the sending system is authorized to send on behalf of that address. It is often used for spoofing the sender.</td>
</tr>
<tr>
<td>From header - display name</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>&quot;From:&quot; value contained in message headers. This is the display name that is visible to the recipient, but no checks are done that the sending system is authorized to send on behalf of that address. It is often used for spoofing the sender.</td>
</tr>
<tr>
<td>Recipient</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Applies to messages sent to a specific recipient.</td>
</tr>
<tr>
<td>Database name</td>
<td></td>
<td>✓</td>
<td></td>
<td>Applies to messages containing data with a specific name.</td>
</tr>
<tr>
<td>Attachment name</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Applies to messages containing attachments with a specific name.</td>
</tr>
<tr>
<td>Attachment size</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Applies to messages with an attachment that does not meet a specified size, is within a specified size range, or exceeds a specified size.</td>
</tr>
<tr>
<td>Attachment type</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Applies to messages with a specific file type attached. File types are categorized in groups for easy selection, you can select multiple file types or whole categories.</td>
</tr>
<tr>
<td>Message body</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Message body is searched for specified phrase. You can use Strip HTML tags feature to get rid off HTML tags, attributes and values, and preserve text only. The body text will then be searched.</td>
</tr>
<tr>
<td>Message size</td>
<td>✓</td>
<td></td>
<td>X</td>
<td>Applies to messages with attachments that do not meet a specified size, are within a specified size range or exceed a specified size.</td>
</tr>
<tr>
<td>Message headers</td>
<td>✓</td>
<td></td>
<td>X</td>
<td>Applies to messages with specific data present in the message header.</td>
</tr>
</tbody>
</table>
5.6.2 Rule action

You can add actions that will be taken with messages and/or attachments that match rule conditions.

NOTE
It is possible to add multiple actions for one rule.

The list of available actions for Mail transport protection, Database protection and On-demand database scan (some of the options might not show up depending on your selected conditions):

<table>
<thead>
<tr>
<th>Action name</th>
<th>Mail transport protection</th>
<th>Database protection</th>
<th>On-demand database scan</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarantine note</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Set quarantine note to take if cleaning not possible.</td>
</tr>
<tr>
<td>Quarantine message</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>The message will not be delivered to the recipient and will be moved to the mail quarantine.</td>
</tr>
<tr>
<td>Quarantine attachment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Puts email attachment into file quarantine, email will be delivered to the recipient with the attachment truncated to zero length.</td>
</tr>
<tr>
<td>Delete attachment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Deletes a message attachment the message will be delivered to the recipient without the attachment.</td>
</tr>
<tr>
<td>Reject message</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>Deletes a message. For incoming emails received via SMTP a NDR (Non-Delivery Report) should be generated by the sending server.</td>
</tr>
<tr>
<td>Drop message silently</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>Deletes a message without generating a NDR.</td>
</tr>
<tr>
<td>Send event notification to administrator</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Sends event notifications to a recipient specified in Email notifications. You need to enable Send event notification by email feature. You can then customize the format of event messages (use the tooltip for suggestions) while creating the rule. Also, you can select verbosity for event messages, however this depends on the minimum verbosity setting in Email notifications section.</td>
</tr>
<tr>
<td>Skip Antispam scan</td>
<td>✓</td>
<td>×</td>
<td>×</td>
<td>Message will not be scanned by the Antispam engine.</td>
</tr>
<tr>
<td>Skip Antivirus scan</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Message will not be scanned by the Antivirus engine.</td>
</tr>
<tr>
<td>Skip Anti-Phishing scan</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Message will not be parsed by the Anti-Phishing protection.</td>
</tr>
<tr>
<td>Evaluate other rules</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Allows the evaluation of other rules, enabling the user to define multiple sets of conditions and multiple actions to take given the conditions.</td>
</tr>
<tr>
<td>Action name</td>
<td>Mail transport protection</td>
<td>Database protection</td>
<td>On-demand database scan</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------</td>
<td>---------------------</td>
<td>-------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Log to events</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>Writes information about the applied rule to the program log and define the format of event messages (use the tooltip for suggestions).</td>
</tr>
<tr>
<td>Add header field</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>Adds a custom string to a message header.</td>
</tr>
<tr>
<td>Remove header field</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>Removes fields from message header according to specified parameters.</td>
</tr>
<tr>
<td>Add subject prefix</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>Adds a prefix to a subject.</td>
</tr>
<tr>
<td>Replace attachment with action information</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>Removes an attachment and adds information about action taken with the attachment to the email body.</td>
</tr>
<tr>
<td>Delete note</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>Delete an infected note.</td>
</tr>
<tr>
<td>Move note to trash</td>
<td>X</td>
<td>✓</td>
<td>✓</td>
<td>Puts note into the trash folder on the email client's side.</td>
</tr>
<tr>
<td>Apply DMARC policy</td>
<td>✓</td>
<td>X</td>
<td>X</td>
<td>If a DMARC result condition is met, the email message is handled according to the policy specified in the DMARC DNS record for the sender's domain.</td>
</tr>
</tbody>
</table>

### 5.7 Rule examples

- Quarantine messages that contain malware or attachment that is password protected, encrypted or damaged

**EXAMPLE**

Objective: Quarantine messages that contain malware or attachment that is password protected, encrypted or damaged

Create the following rule for Mail transport protection:

**Condition**

Type: Antivirus scan result  
Operation: is not  
Parameter: Clean

**Action**

Type: Quarantine message

- Move messages that failed SPF check to a Junk folder
EXAMPLE

Objective: Move messages that failed SPF check to a Junk folder

Create the following rule for Mail transport protection:

**Condition**
- **Type:** SPF result
- **Operation:** is
- **Parameter:** Fail

**Action**
- **Type:** Set SCL value
- **Value:** 5 (Set the value according to SCLJunkThreshold parameter of Get-OrganizationConfig cmdlet of your Exchange server. For more details, see SCL threshold actions article)

EXAMPLE

Objective: Drop messages from specific senders

Create the following rule for Mail transport protection:

**Condition**
- **Type:** Sender
- **Operation:** is / is one of
- **Parameter:** spammer1@domain.com, spammer2@domain.com

**Action**
- **Type:** Drop message silently

EXAMPLE

Objective: Customize predefined rule

Details: Allow archive attachments in messages from specified IP addresses (in case of internal systems, for example) while using Forbidden archive file attachments rule

Open Mail transport protection rule set, select Forbidden archive file attachments and click Edit.

**Condition**
- **Type:** Sender's IP address
- **Operation:** is not / is not any
- **Parameter:** 1.1.1.2, 1.1.1.50-1.1.1.99

EXAMPLE

Objective: Customize predefined rule

Details: Allow archive attachments in messages from specified IP addresses (in case of internal systems, for example) while using Forbidden archive file attachments rule

Open Mail transport protection rule set, select Forbidden archive file attachments and click Edit.

**Condition**
- **Type:** Sender's IP address
- **Operation:** is not / is not any
- **Parameter:** 1.1.1.2, 1.1.1.50-1.1.1.99

EXAMPLE

Objective: Move messages that failed SPF check to a Junk folder

Create the following rule for Mail transport protection:

**Condition**
- **Type:** SPF result
- **Operation:** is
- **Parameter:** Fail

**Action**
- **Type:** Set SCL value
- **Value:** 5 (Set the value according to SCLJunkThreshold parameter of Get-OrganizationConfig cmdlet of your Exchange server. For more details, see SCL threshold actions article)

EXAMPLE

Objective: Drop messages from specific senders

Create the following rule for Mail transport protection:

**Condition**
- **Type:** Sender
- **Operation:** is / is one of
- **Parameter:** spammer1@domain.com, spammer2@domain.com

**Action**
- **Type:** Drop message silently

EXAMPLE

Objective: Customize predefined rule

Details: Allow archive attachments in messages from specified IP addresses (in case of internal systems, for example) while using Forbidden archive file attachments rule

Open Mail transport protection rule set, select Forbidden archive file attachments and click Edit.

**Condition**
- **Type:** Sender's IP address
- **Operation:** is not / is not any
- **Parameter:** 1.1.1.2, 1.1.1.50-1.1.1.99
Objective: Message body

Create the following rule for **Mail transport protection**:

**Condition**
- **Type**: Message body
- **Operation**: contains/contains one of, click Add type web site URL or part of URL

**Action**
- **Type**: Quarantine message

---

**Store messages for non-existent recipients**

**EXAMPLE**

Objective: Store messages for non-existent recipients

Details: If you want to have all messages to non-existent recipients quarantined (regardless of being marked by Antivirus or Antispam protection)

**Condition**
- **Type**: Recipient validation result
- **Operation**: is
- **Parameter**: Contains invalid recipient

**Action**
- **Type**: Quarantine message

---

### 5.8 Mail transport protection

You can configure actions for detected threats on the transport layer for each ESET Mail Security module (Antivirus, Anti-phishing and Antispam) separately.

**Actions to take if cleaning not possible:**

- **No action** - retain infected messages that cannot be cleaned
- **Quarantine message** - send infected messages to the quarantine mailbox
- **Reject message** - reject an infected message
- **Drop message silently** - deletes messages without sending NDR (Non-Delivery Report)

**NOTE**

If you select **No action** and at the same time have **Cleaning level** set to **No cleaning** in ThreatSense parameters of Antivirus and antispyware, then the **protection status** will change to yellow. This is because it is a security risk and we do not recommend that you use this combination. Change one or the other setting in order to achieve a good level of protection.

**Action to take on phishing message:**

- **No action** - Keep the message even if it is marked as phish
- **Quarantine message** - Puts messages marked as phish to the quarantine mailbox
- **Reject message** - Reject messages marked as phish
- **Drop message silently** - Delete messages without sending NDR (Non-Delivery Report)
Antispam action on transport layer can be set under **Action to take on spam messages**:

- **No action** - keep the message even if it is marked as spam
- **Quarantine message** - send messages marked as spam to the quarantine mailbox
- **Reject message** - reject messages marked as spam
- **Drop message silently** - delete messages without sending NDR (Non-Delivery Report)

**SMTP Reject Response**

You can specify a **Response code**, **Status code** and **Response message** which define the SMTP temporary denial response sent to the SMTP server if a message is refused. You can enter a response message in the following format:

<table>
<thead>
<tr>
<th>Response code</th>
<th>Status code</th>
<th>Response message</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>2.5.0</td>
<td>Requested mail action okay, completed</td>
</tr>
<tr>
<td>451</td>
<td>4.5.1</td>
<td>Requested action aborted: local error in processing</td>
</tr>
<tr>
<td>550</td>
<td>5.5.0</td>
<td>Requested action not taken: mailbox unavailable</td>
</tr>
<tr>
<td>554</td>
<td>5.6.0</td>
<td>Invalid content</td>
</tr>
</tbody>
</table>

**NOTE**

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

**Write scan results to message headers**

When enabled, scan results are written into message headers. These message headers start with **X_ESET** making them easy to recognize (for example **X_EsetResult** or **X_ESET_Antispam**).

**Add notification to the body of scanned messages** offers three options:

- **Do not append to messages** - Information will not be added.
- **Append to infected messages only** - Affect only infected messages.
- **Append to all messages** (doesn’t apply to internal messages) - All messages will be marked.

**Add note to the subject of infected messages**

When enabled, 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 (predefined default text is \[found threat %VIRUSNAME%\]). This modification can be used to automate filtering of infected messages by filtering emails with a specific subject, for example using **rules** or alternatively on the client side (if supported by the email client) to put such email messages into a separate folder.

**Add note to the subject of spam messages**

When enabled, ESET Mail Security will append a notification tag to the email subject with the value defined in the **Template added to the subject of spam messages** text field (predefined default text it \[SPAM\]). This modification can be used to automate spam filtering by filtering emails with a specific subject, for example using **rules** or alternatively on a client side (if supported by the email client) to put such email messages into a separate folder.

**Template added to the subject of phish 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 phish messages** text field (predefined default text it \[PHISH\]). This modification can be
used to automate spam filtering by filtering emails with a specific subject, for example using rules or alternatively on a client side (if supported by the email client) to put such email messages into a separate folder.

NOTE
You can also use system variables when editing text which will be added to the subject.

5.8.1 Mail transport advanced settings
You can customize SMTP task configuration:

- Search for sender’s originating IP address in headers - If enabled, ESET Mail Security looks for originating IP address in message headers so that different protection modules (Antispam and others) can use it. In case your organization is separated from the internet by a Proxy, Gateway or Edge Transport Server, email massages appear to arrive from single IP address (usually an internal one). It is common that on the outside server (for example Edge Transport in DMZ) where senders IP address is known, this IP address is written into the message headers of email message that is being received. Value specified in Header with the originating IP field below is the header that ESET Mail Security looks for in message headers.

- Header with the originating IP - Is the header that ESET Mail Security looks for in message headers. Default is X-Originating-IP, but if you are using third party or custom tools that use different header, change it to an appropriate one.

5.9 Database protection
Settings for database protection. The monitoring of database communication (reading/writing) is enabled by default.

Action to take if cleaning not possible:

- No action - Take no action on the infected content of the message.
- Quarantine note - Sends the note to the quarantine (eQuarantine.nsf by default).
- Delete object - Deletes only the infected object from the note. This does not apply to rfc notes - they can only be deleted completely.
- Replace content with action information - You can choose to replace content of the infected object with information about the infection (and the action taken) in the note.
- Delete note - The whole note is deleted.
- Move note to trash - Infected note is placed into trash of the Notes client.

Action to take on phishing message:

- No action - No changes in message will apply
- Quarantine note - Sends the note to the quarantine (eQuarantine.nsf by default).
- Delete note - Message will be deleted
- Move note to trash - Infected note is placed into trash of the Notes client.

Prevent repeated scanning
Once the note has been scanned, it will not be scanned again until ESET Mail Security is updated with a new virus signature database or a rule change.

Scan OLE objects
If this option is selected, the antivirus protection will scan OLE (Object linking and embedding) objects/documents.

Max file size limit
Maximum size limit for files that will be processed by ESET Mail Security.
Databases excluded from scan
Select databases which will be completely excluded from Antivirus and antispyware scanning and from filtering by user-defined rules. Be careful about which databases you exclude because exclusions represent a potential security risk.

Write scan result to infected note
In case of infected note, scan result information is written into the note headers (X-EsetId, X-EsetResult).

NOTE
Encrypted emails and documents are not scanned.

5.9.1 Database excluded from scan
Select databases which will be completely excluded from Antivirus and antispyware scanning and from filtering by user-defined rules. By default, the server databases Names.nsf, Admin4.nsf and Log.nsf are excluded. You can add excluded databases by selecting them. Be careful about which databases you exclude because exclusions represent a potential security risk.

5.10 On-demand database scan
Number of scan threads
Specify how many threads should ESET Mail Security use when scanning the databases. The higher the number, the better the performance. However, this has an effect on how much resources are used. If you configure On-demand database scan to use too many threads, it may put too much of a load on your system, which in turn might slow down other processes or even the whole system. The default value is set to 4 scan threads.

Scan soft-deleted notes
If user soft-deletes a note, it is moved to a Trash folder. Normally, soft-deleted notes are not being scanned. If you enable this option, Trash folders will be scanned as well.
### 5.11 Mail Quarantine

One of the basic steps in setting up protection in ESET Mail Security is creating the quarantine that safely stores infected notes. Only the administrator of the IBM Domino mail server has access to the quarantine. This quarantine is excluded from additional scanning.

The quarantine has different view options, depending on the note type (mail, document), subcategory and reason for storing the file in the quarantine (spam, infected file, user-defined rule). It is possible to recover a quarantined note, recovered notes will be copied into the original database in which they were stored. These notes will be scanned again after recovery. If the reason for quarantine is no longer present, a note will be handled normally. If these reasons persist, a note will be stored in the quarantine again. Notes are not scanned by the antispam module after recovery.

**NOTE**

Only the administrator has access to the quarantine. In order for the quarantine to work properly, scripts must be enabled when the administrator opens the quarantine for the first time.

**Automatically create quarantine**

By default, this option is enabled. It will automatically create a server database (NSF) where quarantined messages or documents are stored.

**Quarantine filename**

Choose a name for the quarantine. By default, it is `eQuarantine.nsf`.

**NOTE**

Choose a name for the quarantine. By default, it is `eQuarantine.nsf`. Only the administrator has access to the quarantine. In order for the quarantine to work properly, scripts must be enabled when the administrator opens the quarantine for the first time.
The quarantine is created after the first infected file is found and sent to the quarantine. If the Automatically create quarantine option is not selected and the quarantine is not created, the file will be processed. The quarantine is created from the EsetQuarantine.ntf template, which is copied into the IBM Domino data folder during the installation. Each IBM Domino server Partition has its own quarantine. In case you uninstall ESET Mail Security, quarantine database file and quarantine template are not removed. This is because the quarantine contains valid data and the template is necessary to allow for viewing the quarantine database.

Automatically delete notes in quarantine
Deletes notes older than specified number of days.

Delete notes older than (days)
Automatically deletes quarantined notes after a selected amount of time. The predefined value is 30 days.

Enable whitelisting of notes released from quarantine
Use this setting when you want to recover a note (email or attachment) from ESET Quarantine and have an active rule in place that would automatically put recovered note back to the quarantine. Whitelisting will ignore rules to prevent this from happening. Once you enable whitelisting, ESET Mail Security will start writing a signature into every quarantined note. This signature is then used to whitelist notes.

IMPORTANT
Enabled whitelisting has an effect on rules and antivirus protection. Any note (email or attachment) that contains a signature will never be processed by rules and will never be scanned for viruses or other infiltrations. When whitelisting is disabled, notes will be processed by rules and antivirus protection regardless of the signature.

EXAMPLE

Enabled whitelisting:
- Signature is being written to all newly quarantined notes. Existing notes already present in your quarantine will not have the signature written.
- Signatures are taken into account when recovering a note from the ESET Quarantine to ignore rules and antivirus protection.

Disabled whitelisting:
- Signature will not be written to notes that are being quarantined from then on.
- Signatures of existing notes already present in your quarantine will not be taken into account when recovering a note from the ESET Quarantine to ignore rules and antivirus protection.

If you are enabling whitelisting again, previously signed notes can be recovered from the ESET Quarantine with the rules being ignored because signatures are being taken into account again.
5.11.1 ESET Quarantine

ESET Quarantine in the **Files** tab in the IBM Domino Administrator.

The quarantine has different view options, depending on the note type **Mail**, **Documents** and **Attachments**, subcategory and reason for storing the file in the quarantine (spam, infected file, user-defined rule).
5.11.2 Recover from quarantine

If you need to recover an item from ESET Quarantine select an item, or double-click to open. Click Recover and the item will be released from quarantine. In case this item ends up in the quarantine again, it is very likely that you have an active rule in place that automatically puts recovered note back to the quarantine. You can modify or deactivate the rule before recovering an item. Alternatively, you can use Enable whitelisting of notes released from quarantine feature in Mail Quarantine advanced setup to prevent the item from being put back to the quarantine. Once you enable whitelisting, any future quarantined items will be signed, and a new option Recover & Exclude will be available for signed items.

Only the administrator of the IBM Domino mail server has access to edit the template and send information message to user.
6. General settings

You can configure general settings and options based on your needs. The menu on the left includes the following categories:

Computer
- Enable or disable detection of potentially unwanted, unsafe, suspicious application and Anti-Stealth protection. Specify exclusions of processes or files and folders. Configure Real-time file system protection, ThreatSense parameters, Cloud-based protection (ESET LiveGrid®), Malware scans (On-demand computer scan and other scan options), Hyper-V scan and HIPS.

Update
- Configure update options such as profiles, detection engine age, snapshots for module rollback, update type, custom update server, connection/proxy server, update mirror, access to update files, HTTP server, user account details for network connection, etc.

Web and email
- Enables you to configure Protocol filtering and exclusions (Excluded applications and IP addresses), SSL/TLS protocol filtering options, Email client protection (integration, email protocols, alerts and notifications), Web access protection (HTTP/HTTPS web protocols and URL address management) and email client Anti-Phishing protection.

Device control
- Enable integration and configure Device control Rules and Groups.

Tools configuration
- Allows you to customize tools, such as ESET CMD, ESET RMM, WMI provider, ESET Security Management Center scan targets, Windows Update notifications, Log files, Proxy server, Email notifications, Diagnostics, Cluster, etc.

User interface
- Configure the behavior of the program’s GUI, Statuses, License information, Alerts and notifications, Password protection, eShell execution policy, etc.

6.1 Computer

Antivirus and antispyware protection protects against malicious system attacks by scanning files, emails and network communication. If a threat is detected, the Antivirus module can eliminate it by first blocking it and then cleaning, deleting or moving it to quarantine.

Scanner options

For all protection modules (for example Real-time file system protection, Web access protection, etc.), Scanner options allows you to enable or disable detection of the following:

Potentially unwanted applications (PUAs)
- A Potentially unwanted application is a software with an intent not unequivocally malicious, however it may install additional unwanted software, change the behavior of the digital device, perform activities not approved or expected by the user or has unclear objectives.
- This category includes: advertising display software, download wrappers, various browser toolbars, software with misleading behavior, bundleware, trackware, etc.
- Read more about these types of applications in the glossary.

Potentially unsafe applications
- This classification is given for commercial, legitimate software that might be misused for malicious purposes.
- An unsafe application refers to legitimate commercial software that has the potential to be misused for malicious purposes.
- This category includes: cracking tools, license key generators, hacking tools, remote access or control tools, password-cracking applications and keyloggers (programs that record each keystroke typed by a user). This
option is disabled by default. Read more about these types of applications in the glossary.

**Potentially suspicious applications**
Is a software compressed with packers or protectors frequently used to deter reverse engineering or to obfuscate the content of the executable (for example, to hide the presence of malware) by proprietary methods of compression and/or encryption.
This category includes: all unknown applications that are compressed with a packer or protector frequently used to compress malware.

**Enable Initial scan**
Enables you to scan a full system after product installation and updates to detect existing malware and speed up future system scans. This scan can be paused or canceled from Scan main window as other scans.

**Anti-Stealth protection**
Is a sophisticated system providing detection of dangerous programs, such as rootkits, which are able to hide themselves from the operating system. This means it is not possible to detect them using ordinary testing techniques.

**Processes exclusions**
Enables you to exclude specific processes. For example, processes of the backup solution, all file operations attributed to such excluded process are ignored and considered safe, thus minimizing the interference with the backup process.

**Exclusions**
Enables you to exclude files and folders from scanning. To ensure that all objects are scanned for threats, we recommend only creating exclusions when it is absolutely necessary. Situations where you may need to exclude an object might include scanning large database entries that would slow your computer during a scan or software that conflicts with the scan.

### 6.1.1 Processes exclusions
The Processes exclusions feature allows you to exclude application processes from Anti-Malware On-access scanning only. Due to the critical role of dedicated servers (application server, storage server, etc.) regular backups are mandatory to guarantee timely recovery from an incident of any kind. To improve backup speed, process integrity and service availability, some techniques that are known to conflict with file-level malware protection are used during backup. Similar problems can occur when attempting live migrations of virtual machines. The only effective way to avoid both situations is to deactivate Anti-Malware software. By excluding specific process (for example those of the backup solution) all file operations attributed to such excluded process are ignored and considered safe, thus minimizing interference with the backup process. We recommend that you use caution when creating exclusions – a backup tool that has been excluded can access infected files without triggering an alert which is why extended permissions are only allowed in the real-time protection module.

Processes exclusions help minimize the risk of potential conflicts and improve the performance of excluded applications, which in turn has a positive effect on the overall performance and stability of the operating system. The exclusion of a process / application is an exclusion of its executable file (.exe).

You can add executable files into the list of excluded processes via Advanced setup (F5) > Computer > Processes exclusions or using the list of running processes from the main menu Tools > Running processes.

This feature was designed to exclude backup tools. Excluding the backup tool’s process from scanning not only ensures system stability, but it also does not affect backup performance as the backup is not slowed down while it is running.

**EXAMPLE**
Click **Edit** to open the **Processes exclusions** management window, where you can **Add** exclusions and browse for executable file (for example *Backup-tool.exe*), which will be excluded from scanning. As soon as the *exe* file is added to the exclusions, activity of this process is not monitored by ESET Mail Security and no scanning is run on any file operations performed by this process.

**IMPORTANT**
If you do not use browse function when selecting process executable, you need to manually enter a full path to the executable. Otherwise, the exclusion will not work correctly and **HIPS** may report errors.

![Add exclusion](image)

**Select process executable (*.exe):**

`C:\Program Files\Backup Tool\Backup-tool.exe`

**Add exclusion**

You can also **Edit** existing processes or **Delete** them from exclusions.

**NOTE**
Web access protection does not take into account this exclusion, so if you exclude the executable file of your web browser, downloaded files are still scanned. This way an infiltration can still be detected. This scenario is an example only, and we do not recommend you to create exclusions for web browsers.

6.1.2   Exclusions

Exclusions enable you to exclude files and folders from scanning. To ensure that all objects are scanned for threats, we recommend only creating exclusions when it is absolutely necessary. Situations where you may need to exclude an object might include scanning large database entries that would slow your computer during a scan or software that conflicts with the scan (for example, backup software).

**WARNING**
Not to be confused with **Excluded extensions**.

To exclude an object from scanning, click **Add** and enter the path to an object or select it in the tree structure. You can also **Edit** or **Delete** selected entries.
NOTE
A threat within a file will not be detected by the Real-time file system protection module or Computer scan module if that file meets the criteria for exclusion from scanning.

Exclusions window displays the Path to excluded files and folders.

**Threat**
If the name of a threat is displayed next to an excluded file, it means that the file is only excluded for the given threat. If that file becomes infected later with other malware, it will be detected by the antivirus module. This type of exclusion can only be used for certain types of infiltrations, and can be created either in the threat alert window reporting the infiltration (click Show advanced options and then select Exclude from detection), or select Tools > Quarantine, right-clicking the quarantined file and then selecting Restore and exclude from scanning from the context menu.

6.1.2.1 Add or edit exclusion
This dialog window enables you to add or edit exclusions. Choose the exclusion Type from the drop-down menu:

**Exclude path**
Excludes specific path for this computer.

**Exclude threat**
Exclusions apply to potentially unwanted applications, potentially unsafe applications and suspicious applications.

**Exclude hash**
Excludes a file based on specified hash, regardless of the file type, location, name or its extension.

You can use wildcards to cover a group of files. A question mark (?) represents a single variable character whereas an asterisk (*) represents a variable string of zero or more characters.
EXAMPLE

If you want to exclude all files in a folder, type the path to the folder and use the mask "*.*"

- To exclude an entire drive including all files and subfolders, use the mask "D:\*"
- If you want to exclude doc files only, use the mask "*.doc"
- If the name of an executable file has a certain number of characters (and characters vary) and you only know the first one for sure (say "D"), use the following format:
  
  D?????.exe (question marks replace the missing / unknown characters)

EXAMPLE

If you want to exclude a threat, enter valid threat name in the following format:

  @NAME=Win32/Adware.Optmedia
  @NAME=Win32/TrojanDownloader.Delf.QQI
  @NAME=Win32/Bagle.D

EXAMPLE

A few more exclusion examples using an asterisk:

  C:\Tools - will be automatically converted to C:\Tools\*.*
  C:\Tools\*.dat - will exclude dat files in the Tools folder
  C:\Tools\sg.dat - will exclude this particular file located in the exact path

6.1.3 Automatic exclusions

The developers of server applications and operating systems recommend excluding sets of critical working files and folders from antivirus scans for most of their products. Antivirus scans may have a negative influence on a server’s performance, which may lead to conflicts and even prevent some applications from running on the server. Exclusions help minimize the risk of potential conflicts and increase the overall performance of the server when running antivirus software. See the complete list of files excluded from scanning for ESET server products.

ESET Mail Security identifies critical server applications and server operating system files, and automatically adds them to the list of Exclusions. You can see a list of detected server applications for which exclusions were created under Automatic exclusions to generate. All automatic exclusions are enabled by default. You can disable/enable each server application by clicking the switch with the following result:

- If an application/operating system exclusion remains enabled, any of its critical files and folders will be added to the list of files excluded from scanning (Advanced setup (F5) > Computer > Basic > Exclusions > Edit). Every time the server is restarted, the system performs an automatic check of exclusions and restores any exclusions that may have been deleted from the list. This is the recommended setting if you want to make sure the recommended Automatic exclusions are always applied.

- If the user disables an application/operating system exclusion, its critical files and folders remain on the list of files excluded from scanning (Advanced setup (F5) > Computer > Basic > Exclusions > Edit). However, they will not be automatically checked and renewed on the Exclusions list every time the server is restarted (see the first bullet above). We recommend this setting for advanced users, who want to remove or modify some of the standard exclusions.

If you want to remove the exclusions from the list without restarting the server, you will need to remove them manually from the list. Any user-defined exclusions entered manually will not be affected by the settings described above.
Most of the Automatic exclusions of server applications/operating systems are selected based on Microsoft’s recommendations. For details, please visit this link.

**NOTE**

IBM Domino temporary folders are excluded by default. However, some IBM Domino tasks and templates use non-standard temp folders and they may be reported by the Real-time file system protection before ESET Mail Security performs an action. If you are experiencing such issues, we recommend that you exclude these folders manually. Following IBM Domino server folders configured in the *notes.ini* file are excluded automatically: Directory, VIEW_REBUILD_DIR, TransLog_Path.

### 6.1.4 Shared local cache

ESET Shared local cache will boost performance in virtualized environments by eliminating duplicate scanning in the network. This ensures that each file will be scanned only once and stored in the shared cache. Turn on the **Caching option** switch to save information about scans of files and folders on your network to the local cache. If you perform a new scan, ESET Mail Security will search for scanned files in the cache. If files match, they will be excluded from scanning.

Cache server setup contains the following:

- **Hostname** - Name or IP address of the computer where the cache is located.
- **Port** - Number of the port used for communication (same as was set in Shared local cache).
- **Password** - Specify the Shared local cache password if required.

### 6.1.5 An infiltration is detected

Infiltrations can reach the system from various entry points such as webpages, shared folders, via email or from removable devices (USB, external disks, CDs, DVDs, diskettes, etc.).

**Standard behavior**

As a general example of how infiltrations are handled by ESET Mail Security, infiltrations can be detected using:

- **Real-time file system protection**
- **Web access protection**
- **Email client protection**
- **On-demand computer scan**

Each uses the standard cleaning level and will attempt to clean the file and move it to Quarantine or terminate the connection. A notification window is displayed in the notification area at the bottom right corner of the screen. For more information about cleaning levels and behavior, see Cleaning.

**Cleaning and deleting**

If there is no predefined action to take for Real-time file system protection, you will be prompted to select an option in the alert window. Usually the options **Clean**, **Delete** and **No action** are available. Selecting **No action** is not recommended, as this will leave infected files uncleaned. The exception to this is when you are sure that a file is harmless and has been detected by mistake.

Apply cleaning if a file has been attacked by a virus that has attached malicious code to the file. If this is the case, attempt to clean the infected file in order to restore it to its original state before cleaning. If the file consists exclusively of malicious code, it will be deleted.

If an infected file is “locked” or in use by a system process, it will usually only be deleted after it is released (normally after a system restart).

**Multiple threats**
If any infected files were not cleaned during Computer scan (or the Cleaning level was set to No Cleaning), an alert window prompting you to select actions for those files is displayed. Select an action individually for each threat in the list or you can use Select action for all listed threats and choose one action to take on all the threats in the list, then click Finish.

Deleting files in archives
In default cleaning mode, the entire archive will only be deleted if it contains infected files and no clean files. In other words, archives are not deleted if they also contain harmless clean files. Use caution when performing a Strict cleaning scan, with Strict cleaning enabled an archive will be deleted if it contains at least one infected file regardless of the status of other files in the archive.

6.1.6 Real-time file system protection
Real-time file system protection controls all antivirus-related events in the system. All files are scanned for malicious code when they are opened, created, or run on your computer. By default, Real-time file system protection launches at system start-up and provides uninterrupted scanning. In special cases (for example, if there is a conflict with another real-time scanner), real-time protection can be disabled by disengaging Start Real-time file system protection automatically in Advanced setup (F5) under Real-time file system protection > Basic.

Media to scan
By default, all types of media are scanned for potential threats:

- **Local drives** - Controls all system hard drives.
- **Removable media** - Controls CD/DVD's, USB storage, Bluetooth devices, etc.
- **Network drives** - Scans all mapped drives.

We recommend that you use default settings and only modify them in specific cases, such as when scanning certain media significantly slows data transfers.

Scan on
By default, all files are scanned upon opening, creation, or execution. We recommend that you keep these default settings, as they provide the maximum level of real-time protection for your computer:

- **File open** - Enables or disables scanning when files are opened.
- **File creation** - Enables or disables scanning when files are created.
- **File execution** - Enables or disables scanning when files are run.
- **Removable media access** - Enables or disables scanning triggered by accessing particular removable media with storage space.

Real-time file system protection checks all types of media and is triggered by various system events such as accessing a file. Using ThreatSense technology detection methods (as described in the ThreatSense parameters section), Real-time file system protection can be configured to treat newly created files differently than existing files. For example, you can configure Real-time file system protection to more closely monitor newly created files.

To ensure a minimal system footprint when using real-time protection, files that have already been scanned are not scanned repeatedly (unless they have been modified). Files are scanned again immediately after each detection engine database update. This behavior is controlled using Smart optimization. If Smart optimization is disabled, all files are scanned each time they are accessed. To modify this setting, press F5 to open Advanced setup and expand Computer > Real-time file system protection. Click ThreatSense parameters > Other and select or deselect Enable Smart optimization.
6.1.6.1 ThreatSense parameters

ThreatSense is technology comprised of many complex threat detection methods. This technology is proactive, which means it also provides protection during the early spread of a new threat. It uses a combination of code analysis, code emulation, generic signatures and virus signatures which work in concert to significantly enhance system security. The scanning engine is capable of controlling several data streams simultaneously, maximizing the efficiency and detection rate. ThreatSense technology also successfully eliminates rootkits.

NOTE
For details about automatic startup file check, see Startup scan.

ThreatSense engine setup options allow you to specify several scan parameters:

- **File types and extensions that are to be scanned**
- **The combination of various detection methods**
- **Levels of cleaning, etc.**

To enter the setup window, click ThreatSense engine parameter setup in the Advanced setup (F5) window for any module that uses ThreatSense technology (see below). Different security scenarios may require different configurations. With this in mind, ThreatSense is individually configurable for the following protection modules:

- Hyper-V scan
- Real-time file system protection
- Malware scans
- Idle-state scanning
- Startup scan
- Document protection
- Email client protection
- Web access protection

ThreatSense parameters are highly optimized for each module, and their modification can significantly influence system operation. For example, changing parameters to always scan runtime packers, or enabling advanced heuristics in the Real-time file system protection module could result in a system slow-down (normally, only newly-created files are scanned using these methods). We recommend that you leave the default ThreatSense parameters unchanged for all modules except Computer scan.

Objects to scan

This section allows you to define which computer components and files will be scanned for infiltrations.

Operating memory
Scans for threats that attack the operating memory of the system.

Boot sectors/UEFI
Scans boot sectors for the presence of viruses in the MBR (Master Boot Record). In case of a Hyper-V Virtual Machine, its disk MBR is scanned in read-only mode.

Email files
The program supports the following extensions: DBX (Outlook Express) and EML.

Archives
The program supports the following extensions: ARJ, BZ2, CAB, CHM, DBX, GZIP, ISO/BIN/NRG, LHA, MIME, NSIS, RAR, SIS, TAR, TNEF, UUE, WISE, ZIP, ACE, and many others.

Self-extracting archives
Self-extracting archives (SFX) are archives needing no specialized programs – archives – to decompress themselves.

**Runtime packers**

After being executed, runtime packers (unlike standard archive types) decompress in memory. In addition to standard static packers (UPX, yoda, ASPack, FSG, etc.), the scanner is able to recognize several additional types of packers through the use of code emulation.

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**Scan options**

Select the methods used when scanning the system for infiltrations. The following options are available:

- **Heuristics**
  A heuristic is an algorithm that analyzes the (malicious) activity of programs. The main advantage of this technology is the ability to identify malicious software which did not exist, or was not known by the previous detection engine.

- **Advanced heuristics/DNA signatures**
  Advanced heuristics consist of a unique heuristic algorithm developed by ESET, optimized for detecting computer worms and trojan horses and written in high-level programming languages. The use of advanced heuristics greatly increases the threat detection capabilities of ESET products. Signatures can reliably detect and identify viruses. Utilizing the automatic update system, new signatures are available within a few hours of a threat discovery. The disadvantage of signatures is that they only detect viruses they know (or slightly modified versions of these viruses).

---

**Cleaning**

The cleaning settings determine the behavior of the scanner while cleaning infected files. There are 3 levels of cleaning:

- **No cleaning**
  Infected files will not be cleaned automatically. The program will display a warning window and allow the user to choose an action. This level is designed for more advanced users who know which steps to take in the event of an infiltration.

- **Normal cleaning**
  The program will attempt to automatically clean or delete an infected file based on a pre-defined action (depending on the type of infiltration). Detection and deletion of an infected file is signaled by a notification in the bottom-right corner of the screen. If it is not possible to select the correct action automatically, the program provides other follow-up actions. The same happens when a pre-defined action cannot be completed.

- **Strict cleaning**
  The program will clean or delete all infected files. The only exceptions are system files. If it is not possible to clean a file, the user will be asked what type of action should be taken.

**WARNING**

If an archive contains a file or files that are infected, there are two options for dealing with the archive. In the default mode, **Normal cleaning**, the whole archive will be deleted if all the files it contains are infected. In **Strict cleaning** mode, the archive will be deleted if it contains at least one infected file, regardless of the status of the other files in the archive.

**IMPORTANT**
If a Hyper-V host is running on Windows Server 2008 R2 SP1, **Normal cleaning** and **Strict cleaning** are not supported. Scanning of Virtual Machine disks is done in read-only mode, no cleaning will be performed. Regardless of the cleaning level selected, the scan is always performed in read-only mode.

## Exclusions

An extension is the part of a file name delimited by a period. An extension defines the type and content of a file. This section of the ThreatSense parameter setup lets you define the types of files to exclude from scan.

## Other

When configuring ThreatSense engine parameters setup for a On-demand computer scan, the following options in Other section are also available:

### Scan alternate data streams (ADS)

Alternate data streams used by the NTFS file system are file and folder associations which are invisible to ordinary scanning techniques. Many infiltrations try to avoid detection by disguising themselves as alternate data streams.

### Run background scans with low priority

Each scanning sequence consumes a certain amount of system resources. If you work with programs that place a high load on system resources, you can activate low priority background scanning and save resources for your applications.

### Log all objects

If this option is selected, the log file will show all the scanned files, even those not infected. For example, if an infiltration is found within an archive, the log will also list clean files contained within the archive.

### Enable Smart optimization

With Smart Optimization enabled, the optimal settings are used to ensure the most efficient scanning level, while simultaneously maintaining the highest scanning speeds. The various protection modules scan intelligently, making use of different scanning methods and applying them to specific file types. If Smart Optimization is disabled, only the user-defined settings in the ThreatSense core of the particular modules are applied when performing a scan.

### Preserve last access timestamp

Select this option to keep the original access time of scanned files instead of updating them (for example, for use with data backup systems).

## Limits

The Limits section allows you to specify the maximum size of objects and levels of nested archives to be scanned:

### Default object settings

Enable to use default settings (no limits). ESET Mail Security will be ignoring your custom settings.

### Maximum object size

Defines the maximum size of objects to be scanned. The given antivirus module will then scan only objects smaller than the size specified. This option should only be changed by advanced users who may have specific reasons for excluding larger objects from scanning. Default value: *unlimited*.

### Maximum scan time for object (sec.)

Defines the maximum time value for scanning of an object. If a user-defined value has been entered here, the antivirus module will stop scanning an object when that time has elapsed, regardless of whether the scan has finished. Default value: *unlimited*.
Archive scan setup

To modify archive scan settings, deselect Default archive scan settings.

Archive nesting level

Specifies the maximum depth of archive scanning. Default value: 10. For objects detected by Mailbox transport protection, actual nesting level is +1 because archive attachment in an email is considered first level.

**EXAMPLE**

If you have nesting level set to 3, an archive file with nesting level 3 will only be scanned on a transport layer up to its actual level 2. Therefore, if you want to have archives scanned by Mailbox transport protection up to level 3, set the value for Archive nesting level to 4.

Maximum size of file in archive

This option allows you to specify the maximum file size for files contained in archives (when they are extracted) that are to be scanned. Default value: unlimited.

**NOTE**

We do not recommend changing the default values; under normal circumstances, there should be no reason to modify them.

### 6.1.6.1.1 Additional ThreatSense parameters

#### Additional ThreatSense parameters for newly created and modified files

The probability of infection in newly-created or modified files is comparatively higher than in existing files. For this reason, the program checks these files with additional scanning parameters. Along with common signature-based scanning methods, advanced heuristics, which can detect new threats before module update is released, are also used. In addition to newly-created files, scanning is performed on self-extending files (.sfx) and runtime packers (internally compressed executable files). By default, archives are scanned up to the 10th nesting level and are checked regardless of their actual size. To modify archive scan settings, disable Default archive scan settings.

#### Additional ThreatSense parameters for executed files

By default, Advanced heuristics is used when files are executed. When enabled, we strongly recommend keeping Smart optimization and ESET LiveGrid® enabled to mitigate impact on system performance.

### 6.1.6.1.2 File extensions excluded from scanning

An extension is the part of a file name delimited by a period. The extension defines the type of a file. Normally, all files are scanned. However, if you need to exclude files with a specific extension, ThreatSense parameter setup lets you exclude files from scanning based on their extension. Excluding may be useful if scanning of certain file types prevents an application from running properly.

**EXAMPLE**

To add a new extension to the list, click Add. Type the extension into the text field (for example tmp) and click OK. When you select Enter multiple values, you can add multiple file extensions delimited by lines, commas or semicolons (for example, choose Semicolon from the drop-down menu as a separator, and type edb;eml;tmp).

You can use a special symbol ? (question mark). The question mark represents any symbol (for example ?db).
NOTE
To display the extension (file type) for all files in a Windows operating system, deselect Hide extensions for known file types under Control Panel > Folder Options > View.

6.1.7 Cloud-based protection
ESET LiveGrid® is an advanced early warning system comprised of several cloud-based technologies. It helps detect emerging threats based on reputation and improves scanning performance by means of whitelisting. New threat information is streamed in real-time to the cloud, which enables the ESET Malware Research Lab to provide timely response and consistent protection at all times. Users can check the reputation of running processes and files directly from the program’s interface or contextual menu with additional information available from ESET LiveGrid®.

When installing ESET Mail Security, select one of the following options:

- You can decide not to enable ESET LiveGrid®. Your software will not lose any functionality, but in some cases ESET Mail Security may respond slower to new threats than detection engine database update.

- You can configure ESET LiveGrid® to submit anonymous information about new threats and where the new threatening code was detected. This file can be sent to ESET for detailed analysis. Studying these threats will help ESET update its threat detection capabilities.

ESET LiveGrid® will collect information about your computer related to newly-detected threats. This information may include a sample or copy of the file in which the threat appeared, the path to that file, the filename, the date and time, the process by which the threat appeared on your computer and information about your computer’s operating system.

By default, ESET Mail Security is configured to submit suspicious files to the ESET Virus Lab for analysis. Files with certain extensions such as .doc or .xls are always excluded. You can also add other extensions if there are particular files that you or your organization want to avoid sending.

Enable ESET LiveGrid® reputation system (recommended)
The ESET LiveGrid® reputation system improves the efficiency of ESET anti-malware solutions by comparing scanned files to a database of whitelisted and blacklisted items in the cloud.

Enable ESET LiveGrid® feedback system
Data will be sent to the ESET Research Lab for further analysis.

Submit crash reports and diagnostic data
Submit data such as crash reports, modules or memory dumps.

Submit anonymous statistics
Allow ESET to collect information about newly detected threats such as the threat name, date and time of detection, detection method and associated metadata, scanned files (hash, file name, origin of the file, telemetry), blocked and suspicious URL’s, product version and configuration, including information about your system.

Contact email (optional)
Your contact email can be included with any suspicious files and may be used to contact you if further information is required for analysis. Please note that you will not receive a response from ESET unless more information is needed.

Submission of samples

Automatic submission of infected samples
This will submit all infected samples to ESET for analysis and to improve future detection.
• All infected samples
• All samples except documents
• Do not submit

Automatic submission of suspicious samples
Suspicious samples resembling threats, and/or samples with unusual characteristics or behavior are submitted to ESET for analysis.

• Executable - Includes executable files: .exe, .dll, .sys
• Archives - Includes archive file types: .zip, .rar, .7z, .arch, .arj, .bzip2, .gzip, .ace, .arc, .cab
• Scripts - Includes script file types: .bat, .cmd, .hta, .js, .vbs, .js, .ps1
• Other - Includes file types: .jar, .reg, .msi, .swf, .lnk
• Possible Spam emails - Improves global detection of spam.
• Documents - Includes Microsoft Office documents or PDF's with active content.

Exclusions
Click Edit option next to Exclusions in ESET LiveGrid® allows you to configure how threats are submitted to ESET Virus Labs for analysis.

Maximum size of samples (MB)
Define the maximum size of samples to be scanned.
6.1.7.1 Exclusion filter

The Exclusion filter allows you to exclude certain files/folders from submission (for example, it may be useful to exclude files that may carry confidential information, such as documents or spreadsheets). The files listed will never be sent to ESET labs for analysis, even if they contain suspicious code. The most common file types are excluded by default (.doc, etc.). You can add to the list of excluded files if desired.

If you have used ESET LiveGrid® before and have disabled it, there may still be data packages to send. Even after deactivating, such packages will be sent to ESET. Once all current information is sent, no further packages will be created.

If you find a suspicious file, you can submit it for analysis to our ThreatLabs. If it is a malicious application, its detection will be added to the next detection module update.
6.1.8 Malware scans

This section provides options to select scanning parameters.

**NOTE**
This scan profile selector applies to **On-demand scan** and **Hyper-V scan**.

**Selected profile**
A particular set of parameters used by the On-demand scanner. You can use one of the predefined scan profile or create a new profile. The scan profiles use different ThreatSense engine parameters.

**List of profiles**
To create a new one, click **Edit**. Type name for profile and click **Add**. New profile will be displayed in the **Selected profile** drop-down menu that lists existing scan profiles.

**Scan targets**
To scan a specific target, click **Edit** and choose an option from drop-down menu or selecting specific targets from the folder (tree) structure.

**ThreatSense parameters**
Modify scan parameters for the On-demand computer scanner.

The **Hyper-V scan** pop-up window:

The **Scan targets** for **Hyper-V** drop-down menu allows you to select pre-defined scan targets:

<table>
<thead>
<tr>
<th>Scan targets</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>By profile settings</td>
<td>Selects targets set in the selected scan profile.</td>
</tr>
<tr>
<td>All virtual machines</td>
<td>Selects all virtual machines.</td>
</tr>
</tbody>
</table>
By profile settings | Selects targets set in the selected scan profile.
---|---
Powered on virtual machines | Selects all online VMs.
Powered off virtual machines | Selects all offline VMs.
No selection | Clears all selections.

Click **Scan** to execute the scan using the custom parameters that you have set. After all scans are finished, check **Log files** > Hyper-V scan.

### 6.1.8.1 Profile manager

The **Scan profile** drop-down menu lets you select pre-defined scan profiles.

- Smart scan
- Context menu scan
- In-depth scan
- My profile (applies to Hyper-V scan, Update profiles)

To help you create a scan profile to fit your needs, see the [ThreatSense engine parameters setup](#) section for a description of each parameter of the scan setup.

Profile manager is used in three places within ESET Mail Security.

**On-demand computer scan**

Your preferred scan parameters can be saved for future scanning. We recommend that you create a different profile (with various scan targets, scan methods and other parameters) for each regularly used scan.

**Update**

The profile editor allows users to create new update profiles. It is only necessary to create custom update profiles if your computer uses multiple means to connect to update servers.

**Hyper-V scan**

Create a new profile, select **Edit** next to List of profiles. New profile will be displayed in the **Selected profile** drop-down menu that lists existing scan profiles.
6.1.8.2 Profile targets

You can specify what will be scanned for infiltrations. Choose objects (memory, boot sectors and UEFI, drives, files and folders or network) from the tree structure that lists all available targets on your system.

NOTE
This scan profile selector applies to **On-demand scan** and **Hyper-V scan**.

Click the gear icon in the top-left corner to access the **Scan targets** and **Scan profile** drop-down menus.

The **Scan targets** drop-down menu enables you to select predefined scan targets:

<table>
<thead>
<tr>
<th>By profile settings</th>
<th>Selects targets set in the selected scan profile.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removable media</td>
<td>Selects diskettes, USB storage devices, CD/DVD.</td>
</tr>
<tr>
<td>Local drives</td>
<td>Selects all system hard drives.</td>
</tr>
<tr>
<td>Network drives</td>
<td>Selects all mapped network drives.</td>
</tr>
<tr>
<td>Shared Folders</td>
<td>Selects all folders on the local server that are shared.</td>
</tr>
<tr>
<td>Custom selection</td>
<td>Clears all selections. Ones cleared, you can make your custom selection.</td>
</tr>
</tbody>
</table>

To quickly navigate to a scan target (file or folder) in order to include it for scanning, enter its path into the text field below the tree structure. The path entry is case sensitive.
The **Scan profile** drop-down menu enables you to select predefined scan profiles:

- Smart scan
- Context menu scan
- In-depth scan

These scan profiles use different ThreatSense engine parameters.

**Scan without cleaning**

If you are only interested in scanning the system without additional cleaning actions, select **Scan without cleaning**. This is useful when you only want to obtain an overview whether there are infected items and get details about these infections, if there are any. You can choose from three cleaning levels by clicking **Setup > ThreatSense parameters > Cleaning**. Information about scanning is saved to a scan log.

**Ignore exclusions**

When you select **Ignore exclusions**, it lets you perform a scan while ignoring exclusions that otherwise apply.

### 6.1.8.3 Scan targets

If you only want to scan a specific target, you can use the **Custom scan** and select an option from the **Scan targets** drop-down menu or select specific targets from the folder (tree) structure.

Scan targets profile selector applies to:

- On-demand scan
- Hyper-V scan

To quickly navigate to a scan target or to add a new target file or folder, enter it in the blank field below the folder list. This is only possible if no targets are selected in the tree structure and the **Scan targets** menu is set to **No selection**.

The **Scan targets** drop-down menu allows you to select pre-defined scan targets.
By profile settings | Selects targets set in the selected scan profile.
Removable media | Selects diskettes, USB storage devices, CD/DVD.
Local drives | Selects all system hard drives.
Network drives | Selects all mapped network drives.
Shared Folders | Selects all folders on the local server that are shared.
Custom selection | Clears all selections. Ones cleared, you can make your custom selection.

You can choose a profile from the **Scan profile** drop-down menu to be used for scanning chosen targets. The default profile is **Smart scan**. There are two more pre-defined scan profiles called **In-depth scan** and **Context menu scan**. These scan profiles use different **ThreatSense engine parameters**.

The **Custom scan** pop-up window:

### Scan without cleaning

If you are only interested in scanning the system without additional cleaning actions, select **Scan without cleaning**. This is useful when you only want to obtain an overview whether there are infected items and get details about these infections, if there are any. You can choose from three cleaning levels by clicking **Setup > ThreatSense parameters > Cleaning**. Information about scanning is saved to a scan log.

### Ignore exclusions

You can perform a scan while ignoring **exclusions** that otherwise apply.

### Scan

To execute the scan using the custom parameters that you have set.
Scan as Administrator

Allows you to execute the scan under the Administrator account. Click this if the current user doesn't have privileges to access the appropriate files to be scanned. Note that this button is not available if the current user cannot call UAC operations as Administrator.

6.1.8.4 Idle-state scan

When the computer is in idle state, a silent computer scan is performed on all local drives. **Idle-state detection** will run when your computer is in the following states:

- Turned off screen or screen saver
- Computer lock
- User logoff

Run even if computer is powered from battery

By default, the Idle-state scanner will not run when the computer (notebook) is operating on battery power.

Enable logging

To record a computer scan output in the Log files section (from the main program window click Log files and select log type Computer scan from the drop-down menu).

**ThreatSense parameters**

Modify scan parameters for the Idle-state scanner.

6.1.8.5 Startup scan

By default, the automatic startup file check will be performed on system start (user logon) and after a successful module update. This scan is controlled by the Scheduler configuration and tasks.

Startup scan options are a part of the **System startup file check** scheduler task.

To modify Startup scan settings, navigate to **Tools > Scheduler**, select one of the tasks named **Automatic startup file check** (user logon or module update) and click **Edit**. Click through the wizard and in the last step, you can modify detailed options of the **Automatic startup file check**.

6.1.8.5.1 Automatic startup file check

When creating a System startup file check scheduled task, you have several options to adjust the following parameters:

The Scan target drop-down menu specifies the scan depth for files run at system startup. Files are arranged in ascending order according to the following criteria:

- All registered files (most files scanned)
- Rarely used files
- Commonly used files
- Frequently used files
- Only the most frequently used files (least files scanned)

Two specific Scan target groups are also included:

**Files run before user logon**

Contains files from locations that may be accessed without the user being logged in (includes almost all startup locations such as services, browser helper objects, winlogon notify, Windows scheduler entries, known dll's, etc.).

**Files run after user logon**
Contains files from locations that may only be accessed after a user has logged in (includes files that are only run by a specific user, typically files in `HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion \Run`).

Lists of files to be scanned are fixed for each aforementioned group.

### Scan priority

The level of priority used to determine when a scan will start:

- **Normal** - at an average system load,
- **Lower** - at a low system load,
- **Lowest** - when the system load is the lowest possible,
- **When idle** - the task will be performed only when the system is idle.

### 6.1.8.6 Removable media

ESET Mail Security provides automatic removable media (CD/DVD/USB) scanning. This module allows you to scan inserted media. This may be useful if the computer administrator wants to prevent the users from using removable media with unsolicited content.

#### Action to take after inserting removable media

Select which action will be performed when a removable media device is inserted into the computer (CD/DVD/USB).

- **Do not scan** - No action will be performed and the New device detected window will be closed.
- **Automatic device scan** - An on-demand computer scan of the inserted removable media device will be performed.
- **Show scan options** - Opens the Removable media setup section.

When removable media is inserted, the following dialog will shown:

- **Scan now** - This will trigger a scan of removable media.
- **Scan later** - Scanning of removable media will be postponed.
- **Setup** - Opens Advanced setup.
- **Always use the selected option** - When selected, the same action will be performed when removable media is inserted another time.

In addition, ESET Mail Security features Device control, which allows you to define rules for the use of external devices on a given computer. More details on Device control can be found in the [Device control] section.

### 6.1.8.7 Document protection

The Document protection feature scans Microsoft Office documents before they are opened, as well as files downloaded automatically by Internet Explorer such as Microsoft ActiveX elements. Document protection provides a layer of protection in addition to Real-time file system protection, and can be disabled to enhance performance on systems that are not exposed to a high volume of Microsoft Office documents.

#### Integrate into system

This option enhances the protection of Microsoft Office documents (not required under normal circumstances).

**ThreatSense parameters**

Modify parameters for the Document protection.

**NOTE**

This feature is activated by applications that use the Microsoft Antivirus API (for example, Microsoft Office 2000 and higher, or Microsoft Internet Explorer 5.0 and higher).
6.1.9 Hyper-V scan

Current version of Hyper-V scan supports scanning of online or offline virtual system in Hyper-V. Supported types of scanning according to hosted Windows Hyper-V system and state of virtual system are shown here:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Online VM</td>
<td>no scan</td>
<td>read-only</td>
<td>read-only</td>
<td>read-only</td>
<td>read-only</td>
</tr>
<tr>
<td>Offline VM</td>
<td>read-only/cleaning</td>
<td>read-only/cleaning</td>
<td>read-only/cleaning</td>
<td>read-only/cleaning</td>
<td>read-only/cleaning</td>
</tr>
</tbody>
</table>

Hardware requirements

The server should have no performance issues running Virtual Machines. Scanning activity primarily uses CPU resources. To scan online VMs, free disk space is required. Disk space must be at least double the space used by checkpoints/snapshots and virtual disks.

Specific limitations

- Scanning on RAID storage, Spanned Volumes and Dynamic Disks are not supported due to the nature of Dynamic Disks. Therefore, we recommend that you avoid using the Dynamic Disk type in your VMs if possible.

- Scanning is always performed on the current VM and does not affect checkpoints or snapshots.

- Hyper-V running on a host in a cluster is currently not supported by ESET Mail Security.

- Virtual Machines on a Hyper-V host running on Windows Server 2008 R2 SP1 can only be scanned in read-only mode (No cleaning), regardless of what cleaning level is selected in ThreatSense parameters.

**NOTE**

While ESET Security supports the scan of virtual disk MBRs, read-only scanning is the only method supported for these targets. This setting can be changed in Advanced setup (F5) > Computer > Hyper-V scan > ThreatSense parameters > Boot sectors.

Virtual Machine to be scanned is "offline" - switched Off state

ESET Mail Security uses Hyper-V Management to detect and to connect to virtual disks. This way, ESET Mail Security has the same access to the content of the virtual disks it does when accessing data and files on any generic drive.

Virtual Machine to be scanned is "online" - Running, Paused, Saved state

ESET Mail Security uses Hyper-V Management to detect virtual disks. Actual connection to these the disks is not possible. Therefore, ESET Mail Security creates a checkpoint/snapshot of the Virtual Machine, then connects to the checkpoint/snapshot. Once the scan is completed, the checkpoint/snapshot is deleted. This means that read-only scan can be performed because the running Virtual Machine(s) are unaffected by scan activity.

Allow up to one minute for ESET Mail Security to create a snapshot or checkpoint during scanning. You should take this into account when running a Hyper-V scan on a larger number of Virtual Machines.

Naming convention

The module of Hyper-V Scan uses the following naming convention:

VirtualMachineName\DiskX\VolumeY

Where X is the number of disks and Y is the number of volumes. For example:

Computer\Disk0\Volume1
The number suffix is added based on the order of detection, and is identical to the order seen in the Disk Manager of the VM. This naming convention is used in the tree-structured list of targets to be scanned, in the progress bar and also in the log files.

**Executing a scan**

- **On-demand** - Click Hyper-V Scan to view a list of Virtual Machines and volumes available for scanning. Select the Virtual Machine(s), disk(s) or volume(s) you want to scan and click Scan.

- To create a scheduler task.

- Via ESET Security Management Center as a Client Task called Server Scan.

- Hyper-V scan can be managed and started via eShell.

It is possible to execute several Hyper-V scans simultaneously. You will receive a notification with a link to log files when a scan is complete.

**Possible issues**

- When executing the scan of an online Virtual Machine, a checkpoint/snapshot of the particular Virtual Machine has to be created and during the creation of a checkpoint/snapshot some generic actions of the Virtual Machine might be limited or disabled.

- If an offline Virtual Machine is being scanned, it cannot be turned on until the scan is finished.

- Hyper-V Manager allows you to name two different Virtual Machines identically and this presents an issue when trying to differentiate the machines while reviewing the scan logs.

**6.1.10 HIPS**

Host-based Intrusion Prevention System (HIPS) protects your system from malware and unwanted activity attempting to negatively affect your computer. HIPS utilizes advanced behavioral analysis coupled with the detection capabilities of network filtering to monitor running processes, files and registry keys. HIPS is separate from Real-time file system protection and is not a firewall; it only monitors processes running within the operating system.

**WARNING**

Changes to HIPS settings should only be made by an experienced user. Incorrect configuration of HIPS settings can lead to system instability.

**Enable Self-Defense**

ESET Mail Security has built-in Self-defense technology that prevents malicious software from corrupting or disabling your antivirus and antispyware protection, so you can be sure your system is protected at all times. Changes to the Enable HIPS and Enable SD (Self-Defense) settings take effect after the Windows operating system is restarted. Disabling the entire HIPS system will also require a computer restart.

**Enable Protected Service**

Microsoft has introduced a concept of protected services with Microsoft Windows Server 2012 R2. It prevents a service against malware attacks. Kernel of ESET Mail Security is running as a protected service by default. This feature is available on Microsoft Windows Server 2012 R2 and newer server operating systems.

**Enable Advanced Memory Scanner**

Works in combination with Exploit Blocker to strengthen protection against malware that has been designed to evade detection by antimalware products through the use of obfuscation or encryption. Advanced Memory Scanner is enabled by default. Read more about this type of protection in the glossary.

**Enable Exploit Blocker**
Is designed to fortify commonly exploited application types such as web browsers, PDF readers, email clients and MS Office components. Exploit Blocker is enabled by default. Read more about this type of protection in the [glossary](#).

**Enable Ransomware shield**
To use this functionality enable HIPS and ESET Live Grid. Read more about Ransomware in the [glossary](#).

**Filtering mode**
You can choose one of the following filtering modes:

- **Automatic mode** - Operations are enabled with the exception of those blocked by pre-defined rules that protect your system. Everything is allowed except actions denied by rule.

- **Smart mode** - The user will only be notified about very suspicious events.

- **Interactive mode** - The user will be prompted to confirm operations. Allow / deny access, Create rule, Temporarily remember this action.

- **Policy-based mode** - Operations are blocked. Accepts only user/predefined rules.

- **Learning mode** - Operations are enabled and a rule is created after each operation. Rules created in this mode can be viewed in the Rule editor, but their priority is lower than the priority of rules created manually or rules created in automatic mode. When you select Learning mode from the HIPS Filtering mode drop-down menu, the Learning mode will end at setting will become available. Select the duration for which you want to engage learning mode (the maximum duration is 14 days). When the specified duration has passed, you will be prompted to edit the rules created by HIPS while it was in learning mode. You can also choose a different filtering mode, or postpone the decision and continue using learning mode.

**Rules**
Rules determine which applications will be granted access to which files, parts of registry or other applications. The HIPS system monitors events inside the operating system and reacts accordingly based on rules similar to the rules used by the personal firewall. Click Edit to open the HIPS rule management window. If the default action for a rule is set to Ask, a dialog window will be displayed each time that the rule is triggered. You can choose to Block or Allow the operation. If you do not choose an action in the given time, a new action is selected based on the rules.

The dialog window allows you to create a rule based on any new action that HIPS detects and then define the conditions under which to Allow or Block that action. Click Details to see further information. Rules created like this are considered equal to rules created manually, so a rule created from a dialog window can be less specific than the rule that triggered that dialog window. This means that after creating such a rule, the same operation can trigger the same window.
Host-based Intrusion Prevention System (HIPS)

Registry access

An application (\MSExchangeMailboxAssistants.exe) is trying to access registry (Mailbox).

- **Application:** \MSExchangeMailboxAssistants.exe
- **Company:** Microsoft Corporation
- **Reputation:** Discovered 2 years ago
- **Operation:** Delete from registry
- **Target:** HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Service...\Mailbox

**Allow this operation?**

- **Ask every time**
- **Remember until application quits**
- **Create rule and remember permanently**

Learn more about this message   Details   Advanced options

**Ask every time**

Dialog window will be displayed each time that the rule is triggered. You can choose to **Deny** or **Allow** the operation.

**Remember until application quits**

Choosing an action **Deny** or **Allow** will create a temporary HIPS rule that will be used until the application in question is closed. Also, if you change filtering mode, modify rules, or when HIPS module is updated, and if you restart the system, temporary rules will be deleted.

**Create rule and remember permanently**

Create a new HIPS rule. You can later modify this rule in the HIPS rule management section.

### 6.1.10.1 HIPS rule settings

This window gives you an overview of existing HIPS rules.

<table>
<thead>
<tr>
<th>Rule</th>
<th>User-defined or automatically chosen rule name.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabled</td>
<td>Deactivate this switch if you want to keep the rule in the list but do not want to use it.</td>
</tr>
<tr>
<td>Action</td>
<td>The rule specifies an action – <strong>Allow</strong>, <strong>Block</strong> or <strong>Ask</strong> – that should be performed if the conditions are right.</td>
</tr>
<tr>
<td>Sources</td>
<td>The rule will be used only if the event is triggered by an application(s).</td>
</tr>
<tr>
<td>Targets</td>
<td>The rule will be used only if the operation is related to a specific file, application or registry entry.</td>
</tr>
</tbody>
</table>
### Rule
User-defined or automatically chosen rule name.

### Log severity
If you activate this option, information about this rule will be written to the HIPS log.

### Notify
A small pop-up window appears in the lower-right corner if an event is triggered.

Create a new rule, click **Add** new HIPS rules or **Edit** selected entries.

**Rule name**
User-defined or automatically chosen rule name.

**Action**
The rule specifies an action **Allow**, **Block** or **Ask** that should be performed if the conditions are right.

**Operations affecting**
You must select the type of operation for which the rule will be applied. The rule will be used only for this type of operation and for the selected target. The rule consists of parts that describe the conditions triggering this rule.

**Source applications**
The rule will be used only if the event is triggered by this application(s). Select **Specific applications** from drop-down menu and click **Add** to add new files or folders or you can select **All applications** from the drop-down menu to add all applications.

---

**NOTE**
Some operations of specific rules predefined by HIPS cannot be blocked and are allowed by default. In addition, not all system operations are monitored by HIPS. HIPS monitors operations that may be considered unsafe.

Descriptions of important operations:

**File operations:**

<table>
<thead>
<tr>
<th>Operation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delete file</td>
<td>Application is asking for permission to delete the target file.</td>
</tr>
<tr>
<td>Write to file</td>
<td>Application is asking for permission to write to the target file.</td>
</tr>
<tr>
<td>Direct access to disk</td>
<td>Application is trying to read from or write to the disk in a non-standard way that will circumvent common Windows procedures. This may result in files being modified without the application of corresponding rules. This operation may be caused by malware trying to evade detection, backup software trying to make an exact copy of a disk, or a partition manager trying to reorganize disk volumes.</td>
</tr>
<tr>
<td>Install global hook</td>
<td>Refers to calling the SetWindowsHookEx function from the MSDN library.</td>
</tr>
<tr>
<td>Load driver</td>
<td>Installation and loading of drivers onto the system.</td>
</tr>
</tbody>
</table>

The rule will only be used if the operation is related to this target. Select **Specific files** from the drop-down menu and click **Add** to add new files or folders. Alternatively, you can select **All files** from the drop-down menu to add all applications.

**Application operations:**

<table>
<thead>
<tr>
<th>Action</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debug another application</td>
<td>Attaching a debugger to the process. While debugging an application, many details of its behavior can be viewed and modified and its data can be accessed.</td>
</tr>
<tr>
<td>Intercept events from another application</td>
<td>The source application is attempting to catch events targeted at a specific application (for example a keylogger trying to capture browser events).</td>
</tr>
<tr>
<td>Terminate/suspend another application</td>
<td>Suspending, resuming or terminating a process (can be accessed directly from Process Explorer or the Processes window).</td>
</tr>
<tr>
<td>Start new application</td>
<td>Starting of new applications or processes.</td>
</tr>
<tr>
<td>Modify state of another application</td>
<td>The source application is attempting to write into the target applications' memory or run code on its behalf. This functionality may be useful to protect an essential application by configuring it as a target application in a rule blocking the use of this operation.</td>
</tr>
</tbody>
</table>

The rule will only be used if the operation is related to this target. Select **Specific applications** from the drop-down menu and click **Add** to add new files or folders. Alternatively, you can select **All applications** from the drop-down menu to add all applications.

**Registry operations:**

<table>
<thead>
<tr>
<th>Operation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modify startup settings</td>
<td>Any changes in settings that define which applications will be run at Windows startup. These can be found, for example, by searching for the Run key in the Windows Registry.</td>
</tr>
<tr>
<td>Delete from registry</td>
<td>Deleting a registry key or its value.</td>
</tr>
<tr>
<td>Rename registry key</td>
<td>Renaming registry keys.</td>
</tr>
<tr>
<td>Modify registry</td>
<td>Creating new values of registry keys, changing existing values, moving data in the database tree or setting user or group rights for registry keys.</td>
</tr>
</tbody>
</table>

The rule will only be used if the operation is related to this target. Select **Specific entries** from the drop-down menu and click **Add** to add new files or folders. Alternatively, you can select **All entries** from the drop-down menu to add all applications.

**NOTE**
You can use wildcards with certain restrictions when entering a target. Instead of a particular key the * (asterisk) symbol can be used in registry paths. For example `HKEY_USERS\software can mean HKEY_USER \default\software but not HKEY_USERS\-1-2-21-2928335913-73762274-491795397-7895\default\software. HKEY_LOCAL_MACHINE\system\ControlSet*` is not a valid registry key path. A registry key path containing \* defines "this path, or any path on any level after that symbol". This is the only way of using wildcards for file targets. First, the specific part of a path will be evaluated, then the path following the wildcard symbol (*).

**WARNING**
You may receive a notification if you create an overly generic rule.
6.1.10.2  HIPS advanced settings

The following options are useful for debugging and analyzing an application’s behavior:

**Drivers always allowed to load**
Selected drivers are always allowed to load regardless of configured filtering mode, unless explicitly blocked by user rule. Drivers shown in this list will always be allowed to load regardless of HIPS filtering mode, unless explicitly blocked by user rule. You can [Add](#) new driver, [Edit](#) or [Delete](#) selected driver from the list.

**NOTE**
Click [Reset](#) if you do not want drivers that you have added manually to be included. This can be useful if you have added several drivers and you cannot delete them from the list manually.

Log all blocked operations
All blocked operations will be written to the HIPS log.

Notify when changes occur in Startup applications
Displays a desktop notification each time an application is added to or removed from system startup.

### 6.2  Update configuration

This section specifies update source information like the update servers being used and authentication data for these servers.

**NOTE**
For updates to be downloaded properly, it is essential that you fill in all update parameters correctly. If you use a firewall, ensure that your ESET program is allowed to communicate with the internet (for example, HTTP communication).

- **Basic**

**Select default update profile**
Choose existing or create new profile that will be applied by default for updates.

**Clear update cache**
If you experience problems with an update, click [Clear](#) to clear the temporary update cache.

**Set maximum detection engine age automatically / Maximum detection engine age (days)**
Allows you to set maximum days after which the detection engine age will be reported as out of date. The default value is 7.

**Module Rollback**
If you suspect that a new update of detection engine and/or program modules may be unstable or corrupt, you can rollback to the previous version and disable updates for a set period of time. Alternatively, you can enable previously disabled updates if you had postponed them indefinitely. ESET Mail Security records snapshots of detection engine and program modules for use with the [Rollback](#) feature. In order to create detection engine snapshots, leave [Create snapshots of modules enabled](#).

**Number of locally stored snapshots**
Defines the number of previous module snapshots stored.

- **Profiles**
To create a custom update profile, select **Edit** next to **List of profiles**, enter your own **Profile name** and click **Add**. Select profile to edit and modify parameters for **module updates** types or create an **Update mirror**.

### Updates

Select the type of update to use from the drop-down menu:

- **Regular update** - By default, the Update type is set to Regular update to ensure that update files will automatically be downloaded from the ESET server with the least network traffic.

- **Pre-release update** - Are updates that have gone through thorough internal testing and will be available to the general public soon. You can benefit from enabling pre-release updates by having access to the most recent detection methods and fixes. However, pre-release updates might not be stable enough at all times and SHOULD NOT be used on production servers and workstations where maximum availability and stability is required.

- **Delayed update** - Allows updating from special update servers providing new versions of virus databases with a delay of at least X hours (that is, databases tested in a real environment and therefore considered as stable).

**Ask before downloading update**

When a new update is available, you will be prompted before downloading it.

**Ask if an update file size is greater than (KB)**

If the update file size is greater than the value specified in the field, a notification will be displayed.

**Disable notification about successful update**

Turns off the system tray notification at the bottom right corner of the screen. It is useful to select this option if a full-screen application is running. Note that Presentation mode will turn off all notifications.

### Modules updates

Module updates are set to **Choose automatically** by default. The update server is the location where updates are stored. If you use an ESET server, we recommend that you leave the default option selected.

- **When using a local HTTP server** - also known as a Mirror - the update server should be set as follows:
  
  `http://computer_name_or_its_IP_address:2221`

- **When using a local HTTP server with SSL** - the update server should be set as follows:
  
  `https://computer_name_or_its_IP_address:2221`

- **When using a local shared folder** - the update server should be set as follows:
  
  `\computer_name_or_its_IP_address\shared_folder`

**Enable more frequent updates of detection signatures**

Detection engine will be updated in shorter intervals. Disabling this option may negatively impact detection rate.

**Allow module updates from removable media**

Update from removable media if contains created mirror. When **Automatic** selected, updates will run in the background. If you want to show update dialogs select **Always ask**.

**Program component update**

Use the **Update mode** drop-down menu to choose how ESET Mail Security component updates are applied when a new update is available. Component updates usually modify existing features, but may also include new features. Depending on chosen update mode, the component update can be performed automatically without an intervention or confirmation. Alternatively, you can choose to be notified before the updates are
installed. A server restart may be required after the component update. The following update modes are available:

- **Ask before update** - You will be prompted to confirm or refuse product updates when they are available. This is the default option. A server restart may be required after the component update.

- **Auto-update** - Component updates will be downloaded and installed automatically. We do not recommend you this option because ESET Mail Security will restart your server after the component update.

- **Never update** - Component updates will not be performed at all. We recommend you this option because it enables you to run the component updates manually and restart your server during scheduled maintenance window.

**IMPORTANT**
Auto-update mode restarts your server automatically after the component update has been completed.

### Connection options

**Proxy Server**
To access the proxy server setup options for a given update profile, click the **Proxy mode** and select one of the three following options:

- **Do not use proxy server** - No proxy server will be used by ESET Mail Security when performing updates.

- **Use global proxy server settings** - Proxy server configuration specified in the **Advanced setup (F5) > Tools > Proxy server** will be used.

- **Connection through a proxy server** - Use this option if:

  A proxy server should be used to update ESET Mail Security that is different from the proxy server specified in the global settings (**Tools > Proxy server**). If so, the settings should be specified here: Proxy server address, communication Port (3128 by default), plus Username and Password for the proxy server if required.

  The proxy server settings were not set globally, but ESET Mail Security will connect to a proxy server for updates.

  Your computer is connected to the internet via a proxy server. The settings are taken from Internet Explorer during program installation, but if they are subsequently changed (for example, if you change your ISP), check that the HTTP proxy settings listed in this window are correct. Otherwise the program will not be able to connect to the update servers.

**NOTE**
Authentication data such as **Username** and **Password** is intended for accessing the proxy server. Complete these fields only if a Username and Password are required. Please note that these fields are not for your Username/Password for ESET Mail Security, and should only be completed if you know you need a password to access the internet via a proxy server.

**Use direct connection if proxy is not available**
If a product is configured to utilize HTTP Proxy and the proxy is unreachable, the product will bypass the proxy and communicate directly with ESET servers.

**Windows shares**
When updating from a local server running Windows, authentication for each network connection is required by default.
Connect to LAN as
To configure your account, select one of the following options:

- **System account (default)** - Use the system account for authentication. Typically, no authentication process takes place if there is no authentication data supplied in the main update setup section.

- **Current user** - Select this option to ensure that the program authenticates using the currently logged-in user account. The drawback of this solution is that the program is not able to connect to the update server if no user is currently logged in.

- **Specified user** - Select this option to use a specific user account for authentication. Use this method when the default system account connection fails. Be aware that the specified user account must have access to the update files directory on the local server. If the user does not have access, the program will not be able to establish a connection or download updates.

**WARNING**
When either **Current user** or **Specified user** is selected, an error may occur when changing the identity of the program to the desired user. We recommend entering the LAN authentication data in the main update setup section. In this update setup section, the authentication data should be entered as follows: `domain_name \user` (if it is a workgroup, enter `workgroup_name\name`) and password. When updating from the HTTP version of the local server, no authentication is required.

Disconnect from server after update
To force a disconnect if a connection to the server remains active even after updates have been downloaded.

**Update mirror**
Configuration options for the local Mirror server are located in the Advanced setup (F5) in the Update > Profiles > Update Mirror tab.

### 6.2.1 Update rollback
If you click **Rollback**, you have to select a time interval from the drop-down menu that represents the period of time that the detection engine database and program module updates will be paused.

Select **Until revoked** to postpone regular updates indefinitely until you restore update functionality manually. Because it represents a potential security risk, we do not recommend selecting this option.

The detection engine database version is downgraded to the oldest available and stored as a snapshot in the local computer file system.

### 6.2.2 Scheduled Task - Update
If you wish to update the program from two update servers, then it is necessary to create two different update profiles. If the first one fails to download update files, then the program automatically switches to the alternative one. This is suitable, for example, for notebooks that normally update from a local LAN update server, but their owners often connect to the internet using other networks. Therefore, if the first profile fails, the second one will automatically download update files from the ESET update servers.

**EXAMPLE**
The steps below will walk you through a task to edit existing **Regular automatic update**.
1. In the main **Scheduler** screen, select task **Update** with name **Regular automatic update** and click **Edit** the configuration wizard will be open.

2. Set the scheduler task to run, select one of the following timing options to define when you want the scheduled task to run.

3. If you want to prevent the task from being executed when the system is running on battery power (for example UPS), click the switch next to **Skip task when running on battery power**.

4. Select **update profile** to use for update. Select an action to perform if the scheduled task execution fails for any reason.

5. Click **Finish** to apply the task.

### 6.2.3 Update mirror

Open ESET Mail Security

*Press F5 > Update > Profiles > Update mirror*

ESET Mail Security allows you to create copies of update files that can be used to update other workstations on the network. The use of a "mirror" - a copy of the update files in the LAN environment is convenient because the update files do not need to be downloaded from the vendor update server repeatedly by each workstation. Updates are downloaded to the local mirror server and then distributed to all workstations to avoid the risk of network traffic overload. Updating client workstations from a Mirror optimizes network load balance and saves Internet connection bandwidth.

**Update mirror**

**Create update mirror**

Activates mirror configuration options.

**Storage folder**

Click **Clear** if you want to change a defined default folder to store mirrored files `C:\ProgramData\ESET\ESET File Security\mirror`. Click **Edit** to browse for a folder on the local computer or shared network folder. If authorization for the specified folder is required, authentication data must be entered in the Username and Password fields. If the selected destination folder is located on a network disk running the Windows NT/2000/XP operating system, the username and password specified must have write privileges for the selected folder. The username and password should be entered in the format `Domain/User` or `Workgroup/User`. Please remember to supply the corresponding passwords.

**Program component update**

**Files**

When configuring the Mirror you can specify the language versions of updates you want to download. Languages selected must be supported by the mirror server configured by the user.

**Update components automatically**

Allows for the installation of new features and updates to existing features. An update can be performed automatically without user intervention, or you can choose to be notified. After a product update has been installed, a computer restart may be required.

**Update components now**

Updates your program components to the latest version.

**HTTP server**

**Server port**
Default port is set to 2221. Change this value if you are using a different port.

**Authentication**

Defines the method of authentication used for accessing update files. The following options are available: None, Basic, and NTLM.

- Select Basic to use base64 encoding with basic username and password authentication.
- The NTLM option provides encoding using a safe encoding method. For authentication, the user created on the workstation sharing the update files is used.
- The default setting is None, which grants access to the update files with no need for authentication.

**WARNING**

If you want to allow access to the update files via the HTTP server, the Mirror folder must be located on the same computer as the ESET Mail Security instance creating it.

**SSL for HTTP server**

Append your Certificate chain file, or generate a self-signed certificate if you want to run HTTP server with HTTPS (SSL) support. The following certificate types are available: PEM, PFX and ASN. For additional security, you can use HTTPS protocol to download update files. It is almost impossible to track data transfers and login credentials using this protocol.

The Private key type is set to Integrated by default (and therefore the Private key file option is disabled by default). This means that the private key is a part of the selected certificate chain file.

**Connection options**

**Windows shares**

When updating from a local server running Windows, authentication for each network connection is required by default.

**Connect to LAN as**

To configure your account, select one of the following options:

- **System account (default)** - Use the system account for authentication. Normally, no authentication process takes place if there is no authentication data supplied in the main update setup section.

- **Current user** - Select this to ensure that the program authenticates using the currently logged-in user account. The drawback of this solution is that the program is not able to connect to the update server if no user is currently logged in.

- **Specified user** - Select this to use a specific user account for authentication. Use this method when the default system account connection fails. Be aware that the specified user account must have access to the update files directory on the local server. If the user does not have access, the program will not be able to establish a connection and download updates.

**WARNING**

When either Current user or Specified user is selected, an error may occur when changing the identity of the program to the desired user. We recommend entering the LAN authentication data in the main update setup section. In this update setup section, the authentication data should be entered as follows: domain_name\user (if it is a workgroup, enter workgroup_name\name) and password. When updating from the HTTP version of the local server, no authentication is required.

**Disconnect from server after update**

To force a disconnect if a connection to the server remains active even after updates have been downloaded.
### 6.3 Network protection

**NOTE**

On Windows Server 2008 SP2, Windows Server 2008 R2 SP1, Small Business Server 2008 SP2 and Small Business Server 2011, installation of the **Network protection** component is disabled by default. If you want this feature to be installed, choose the **Custom** installation type. If you have ESET Mail Security already installed, you can run the installer again to modify your existing installation adding **Network protection** component.

#### Enable Network attack protection (IDS)

Allows you to configure access to some of the services running on your computer from the Trusted zone and enable/disable detection of several types of attacks and exploits that might be used to harm your computer.

#### Enable Botnet protection

Detects and blocks communication with malicious command and control servers based on typical patterns when the computer is infected and a bot is attempting to communicate.

#### IDS exceptions

You can think of Intrusion Detection System (IDS) exceptions as network protection rules. Click **edit** to define IDS exceptions.

#### Intrusion detection:

<table>
<thead>
<tr>
<th>Protocol SMB</th>
<th>Detects and blocks various security problems in SMB protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol RPC</td>
<td>Detects and blocks various CVEs in the remote procedure call system developed for the Distributed Computing Environment (DCE).</td>
</tr>
<tr>
<td>Protocol RDP</td>
<td>Detects and blocks various CVEs in the RDP protocol (see above).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Block unsafe address after attack detection</th>
<th>IP addresses that have been detected as sources of attacks are added to the Blacklist to prevent connection for a certain period of time.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Display notification after attack detection</th>
<th>Turns on the system tray notification at the bottom right corner of the screen.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Display notifications also for incoming attacks against security holes</th>
<th>Alerts you if attacks against security holes are detected or if an attempt is made by a threat to enter the system this way.</th>
</tr>
</thead>
</table>

#### Packet inspection:

<table>
<thead>
<tr>
<th>Allow incoming connection to admin shares in SMB protocol</th>
<th>The administrative shares (admin shares) are the default network shares that share hard drive partitions (C$, D$, ...) in the system together with the system folder (ADMIN$). Disabling connection to admin shares should mitigate many security risks. For example, the Conficker worm performs dictionary attacks in order to connect to admin shares.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Deny old (unsupported) SMB dialects</th>
<th>Deny SMB sessions that use an old SMB dialect unsupported by IDS. Modern Windows operating systems support old SMB dialects due to backward compatibility with old operating systems such as Windows 95. The attacker can use an old dialect in an SMB session in order to evade traffic inspection. Deny old SMB dialects if your computer does not need to share files (or use SMB communication in general) with a computer with an old version of Windows.</th>
</tr>
</thead>
</table>
Allow incoming connection to admin shares in SMB protocol - The administrative shares (admin shares) are the default network shares that share hard drive partitions (C$, D$, ...) in the system together with the system folder (ADMIN$). Disabling connection to admin shares should mitigate many security risks. For example, the Conficker worm performs dictionary attacks in order to connect to admin shares.

Deny SMB sessions without extended security - Extended security can be used during the SMB session negotiation in order to provide a more secure authentication mechanism than LAN Manager Challenge/Response (LM) authentication. The LM scheme is considered weak and is not recommended for use.

Allow communication with the Security Account Manager service - For more information about this service see [MS-SAMR].

Allow communication with the Local Security Authority service - For more information about this service see [MS-LSAD] and [MS-LSAT].

Allow communication with the Remote Registry service - For more information about this service see [MS-RRP].

Allow communication with the Service Control Manager service - For more information about this service see [MS-SCMR].

Allow communication with the Server service - For information about this service see [MS-SRVS].

Allow communication with the other services - Other MSRPC services.

6.3.1 IDS exceptions

Intrusion Detection System (IDS) exceptions are essentially network protection rules. The exceptions are evaluated from top to bottom. IDS exceptions editor allows you to customize network protection behavior upon various IDS exceptions. First matching exception is applied, for each action type (Block, Notify, Log) separately. Top/Up/Down/Bottom allows you to adjust the priority level of exceptions. To create a new IDS exception, click Add. Click Edit to modify an existing IDS exception, or Delete to remove it.

Choose Alert type from the drop-down list. Specify the Threat name and Direction. Browse for an Application you want to create the exception for. Specify a list of IP addresses (IPv4 or IPv6) or subnets. For multiple entries use comma as a delimiter.

Configure Action for IDS exception by selecting one of the options from the drop-down menu (Default, Yes, No). Do this for each Action type (Block, Notify, Log).

EXAMPLE

If want a notification to be displayed in case of an IDS exception alert, as well as have the time of the event logged, leave the Block action type Default and for the other two action types (Notify and Log) choose Yes from the drop-down menu.
6.3.2 Temporary IP address blacklist

View a list of IP addresses that have been detected as the source of attacks and added to the blacklist to block connections for a certain period of time. Shows IP address that have been locked.

Block reason
Shows type of attack that has been prevented from the address (for example TCP Port Scanning attack).

Timeout
Shows time and date when the address will expire from the blacklist.

Remove / Remove all
Removes selected IP address from the temporary blacklist before it will expire or removes all addresses from the blacklist immediately.

Add exception
Adds a firewall exception into IDS filtering for selected IP address.

6.4 Web and email

You can configure protocol filtering, Email client protection, Web access protection and Anti-phishing to protect your server during internet communication.

Email client protection
Controls all email communication, protects against malicious code and lets you choose the action taken when an infection is detected.

Web access protection
Monitors the communication between web browsers and remote servers and complies with the HTTP and HTTPS rules. This feature also allows you to block, allow or exclude certain URL addresses.

Protocol filtering
Offers advanced protection for application protocols and it is provided by the ThreatSense scanning engine. This control works automatically, regardless of whether a web browser or an email client is used. It also works for encrypted (SSL/TLS) communication.

Anti-Phishing protection
Allows you to block web pages known to distribute phishing content.

6.4.1 Protocol filtering

Antivirus protection for application protocols is provided by the ThreatSense scanning engine, which integrates multiple advanced malware scanning techniques. Protocol filtering works automatically, regardless of the Internet browser or email client used. If protocol filtering is enabled, ESET Mail Security will be checking communications that uses the SSL/TLS protocol, go to Web and email > SSL/TLS.

Enable application protocol content filtering
If you disable protocol filtering, note that many ESET Mail Security components (Web access protection, Email protocols protection and Anti-Phishing protection) depend on it and not all their features will be available.

Excluded applications
To exclude the communication of specific network-aware applications from content filtering, select them in the list. HTTP/POP3 communication of the selected applications will not be checked for threats. Enables you to exclude specific applications from protocol filtering. Click Edit and Add to select an executable from the list of applications to exclude it from protocol filtering.
Excluded IP addresses
Allows you to exclude specific remote addresses from protocol filtering. IP addresses in this list will be excluded from protocol content filtering. HTTP/POP3/IMAP communication from/to the selected addresses will not be checked for threats.

NOTE
Exclusions are useful when protocol filtering causes compatibility issues.

6.4.1.1 Web and email clients
Because of the enormous amount of malicious code circulating the Internet, safe Internet browsing is a very important aspect of computer protection. Web browser vulnerabilities and fraudulent links help malicious code enter the system unnoticed, which is why ESET Mail Security focuses on web browser security. Each application accessing the network can be marked as an Internet browser. Applications that already use protocols for communication or applications from selected paths can be added to the list of Web and email clients.

NOTE
Starting with Windows Vista Service Pack 1 and Windows Server 2008 SP2, the new Windows Filtering Platform (WFP) architecture is used to check network communication. Since WFP technology uses special monitoring techniques, the Web and email clients section is not available.

6.4.2 SSL/TLS
ESET Mail Security is capable of checking for threats in communications that use the Secure Sockets Layer (SSL) / Transport Layer Security (TLS) protocol.

You can use various scanning modes to examine SSL protected communications with trusted certificates, unknown certificates, or certificates that are excluded from SSL-protected communication checking.

Enable SSL/TLS protocol filtering
If protocol filtering is disabled, the program will not scan communications over SSL/TLS. The Secure Sockets Layer (SSL) / Transport Layer Security (TLS) protocol filtering mode is available in following options:

- **Automatic mode** - Select this option to scan all SSL/TLS protected communications except communications protected by certificates excluded from checking. If a new communication using an unknown, signed certificate is established, you will not be notified and the communication will automatically be filtered. When you access a server with an untrusted certificate that is marked as trusted (it is on the trusted certificates list), communication to the server is allowed and the content of the communication channel is filtered.
• **Interactive mode** - If you enter a new SSL/TLS protected site (with an unknown certificate), an action selection dialog is displayed. This mode allows you to create a list of SSL/TLS certificates that will be excluded from scanning.

• **Policy mode** - All SSL/TLS connections are filtered, except configured exclusions.

**List of SSL/TLS filtered application**

Add filtered application and set one of the scan actions. The List of SSL/TLS filtered applications can be used to customize ESET Mail Security behavior for specific applications, and to remember actions chosen if **Interactive mode** is selected in **SSL/TLS protocol filtering mode**.

**List of known certificates**

Allows you to customize ESET Mail Security behavior for specific SSL certificates. The list can be viewed and managed by clicking **Edit** next to **List of known certificates**.

**Exclude communication with trusted domains**

To exclude communication using Extended validation certificates from protocol checking (internet banking).

**Block encrypted communication utilizing the obsolete protocol SSL v2**

Communication using this earlier version of the SSL protocol will automatically be blocked.

**Root certificate**

For SSL/TLS communication to work properly in your browsers/email clients, it is essential that the root certificate for ESET be added to the list of known root certificates (publishers). Add the root certificate to known browsers should be enabled. Select this option to automatically add the ESET root certificate to known browsers (for example, Opera and Firefox). For browsers using the system certification store, the certificate is added automatically (for example, in Internet Explorer).

To apply the certificate to unsupported browsers, click **View Certificate > Details > Copy to File**... and manually import it into the browser.

**Certificate validity**

**If the certificate cannot be verified using the TRCA certificate store**

In some cases, a website certificate cannot be verified using the **Trusted Root Certification Authorities** (TRCA) store. This means that the certificate is signed by someone (for example, the administrator of a web server or a small business) and considering this certificate as trusted is not always a risk. Most large businesses (for example, banks) use a certificate signed by the TRCA. If **Ask about certificate validity** is selected (selected by default), the user will be prompted to select an action to take when encrypted communication is established. You can select **Block communication that uses the certificate** to always terminate encrypted connections to sites with unverified certificates.

**If the certificate is invalid or corrupt**

This means that the certificate expired or was incorrectly signed. In this case, we recommend that you leave **Block communication that uses the certificate** selected.

**6.4.2.1 List of known certificates**

To customize ESET Mail Security behavior for specific Secure Sockets Layer (SSL) / Transport Layer Security (TLS) certificates, and to remember actions chosen if **Interactive mode** is selected in **SSL/TLS protocol filtering mode**. You can configure selected certificate or **Add** a certificate from a URL or File. Once you are in Add certificate window, click URL or File and specify the certificate URL or browse for a certificate file. The following fields will automatically be filled using data from the certificate:

- **Certificate name** - name of the certificate.
- **Certificate issuer** - name of the certificate creator.
- **Certificate subject** - the subject field identifies the entity associated with the public key stored in the subject public key field.
Access action

- **Auto** - to allow trusted certificates and ask for untrusted ones.
- **Allow or Block** - to allow/block communication secured by this certificate regardless of its trustworthiness.
- **Ask** - to receive a prompt when a specific certificate is encountered.

Scan action

- **Auto** - to scan in automatic mode and ask in interactive mode.
- **Scan or Ignore** - to scan or ignore communication secured by this certificate.
- **Ask** - receive a prompt when a specific certificate is encountered.

6.4.2.2 Encrypted SSL communication

If your system is configured to use SSL protocol scanning, a dialog window prompting you to choose an action will be displayed in two situations:

First, if a website uses an unverifiable or invalid certificate, and ESET Mail Security is configured to ask the user in such cases (by default yes for unverifiable certificates, no for invalid ones), a dialog box will ask you whether to **Allow** or **Block** the connection.

Second, if SSL protocol filtering mode is set to Interactive mode, a dialog box for each website will ask whether to **Scan** or **Ignore** the traffic. Some applications verify that their SSL traffic is not modified nor inspected by anyone, in such cases ESET Mail Security must **Ignore** that traffic to keep the application working.

In both cases, the user can choose to remember the selected action. Saved actions are stored in the **List of known certificates**.
6.4.3 Email client protection

Integration of ESET Mail Security with email clients increases the level of active protection against malicious code in email messages. If your email client is supported, integration can be enabled in ESET Mail Security. When integration is activated, the ESET Mail Security toolbar is inserted directly into the email client (toolbar for newer versions of Windows Live Mail is not inserted), allowing for more efficient email protection.

Email client integration

Email clients that are currently supported include Microsoft Outlook, Outlook Express, Windows Mail and Windows Live Mail. Email protection works as a plug-in for these programs. The main advantage of the plug-in is that it is independent of the protocol used. When the email client receives an encrypted message, it is decrypted and sent to the virus scanner. Even if integration is not enabled, email communication is still protected by the email client protection module (POP3, IMAP). For a complete list of supported email clients and their versions, refer to the following Knowledgebase article.

Disable checking upon inbox content change

If you are experiencing a system slowdown when working with your email client (MS Outlook only). This may occur when retrieving an email from the Kerio Outlook Connector Store, for example.

Enable email protection by client plugins

Lets you disable email client protection without removing integration into your email client. You can disable all plugins at once, or disable selectively the following:

- Received email - Toggles checking of received messages.
- Sent email - Toggles checking of sent messages.
- Read email - Toggles checking of read messages.

Action to be performed on infected email

- No action - If enabled, the program will identify infected attachments, but will leave emails without taking any action.
- Delete email - The program will notify the user about infiltration(s) and delete the message.
- Move email to the Deleted items folder - Infected emails will be moved automatically to the Deleted items folder.
- Move email to the folder - Infected emails will be moved automatically to the specified folder.
- Folder - Specify the custom folder where you want to move infected emails when detected.

Repeat scan after update

Toggles rescanning after a detection engine update.

Accept scan results from other modules

If this is selected, the email protection module accepts scan results of other protection modules (POP3, IMAP protocols scanning).

6.4.3.1 Email protocols

Enable email protection by protocol filtering

The IMAP and POP3 protocols are the most widespread protocols used to receive email communication in an email client application. ESET Mail Security provides protection for these protocols regardless of the email client used.

ESET Mail Security also supports the scanning of IMAPS and POP3S protocols, which use an encrypted channel to transfer information between server and client. ESET Mail Security checks communication utilizing the SSL (Secure Socket Layer), and TLS (Transport Layer Security) protocols. The program will only scan traffic on ports defined in Ports used by IMAPS / POP3S protocol, regardless of operating system version.

IMAPS / POP3S scanner setup
Encrypted communications will not be scanned when default settings are in use. To enable the scanning of encrypted communication, navigate to SSL/TLS protocol checking.

The port number identifies what type of port it is. Here are the default email ports for:

<table>
<thead>
<tr>
<th>Port name</th>
<th>Port numbers</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>POP3</td>
<td>110</td>
<td>Default POP3 non-encrypted port.</td>
</tr>
<tr>
<td>IMAP</td>
<td>143</td>
<td>Default IMAP non-encrypted port.</td>
</tr>
<tr>
<td>Secure IMAP (IMAP4-SSL)</td>
<td>585</td>
<td>Enable SSL/TLS protocol filtering. Multiple port numbers must be delimited by a comma.</td>
</tr>
<tr>
<td>IMAP4 over SSL (IMAPS)</td>
<td>993</td>
<td>Enable SSL/TLS protocol filtering. Multiple port numbers must be delimited by a comma.</td>
</tr>
<tr>
<td>Secure POP3 (SSL-POP)</td>
<td>995</td>
<td>Enable SSL/TLS protocol filtering. Multiple port numbers must be delimited by a comma.</td>
</tr>
</tbody>
</table>

### 6.4.3.2 Alerts and notifications

Email protection provides control of email communications received through the POP3 and IMAP protocols. Using the plug-in for Microsoft Outlook and other e-mail clients, ESET Mail Security provides control of all communications from the email client (POP3, MAPI, IMAP, HTTP). When examining incoming messages, the program uses all the advanced scanning methods included in the ThreatSense scanning engine. This means that detection of malicious programs takes place even before being matched against the virus detection database. Scanning of POP3 and IMAP protocol communications is independent of the email client used.

After an email has been checked, a notification with the scan result can be appended to the message. You can elect to Append tag messages to received and read mail, Append note to the subject of received and read infected email or Append tag messages to sent email. Be aware that on rare occasions tag messages may be omitted in problematic HTML messages or if messages are forged by malware. The tag messages can be added to received and read email, sent email or both. The available options are:

- **Never** - No tag messages will be added at all.
- **To infected email only** - Only messages containing malicious software will be marked as checked (default).
- **To all scanned email** - The program will append messages to all scanned email.

**Append note to the subject of sent infected email**

Disable this if you do not want email protection to include a virus warning in the subject of an infected email. This feature allows for simple, subject-based filtering of infected emails (if supported by your email program). It also increases the level of credibility for the recipient and if an infiltration is detected, provides valuable information about the threat level of a given email or sender.

**Template added to the subject of infected email**

Edit this template if you wish to modify the subject prefix format of an infected email. This function will replace the message subject Hello with a given prefix value [virus] to the following format: [virus] Hello. The variable %VIRUSNAME% represents the detected threat.
6.4.3.3 MS Outlook toolbar
Microsoft Outlook protection works as a plug-in module. After ESET Mail Security is installed, this toolbar containing the antivirus protection options is added to Microsoft Outlook:

**ESET Mail Security**
Click on icon opens the main program window of ESET Mail Security.

**Rescan messages**
Allows you to launch email checking manually. You can specify messages that will be checked and you can activate rescanning of received email. For more information see Email client protection.

**Scanner setup**
Displays the Email client protection setup options.

6.4.3.4 Outlook Express and Windows Mail toolbar
Outlook Express and Windows Mail protection works as a plug-in module. After ESET Mail Security is installed, this toolbar containing the antivirus protection options is added to Outlook Express or Windows Mail:

**ESET Mail Security**
Click on icon opens the main program window of ESET Mail Security.

**Rescan messages**
Enables you to launch email checking manually. You can specify messages that will be checked and you can activate rescanning of received email. For more information see Email client protection.

**Scanner setup**
Displays the Email client protection setup options.

**Customize appearance**
The appearance of the toolbar can be modified for your email client. Deselect the option to customize appearance independent of email program parameters.

- **Show text** - displays descriptions for icons.
- **Text to the right** - option descriptions are moved from the bottom to the right side of icons.
- **Large icons** - displays large icons for menu options.

6.4.3.5 Confirmation dialog
This notification serves to verify that the user really wants to perform the selected action, which should eliminate possible mistakes. The dialog also offers the option to disable confirmations.

6.4.3.6 Rescan messages
The ESET Mail Security toolbar integrated in email clients enables users to specify several options for email checking. The option Rescan messages offers two scanning modes:

- **All messages in the current folder** - Scans messages in the currently displayed folder.
- **Selected messages only** - Scans only messages marked by the user.
- **Rescan already scanned messages** - Provides the user with the option to run another scan on messages that have been scanned before.
6.4.4 Web access protection

Web access protection works by monitoring communication between web browsers and remote servers to protect you from online threats, and complies with HTTP (Hypertext Transfer Protocol) and HTTPS (encrypted communication) rules.

Access to web pages known to contain malicious content is blocked before content is downloaded. All other web pages are scanned by the ThreatSense scanning engine when they are loaded and blocked if malicious content is detected. Web access protection offers two levels of protection, blocking by blacklist and blocking by content.

Basic

We strongly recommend that you leave Web access protection enabled. This option can also be accessed from the main program window of ESET Mail Security by navigating to Setup > Web and email > Web access protection.

Enable advanced scanning of browser scripts

By default, all JavaScript programs executed by internet browsers will be checked by the antivirus scanner.

Web protocols

Allows you to configure monitoring for these standard protocols which are used by most Internet browsers. By default, ESET Mail Security is configured to monitor the HTTP protocol used by most Internet browsers.

ESET Mail Security also supports HTTPS protocol checking. HTTPS communication uses an encrypted channel to transfer information between server and client. ESET Mail Security checks communication utilizing the Secure Socket Layer (SSL), and Transport Layer Security (TLS) protocols. The program will only scan traffic on ports defined in Ports used by HTTPS protocol, regardless of operating system version.

Encrypted communication will be not scanned when default settings are in use. To enable the scanning of encrypted communication Advanced setup (F5) > Web and email > SSL/TLS.

ThreatSense parameters

Configure settings such as types of scan (emails, archives, exclusions, limits, etc.) and detection methods for Web access protection.

6.4.4.1 URL address management

The URL address management allows you to specify HTTP addresses to block, allow or exclude from checking. Websites in the List of blocked addresses will not be accessible unless they are also included in the List of allowed addresses. Websites in the List of addresses excluded from checking are not scanned for malicious code when accessed. SSL/TLS protocol filtering must be enabled if you want to filter HTTPS addresses in addition to HTTP web pages. Otherwise, only the domains of HTTPS sites that you have visited will be added, the full URL will not be.

One list of blocked addresses may contain addresses from some external public blacklist, and a second one may contain your own blacklist, which makes it easier to update the external list while keeping yours intact.

Click Edit and Add to create a new address list in addition to the predefined ones. This can be useful if you want to logically split different groups of addresses. By default, the following three lists are available:

- List of addresses excluded from checking - No checking for malicious code will be performed for any address added to this list.

- List of allowed addresses - If Allow access only to HTTP addresses in the list of allowed addresses is enabled and the list of blocked addresses contains * (match everything), the user will be allowed to access addresses specified in this list only. The addresses in this list are allowed even if they are included in the list of blocked addresses.
• **List of blocked addresses** - The user will not be allowed to access addresses specified in this list unless they also occur in the list of allowed addresses.

You can **Add** a new URL address into the list. You can also enter multiple values with separator. Click **Edit** to modify an existing address in the list, or **Delete** to delete it. Deleting is only possible for addresses created with **Add**, not the ones that were imported.

In all lists, the special symbols * (asterisk) and ? (question mark) can be used. The asterisk represents any number or character, while the question mark represents any one character. Particular care should be taken when specifying excluded addresses because the list should only contain trusted and safe addresses. Similarly, it is necessary to ensure that the symbols * and ? are used correctly in this list.

**NOTE**
If you want to block all HTTP addresses except addresses present in the active List of allowed addresses, add * to the active List of blocked addresses.

### 6.4.4.1.1 Create new list

The list will include the desired URL addresses/domain masks that will be blocked, allowed or excluded from checking. When creating a new list, specify the following:

- **Address list type** - Choose the type (Excluded from checking, Blocked or Allowed) from the drop-down list.
- **List name** - Specify the name of the list. This field will be grayed out when editing one of the three pre-defined lists.
- **List description** - Type a short description for the list (optional). Will be grayed out when editing one of three pre-defined list.
- **List active** - Use the switch to deactivate the list. You can activate it later when required.
• **Notify when applying** - If you want to be notified when a particular list is used in evaluation of an HTTP / HTTPS site that you visited. A notification will be issued if a website is blocked or allowed because it is included in the list of blocked or allowed addresses. The notification will contain the name of the list containing the specified website.

• **Logging severity** - Choose the logging severity (None, Diagnostic, Information or Warning) from the drop-down list. Records with **Warning** verbosity can be collected by ESET Security Management Center.

ESET Mail Security enables user to block access to specified websites and prevent the Internet browser from displaying their content. Furthermore, it allows user to specify addresses, which should be excluded from checking. If the complete name of the remote server is unknown, or the user wishes to specify a whole group of remote servers, so-called masks can be used to identify such a group.

The masks include the symbols `?` and `*`:

- use `?` to substitute a symbol
- use `*` to substitute a text string

**EXAMPLE**

`*.c?m` applies to all addresses where the last part begins with the letter c, ends with the letter m and contains an unknown symbol in between them (.com, .cam, etc.).

A leading `*.` sequence is treated specially if used at the beginning of a domain name. First, the `*` wildcard cannot represent a slash character (`/`) in this case. This is to avoid circumventing the mask, for example the mask `*.domain.com` will not match `https://anydomain.com/anypath#.domain.com` (such a suffix can be appended to any URL without affecting the download). And second, the `*.` also matches an empty string in this special case. This is to make it possible to match the whole domain including any subdomains using a single mask. For example the mask `*.domain.com` also matches `https://domain.com`. Using `*domain.com` would be incorrect, as that would also match `https://anotherdomain.com`.

**Enter multiple values**

Add multiple URL addresses delimited by new lines, commas or semicolons. When multiple selection is enabled, addresses will be shown in the list.

**Import**

Text file with URL addresses to import (separate values with a line break, for example *.txt using encoding UTF-8).
6.4.5 Anti-Phishing web protection

The term phishing defines a criminal activity that uses social engineering (the manipulation of users in order to obtain confidential information). Phishing is often used to gain access to sensitive data such as bank account numbers, PIN numbers and more.

ESET Mail Security includes anti-phishing protection, which blocks web pages known to distribute this type of content. We strongly recommend that you enable Anti-Phishing in ESET Mail Security. Visit our Knowledgebase article for more information on Anti-Phishing protection in ESET Mail Security.

When you access a recognized phishing website, the following dialog will be displayed in your web browser. If you still want to access the website, click Ignore threat (not recommended).

NOTE

Potential phishing websites that have been whitelisted will expire after several hours by default. To allow a website permanently, use the URL address management tool.

Report a phishing site
If you run across a suspicious website that appears to be phishing or otherwise malicious, you can report it to ESET for analysis. Before submitting a website to ESET, make sure it meets one or more of the following criteria:

- the website is not detected at all
- the website is incorrectly detected as a threat. In this case, you can Report a false-positive phishing site.

Alternatively, you can submit the website by email. Send your email to samples@eset.com. Remember to use a descriptive subject and enclose as much information about the website as possible (for example, the website that referred you there, how you learned of this website, etc.).

6.5 Device control

ESET Mail Security includes automatic device (CD/DVD/USB/) control. This module allows you to scan, block or adjust extended filters/permissions and define a user's ability to access and work with a given device. This may be useful if the computer administrator wants to prevent the use of devices containing undesirable content.

**NOTE**
When you enable device control using Integrate into system switch, the Device control feature of ESET Mail Security will be activated. However, a restart your system is required for this change to take effect.

Device control will become active, allowing you to edit their settings. If a device blocked by an existing rule is detected, a notification window will be displayed and access to the device will not be granted.

**Rules**
A Device control rule defines the action that will be taken when a device meeting the rule criteria is connected to the computer.

**Groups**
When you click Edit, you can manage Device groups. Create a new Device group or select an existing one to add or remove devices from the list.

**NOTE**
You can view device control log entries in Log files.

6.5.1 Device rules
Specific devices can be allowed or blocked by user, user group, or any of several additional parameters that can be specified in the rule configuration. The list of rules contains several descriptions of a rule such as its name, the type of external device, the action to perform when a device is detected, and log severity.

You can Add a new rule or modify settings of an existing one. Enter a description of the rule into the Name field for better identification. Click the switch next to Rule enabled to disable or enable this rule; this can be useful if you don't want to delete the rule permanently.

**Apply during**
You can limit rules using Time slots. Create the time slot first, it will then appear in the drop-down menu.

**Device type**
Choose the external device type from the drop-down menu (Disk storage/Portable device/Bluetooth/FireWire/...). The types of devices are inherited from the operating system and can be seen in the system Device manager assuming the device is connected to the computer. Storage devices include external disks or conventional memory card readers connected via USB or FireWire. Smart card readers include all readers of smart cards with an embedded integrated circuit, such as SIM cards or authentication cards. Examples of imaging devices are scanners or cameras, these devices do not provide information about users, only about their actions. This means that imaging devices can only be blocked globally.
Action

Access to non-storage devices can either be allowed or blocked. In contrast, rules for storage devices allow you to select one of the following rights settings:

- **Read/Write** - Full access to the device will be allowed.
- **Block** - Access to the device will be blocked.
- **Read Only** - Only read access to the device will be allowed.
- **Warn** - Each time that a device is connected, the user will be notified if it is allowed/blocked, and a log entry will be made. Devices are not remembered, a notification will still be displayed upon subsequent connections of the same device.

**NOTE**

Note that not all rights (actions) are available for all device types. If a device has storage space, all four actions are made available. For non-storage devices, there are only two (for example Read Only is not available for Bluetooth, so Bluetooth devices can only be allowed or blocked).

Additional parameters shown below can be used to fine-tune rules and tailor them to devices. All parameters are case-insensitive:

- **Vendor** - Filter by vendor name or ID.
- **Model** - The given name of the device.
- **Serial** - External devices usually have their own serial numbers. In the case of a CD/DVD, this is the serial number of the given media, not the CD drive.

**NOTE**

If these three descriptors are empty, the rule will ignore these fields when matching. Filtering parameters in all text fields are case-insensitive and no wildcards (*, ?) are supported.

In order to figure out the parameters of a device, create a rule to allow that type of device, connect the device to your computer and then review the device details in the Device control log.

Choose the **Logging severity** from the drop-down list:

- **Always** - Logs all events.
- **Diagnostic** - Logs information needed to fine-tune the program.
- **Information** - Records informative messages, including successful update messages, plus all records above.
- **Warning** - Records critical errors and warning messages.
- **None** - No logs will be recorded.

Rules can be limited to certain users or user groups by adding them to the **User list**. Click **Edit** to manage the User list.

- **Add** - Opens the Object types: Users or Groups dialog window that allows you to select desired users.
- **Delete** - Deletes the selected user from the filter.

**NOTE**

All devices can be filtered by user rules (for example imaging devices do not provide information about users, only about invoked actions).

The following functions are available:

**Edit**

Lets you modify the name of a selected rule or parameters for the devices contained therein (vendor, model, serial number).
Copy
Creates a new rule based on the parameters of the selected rule.

Delete
If you want to delete the selected rule. Alternatively, you can use the check box next to a given rule to disable it. This can be useful if you don’t want to delete a rule permanently so that you can use it in the future.

Populate
Provides an overview of all currently connected devices with the following information: device type, device vendor, model and serial number (if available). When you select a device (from the list of Detected devices) and click OK, a rule editor window appears with predefined information (you can adjust all the settings).

Rules are listed in order of priority with higher-priority rules at the top. You can select multiple rules and apply actions, such as deleting or moving them up or down the list by clicking Top/Up/Down/Bottom (arrow buttons).

6.5.2 Device groups
The Device groups window is divided into two parts. The right part of the window contains a list of devices that belong to a respective group and the left part of the window contains a list of existing groups. Select the group that contains the devices you want to display in the right pane.

You can create different groups of devices for which different rules will be applied. You can also create a single group of devices that are set to Read/Write or Read-only. This ensures that unrecognized devices will be blocked by Device control when connected to your computer.

WARNING
Having an external device connected to your computer may pose a security risk.

The following functions are available:

Add
Create a new device group by entering its name or add a device to an existing group (optionally, you can specify details such as vendor name, model and serial number) depending on where in the window you clicked the button.

Edit
Lets you modify the name of a selected group or parameters for the devices contained therein (vendor, model, serial number).

Delete
Deletes the selected group or device depending on where in the window you clicked. Alternatively, you can use the check box next to a given rule to disable it. This can be useful if you do not want to delete a rule permanently so that you can use it in the future.

Import
Imports a serial number list of devices from a file.

Populate
Provides an overview of all currently connected devices with the following information: device type, device vendor, model and serial number (if available). When you select a device (from the list of Detected devices) and click OK, a rule editor window appears with predefined information (you can adjust all the settings).

When you are done with customization click OK. Click Cancel to leave the Device groups window without saving your changes.
NOTE
Please note that not all rights (actions) are available for all device types. If a device has storage space, all four actions are made available. For non-storage devices, there are only two (for example, Read Only is not available for Bluetooth, so Bluetooth devices can only be allowed or blocked).

6.6 Tools configuration

You can customize advanced settings for the following:

- Time slots
- ERA/ESMC scan targets
- Override mode
- ESET CMD
- ESET RMM
- WMI Provider
- Log files
- Proxy server
- Email notifications
- Presentation mode
- Diagnostics
- Cluster

6.6.1 Time slots

Time slots are used within Device control rules, limiting the rules when they are being applied. Create a time slot and select it when adding new or modifying existing rules (Apply during parameter). This enables you to define commonly used time slots (work time, weekend, etc.) and reuse them easily without redefining the time ranges for every rule. A time slot should be applicable to any relevant type of rule that supports time-based control.

6.6.2 Microsoft Windows update

Windows updates provide important fixes to potentially dangerous vulnerabilities and improve the general security level of your computer. For this reason, it is vital that you install Microsoft Windows updates as soon as they become available. ESET Mail Security notifies you about missing updates according to the level you specify. The following levels are available:

- No updates - No system updates will be offered for download.
- Optional updates - Updates marked as low priority and higher will be offered for download.
- Recommended updates - Updates marked as common and higher will be offered for download.
- Important updates - Updates marked as important and higher will be offered for download.
- Critical updates - Only critical updates will be offered for download.

Click OK to save changes. The System updates window will be displayed after status verification with the update server. System update information may not be immediately available after saving changes.
6.6.3 ESET CMD

This is a feature that enables advanced ecmd commands. It allows you to export and import settings using the command line (ecmd.exe). Until now, it was only possible to export settings using the GUI. ESET Mail Security configuration can be exported to an .xml file.

When you have enabled ESET CMD, there are two authorization methods available:

- **None** - No authorization. We do not recommend this method because it allows importation of any unsigned configuration, which is a potential risk.

- **Advanced setup password** - A password is required to import a configuration from an .xml file, this file must be signed (see singing .xml configuration file further down). The password specified in Access Setup must be provided before a new configuration can be imported. If you do not have access setup enabled, your password does not match or the .xml configuration file is not signed, the configuration will not be imported.

Once ESET CMD is enabled, you can use the command line to import or export ESET Mail Security configurations. You can do it manually or create a script for the purpose of automation.

**IMPORTANT**

To use advanced ecmd commands, you need to run them with administrator privileges, or open a Windows Command Prompt (cmd) using Run as administrator. Otherwise, you will get Error executing command. message. Also, when exporting a configuration, the destination folder must exist. The export command still works when the ESET CMD setting is switched off.

**EXAMPLE**

Export settings command:
ecmd /getcfg c:\config\settings.xml

Import settings command:
ecmd /setcfg c:\config\settings.xml

**NOTE**

Advanced ecmd commands can only be run locally. Executing the client task Run command using ESET Security Management Center will not work.

Signing an .xml configuration file:

1. Download XmlSignTool executable.
2. Open a Windows Command Prompt (cmd) using Run as administrator.
3. Navigate to the location of xmlsigntool.exe
4. Execute a command to sign the .xml configuration file, usage: xmlsigntool /version 1|2 <xml_file_path>

**IMPORTANT**

Value of the parameter /version depends on the version of your ESET Mail Security. Use /version 2 for ESET Mail Security 7 and newer.
5. Enter and Re-enter your Advanced Setup Password when prompted by the XmlSignTool. Your .xml configuration file is now signed and can be used to import on another instance of ESET Mail Security with ESET CMD using the password authorization method.

**EXAMPLE**

Sign exported configuration file command: `xmlsignool /version 2 c:\config\settings.xml`

![Command Prompt](image)

**NOTE**

If your Access Setup password changes and you want to import a configuration that was signed earlier with an old password, you can sign the .xml configuration file again using your current password. This allows you to use an older configuration file without exporting it to another machine running ESET Mail Security before the import.

### 6.6.4 ESET RMM

Remote monitoring and management (RMM) is the process of supervising and controlling software systems (such as those on desktops, servers and mobile devices) by means of a locally installed agent that can be accessed by a management service provider.

**Enable RMM**

Enables Remote monitoring and management command are functional. You must have administrator privileges to use RMM utility.

**Working mode**

Select the working mode of RMM from the drop-down menu:

- Safe separation only
- All operations

**Authorization method**

Set the RMM authorization method from the drop-down menu:
- **None** - No application path check will be performed, you can run `ermm.exe` from any application
- **Application path** - Specify application which is allowed to run `ermm.exe`

Default ESET Endpoint Security installation contains file `ermm.exe` located in ESET Mail Security (default path `c:\Program Files\ESET\ESET Mail Security`). `ermm.exe` exchange data with RMM Plugin, which communicates with RMM Agent, linked to a RMM Server.

- `ermm.exe` - Command line utility developed by ESET that allows managing of Endpoint products and communication with any RMM Plugin.
- RMM Plugin - A third party application running locally on Endpoint Windows system. The plugin was designed to communicate with specific RMM Agent (e.g. Kaseya only) and with `ermm.exe`.
- RMM Agent - A third party application (e.g. from Kaseya) running locally on Endpoint Windows system. Agent communicates with RMM Plugin and with RMM Server.
- RMM Server - Running as a service on a third party server. Supported RMM systems are by Kaseya, Labtech, Autotask, Max Focus and Solarwinds N-able.

### 6.6.5 WMI Provider

Windows Management Instrumentation (WMI) is the Microsoft implementation of Web-Based Enterprise Management (WBEM), which is an industry initiative to develop a standard technology for accessing management information in an enterprise environment.


#### ESET WMI Provider

The purpose of the ESET WMI Provider is to allow for the remote monitoring of ESET products in an enterprise environment without requiring any ESET-specific software or tools. By exposing the basic product, status and statistics information via WMI, we greatly expand the possibilities of enterprise administrators when monitoring the ESET products. Administrators can take advantage of the number of access methods offered by WMI (command line, scripts and third-party enterprise monitoring tools) to monitor the state of their ESET products.

The current implementation provides read-only access to basic product information, installed features and their protection status, statistics of individual scanners, and product log files.

The WMI Provider allows for the use of standard Windows WMI infrastructure and tools to read the state of the product and product logs.

#### 6.6.5.1 Provided data

All the WMI classes related to ESET product are located in the “root\ESET” namespace. The following classes, which are described in more detail below, are currently implemented:

**General**
- ESET_Product
- ESET_Features
- ESET_Statistics

**Logs**
ESET_Product class

There can only be one instance of the ESET_Product class. Properties of this class refer to basic information about your installed ESET product:

- **ID** - Product type identifier, for example, “emsl”
- **Name** - Name of the product, for example, "ESET Mail Security"
- **FullName** - Full name of the product, for example, "ESET Mail Security for IBM Domino"
- **Version** - Product version, for example, "6.5.14003.0"
- **VirusDBVersion** - Version of the virus database, for example, "14533 (20161201)"
- **VirusDBLastUpdate** - Timestamp of the last update of the virus database. The string contains the timestamp in WMI datetime format. For example, “20161201095245.000000+060”
- **LicenseExpiration** - License expiration time. The string contains timestamp in WMI datetime format
- **KernelRunning** - Boolean value indicating whether the ekrn service is running on the machine, for example, “TRUE”
- **StatusCode** - Number indicating the protection status of the product: 0 - Green (OK), 1 - Yellow (Warning), 2 - Red (Error)
- **StatusText** - Message describing the reason for a non-zero status code, otherwise it is null

ESET_Features class

The ESET_Features class has multiple instances, depending on the number of product features. Each instance contains:

- **Name** - Name of the feature (list of names is provided below)
- **Status** - Status of the feature: 0 - inactive, 1 - disabled, 2 - enabled

A list of strings representing currently recognized product features:

- **CLIENT_FILE_AV** - Real-time file system anti-virus protection
- **CLIENT_WEB_AV** - Client web anti-virus protection
- **CLIENT_DOC_AV** - Client document anti-virus protection
- **CLIENT_NET_FW** - Client personal firewall
- **CLIENT_EMAIL_AV** - Client email anti-virus protection
- **CLIENT_EMAIL_AS** - Client email anti-spam protection
- **SERVER_FILE_AV** - Real-time anti-virus protection of files on the protected file server product, for example, files in SharePoint’s content database in the case of ESET Mail Security
- **SERVER_EMAIL_AV** - Anti-virus protection of emails of protected server product, for example, emails in MS Exchange or IBM Domino
- **SERVER_EMAIL_AS** - Anti-spam protection of emails of protected server product, for example, emails in MS Exchange or IBM Domino
- **SERVER_GATEWAY_AV** - Anti-virus protection of protected network protocols on the gateway
- **SERVER_GATEWAY_AS** - Anti-spam protection of protected network protocols on the gateway
**ESET_Statistics class**

The ESET_Statistics class has multiple instances, depending on the number of scanners in the product. Each instance contains:

- **Scanner** - String code for the particular scanner, for example, “CLIENT_FILE”
- **Total** - Total number of files scanned
- **Infected** - Number of infected files found
- **Cleaned** - Number of cleaned files
- **Timestamp** - Timestamp of the last change of this statistics. In WMI datetime format, for example, “20130118115511.000000+060”
- **ResetTime** - Timestamp of when the statistics counter was last reset. In WMI datetime format, for example, “20130118115511.000000+060”

List of strings representing currently recognized scanners:

- CLIENT_FILE
- CLIENT_EMAIL
- CLIENT_WEB
- SERVER_FILE
- SERVER_EMAIL
- SERVER_WEB

**ESET_ThreatLog class**

The ESET_ThreatLog class has multiple instances, each one representing a log record from the “Detected threats” log. Each instance contains:

- **ID** - Unique ID of this scan log record
- **Timestamp** - Creation timestamp of the log (in the WMI date/time format)
- **LogLevel** - severity of the log record expressed as a number in the [0-8] interval. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- **Scanner** - Name of the scanner that created this log event
- **ObjectType** - Type of object that produced this log event
- **ObjectName** - Name of the object that produced this log event
- **Threat** - Name of the threat that has been found in the object described by ObjectName and ObjectType properties
- **Action** - Action performed after the threat was identified
- **User** - User account that caused this log event to be generated
- **Information** - Additional description of the event
- **Hash** - Hash of the object that produced this log event

**ESET_EventLog**

The ESET_EventLog class has multiple instances, each one representing a log record from the “Events” log. Each instance contains:

- **ID** - Unique ID of this scan log record
- **Timestamp** - Creation timestamp of the log (in the WMI date/time format)
- **LogLevel** - Severity of the log record expressed as a number in the [0-8] interval. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- **Module** - Name of the module that created this log event
- **Event** - Description of the event
- **User** - User account that caused this log event to be generated

**ESET_ODFileScanLogs**
The ESET_ODFileScanLogs class has multiple instances, each one representing an on-demand file scan record. This is equivalent to the GUI “On-demand computer scan” list of logs. Each instance contains:

- **ID** - Unique ID of this scan log record
- **Timestamp** - Creation timestamp of the log (in the WMI date/time format)
- **Targets** - Target folders/objects of the scan
- **TotalScanned** - Total number of objects scanned
- **Infected** - Number of infected objects found
- **Cleaned** - Number of objects cleaned
- **Status** - Status of the scan process

### ESET_ODFileScanLogRecords
The ESET_ODFileScanLogRecords class has multiple instances, each one representing a log record in one of the scan logs represented by instances of the ESET_ODFileScanLogs class. Instances of this class provide log records of all the on-demand scans/logs. When instance of a particular scan log are required only, they must be filtered by the LogID property. Each class instance contains:

- **LogID** - ID of the scan log this record belongs to (ID of one of the instances of the ESET_ODFileScanLogs class)
- **ID** - Unique ID of this scan log record
- **Timestamp** - Creation timestamp of the log (in the WMI date/time format)
- **LogLevel** - Severity of the log record expressed as a number [0-8]. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- **Log** - The actual log message

### ESET_ODServerScanLogs
The ESET_ODServerScanLogs class has multiple instances, each one representing a run of the on-demand server scan. Each instance contains:

- **ID** - Unique ID of this scan log record
- **Timestamp** - Creation timestamp of the log (in the WMI date/time format)
- **Targets** - Target folders/objects of the scan
- **TotalScanned** - Total number of objects scanned
- **Infected** - Number of infected objects found
- **Cleaned** - Number of objects cleaned
- **RuleHits** - Total number of rule hits
- **Status** - Status of the scan process

### ESET_ODServerScanLogRecords
The ESET_ODServerScanLogRecords class has multiple instances, each one representing a log record in one of the scan logs represented by instances of the ESET_ODServerScanLogs class. Instances of this class provide log records of all the on-demand scans/logs. When instance of a particular scan log are required only, they must be filtered by the LogID property. Each class instance contains:

- **LogID** - ID of the scan log this record belongs to (ID of one of the instances of the ESET_ODServerScanLogs class)
- **ID** - Unique ID of this scan log record
- **Timestamp** - Creation timestamp of the log record (in the WMI date/time format)
- **LogLevel** - Severity of the log record expressed as a number in the [0-8] interval. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- **Log** - The actual log message

### ESET_SmtpProtectionLog
The ESET_SmtpProtectionLog class has multiple instances, each one representing a log record from the “Smtp protection” log. Each instance contains:

- **ID** - Unique ID of this scan log record
- **Timestamp** - Creation timestamp of the log record (in the WMI date/time format)
- **LogLevel** - Severity of the log record expressed as a number [0-8]. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- **HELODomain** - Name of the HELO domain
- **IP** - Source IP address
- **Sender** - Email sender
- **Recipient** - Email recipient
- **ProtectionType** - Type of protection used
- **Action** - Action performed
- **Reason** - Reason for action
- **TimeToAccept** - Number of minutes after which the email will be accepted

### ESET_HIPSLog

The ESET_HIPSLog class has multiple instances, each one representing a log record from the “HIPS” log. Each instance contains:

- **ID** - Unique ID of this log record
- **Timestamp** - Creation timestamp of the log record (in the WMI date/time format)
- **LogLevel** - Severity of the log record expressed as a number in the [0-8] interval. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- **Application** - Source application
- **Target** - Type of operation
- **Action** - Action taken by HIPS, e.g. allow, deny, etc.
- **Rule** - Name of the rule responsible for the action
- **AdditionalInfo**

### ESET_URLLog

The ESET_URLLog class has multiple instances, each one representing a log record from the “Filtered websites” log. Each instance contains:

- **ID** - Unique ID of this log record
- **Timestamp** - Creation timestamp of the log record (in the WMI date/time format)
- **LogLevel** - Severity of the log record expressed as a number [0-8]. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- **URL** - The URL
- **Status** - What happened to URL, e.g. “Blocked by Web control”
- **Application** - Application that tried to access the URL
- **User** - User account the application was running under

### ESET_DevCtrlLog

The ESET_DevCtrlLog class has multiple instances, each one representing a log record from the “Device control” log. Each instance contains:

- **ID** - Unique ID of this log record
- **Timestamp** - Creation timestamp of the log record (in the WMI date/time format)
- **LogLevel** - Severity of the log record expressed as a number [0-8]. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- **Device** - Device name
- **User** - User account name
- **UserSID** - User account SID
- **Group** - User group name
- **GroupSID** - User group SID
- **Status** - What happened to the device, e.g. "Writing blocked"
- **DeviceDetails** - Additional info regarding the device
- **EventDetails** - Additional info regarding the event

**ESET_MailServerLog**

The ESET_MailServerLog class has multiple instances, each one representing a log record from the “Mail server” log. Each instance contains:

- **ID** - Unique ID of this log record
- **Timestamp** - Creation timestamp of the log record (in the WMI date/time format)
- **LogLevel** - Severity of the log record expressed as a number [0-8]. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- **IPAddr** - Source IP address
- **HELODomain** - Name of the HELO domain
- **Sender** - Email sender
- **Recipient** - Email recipient
- **Subject** - E-mail subject
- **ProtectionType** - Protection type that has performed the action described by the current log record, i.e. antivirus, antispam or rules.
- **Action** - Action performed
- **Reason** - The reason why was the action performed on the object by the given ProtectionType.

**ESET_HyperVScanLogs**

The ESET_HyperVScanLogs class has multiple instances, each one representing a run of the Hyper-V file scan. This is equivalent to the GUI “Hyper-V scan” list of logs. Each instance contains:

- **ID** - Unique ID of this log record
- **Timestamp** - Creation timestamp of the log record (in the WMI date/time format)
- **Targets** - Target machines/disks/volumes of the scan
- **TotalScanned** - Total number of objects scanned
- **Infected** - Number of infected objects found
- **Cleaned** - Number of objects cleaned
- **Status** - Status of the scan process

**ESET_HyperVScanLogRecords**

The ESET_HyperVScanLogRecords class has multiple instances, each one representing a log record in one of the scan logs represented by instances of the ESET_HyperVScanLogs class. Instances of this class provide log records of all the Hyper-V scans/logs. When instance of a particular scan log are required only, they must be filtered by the LogID property. Each class instance contains:

- **LogID** - ID of the scan log this record belongs to (ID of one of the instances of the ESET_HyperVScanLogs class)
- **ID** - Unique ID of this log record
- **Timestamp** - Creation timestamp of the log record (in the WMI date/time format)
- **LogLevel** - Severity of the log record expressed as a number [0-8]. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- **Log** - The actual log message

**ESET_NetworkProtectionLog**
The ESET_NetworkProtectionLog class has multiple instances, each one representing a log record from the “Network protection” log. Each instance contains:

- ID - Unique ID of this log record
- Timestamp - Creation timestamp of the log record (in the WMI date/time format)
- LogLevel - Severity of the log record expressed as a number [0-8]. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- Event - Event triggering network protection action
- Action - Action performed by network protection
- Source - Source address of network device
- Target - Destination address of network device
- Protocol - Network communication protocol
- RuleOrWormName - Rule or worm name related to the event
- Application - Application that initiated the network protection
- User - User account that caused this log event to be generated

ESET_SentFilesLog

The ESET_SentFilesLog class has multiple instances, each one representing a log record from the “Sent files” log. Each instance contains:

- ID - Unique ID of this log record
- Timestamp - Creation timestamp of the log record (in the WMI date/time format)
- LogLevel - Severity of the log record expressed as a number [0-8]. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical
- Sha1 - Sha-1 hash of sent file
- File - Sent File
- Size - Sent file size
- Category - Sent file category
- Reason - Reason of sending the file
- SentTo - ESET department the file was sent to
- User - User account that caused this log event to be generated

ESET_OneDriveScanLogs

The ESET_OneDriveScanLogs class has multiple instances, each one representing a run of the OneDrive scan. This is equivalent to the GUI “OneDrive scan” list of logs. Each instance contains:

- ID - Unique ID of this OneDrive log
- Timestamp - Creation timestamp of the log (in the WMI date/time format)
- Targets - Target folders/objects of the scan
- TotalScanned - Total number of objects scanned
- Infected - Number of infected objects found
- Cleaned - Number of objects cleaned
- Status - Status of the scan process

ESET_OneDriveScanLogRecords

The ESET_OneDriveScanLogRecords class has multiple instances, each one representing a log record in one of the scan logs represented by instances of the ESET_OneDriveScanLogs class. Instances of this class provide log records of all the OneDrive scans/logs. When instance of a particular scan log are required only, they must be filtered by the LogID property. Each instance contains:

- LogID - ID of the scan log this record belongs to (ID of one of the instances of the ESET_OneDriveScanLogs class)
- ID - Unique ID of this OneDrive log
- Timestamp - Creation timestamp of the log (in the WMI date/time format)
Log Level - Severity of the log record expressed as a number [0-8]. Values correspond to the following named levels: Debug, Info-Footnote, Info, Info-Important, Warning, Error, SecurityWarning, Error-Critical, SecurityWarning-Critical

Log - The actual log message

6.6.5.2 Accessing Provided Data

Here are a few examples of how to access ESET WMI data from Windows command line and PowerShell, which should work from any current Windows operating system. There are, however, many other ways of accessing the data from other scripting languages and tools.

Command line without scripts

The `wmic` command line tool can be used to access various predefined or any custom WMI classes.

To display complete info about product on the local machine:

```
wmic /namespace:\root\ESET Path ESET_Product
```

To display product version number only of the product on the local machine:

```
wmic /namespace:\root\ESET Path ESET_Product Get Version
```

To display complete info about product on a remote machine with IP 10.1.118.180:

```
wmic /namespace:\root\ESET /node:10.1.118.180 /user:Administrator Path ESET_Product
```

PowerShell

To get and display complete info about product on the local machine:

```
Get-WmiObject ESET_Product -namespace 'root\ESET'
```

To get and display complete info about product on a remote machine with IP 10.1.118.180:

```
$cred = Get-Credential # prompts the user for credentials and stores it in the variable
Get-WmiObject ESET_Product -namespace 'root\ESET' -computername '10.1.118.180' -cred $cred
```

6.6.6 ERA/ESMC scan targets

This functionality lets ESET Security Management Center use scan target (On-demand mailbox database scan and Hyper-V scan) when running the Server Scan client task on a server with ESET Mail Security. ERA/ESMC scan targets setting is available only if you have ESET Management Agent installed, otherwise it will be grayed out.

When you enable Generate target list ESET Mail Security creates a list of available scan targets. This list is generated periodically, according to your Update period.

NOTE

When Generate target list is enabled for the first time, it takes ESET Security Management Center about half of the specified Update period to pick it up. So if Update period is set to 60 minutes, it'll take ESMC about 30 minutes to receive the list of scan targets. If you need ESET Security Management Center to collect the list earlier, set the update period to a smaller value. You can always increase it later.

When ESET Security Management Center runs a Server Scan client task, it will collect the list and you will be asked to select scan targets for Hyper-V scan on that particular server.

When ESET Security Management Center runs a Server Scan client task, it will collect the list and you will be asked to select scan targets for On-demand mailbox database scan on that particular server.
6.6.7 Override mode

If you have ESET Security Management Center policy applied to ESET Mail Security, you'll see a lock icon instead of enable/disable switch on Setup page and a lock icon next to the switch in Advanced setup window.

![ESET Security Management Center console](image)

Normally, settings that are configured via ESET Security Management Center policy cannot be modified. Override mode allows you to temporarily unlock these settings. However, you need to enable Override mode using ESET Security Management Center policy.

Log into ESMC Web Console, navigate to Admin > Policies, select and edit existing policy that is applied to ESET Mail Security or create a new one. In Settings, click Override Mode, enable it and configure the rest of its settings including Authentication type (Active directory user or Password).
Once the policy is modified, or new policy is applied to ESET Mail Security, Override policy button will appear in Advanced setup window.
Click **Override policy** button, set the duration and click **Apply**.

Temporary policy override

Set the duration for which the policy settings can be overridden. After this duration the configuration will revert to the policy.

Override duration

<table>
<thead>
<tr>
<th>Duration</th>
<th>Apply</th>
<th>Cancel</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 hour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 hours</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you selected **Password** as Authentication type, enter the policy override password.
Once the Override mode expires, any configuration changes you've made will revert back to original ESET Security Management Center policy settings. You'll see a notification before the Override expires. You can End override mode anytime before it expires on Monitoring page or in Advanced setup window.

6.6.8 Log files
This section lets you modify configuration of ESET Mail Security logging.

Log records
Records are written to the Events log (C:\ProgramData\ESET\ESET Mail Security\Logs) and can be viewed in Log files viewer. Use the switches to enable or disable particular feature:

**Log mail transport errors**
If this option is enabled and should there be problems on the mail transport layer, error messages are written into Events log.

Logging filter
Produces a significant amount of data because all the logging options are enabled by default. We recommend you to selectively disable logging of the components which are not useful or related to the problem.

**NOTE**
To start the actual logging you need to turn on general Diagnostic logging on product level in main menu Setup > Tools. Once the logging itself is turned on, ESET Mail Security will collect detailed logs according to what features are enabled in this section.

Use the switches to enable or disable particular feature. This options also be combined depending on the availability of individual components in the ESET Mail Security:

- **Transport and database diagnostic logging** - Collects internal records from LMON add-in (all Transport and Database protection logs).

- **On-demand database scan diagnostic logging** - Writes detailed information into logs, especially when troubleshooting is necessary.

- **Cluster diagnostic logging** - Cluster logging will be included in general diagnostic logging.

- **Antispam engine diagnostic logging** - When you need to troubleshoot, you will see detailed antispam engine information in the logs. Writes detailed information about the Antispam engine into the log file for diagnostic purposes. The Antispam engine doesn’t use the Events log (warnlog.dat file) and therefore cannot be viewed in the Log files viewer. It writes records directly into a dedicated text file (for example C:\ProgramData\ESET Mail Security\Logs\antispam.0.log) so that all Antispam engine diagnostic data is kept in one place. This way, performance of ESET Mail Security is not compromised in a case of a huge email traffic.

Log files
Define how the logs will be managed. This is important mostly to prevent the disk being used up. Default settings allow for automatic deletion of older logs in order to save disk space.

**Automatically delete records older than (days)**
Log entries older than the specified number of days will get deleted.

**Automatically delete old records if log size exceeded**
When log size exceeds **Max log size [MB]**, old log records will be deleted until **Reduced log size [MB]** is reached.
Back up automatically deleted records
Automatically deleted log records and files will be backed up to the specified directory and optionally compressed as ZIP files.

Back up diagnostic logs
Will back up automatically deleted diagnostic logs. If not enabled, diagnostic log records are not backed up.

Backup folder
Folder where log backups will be stored. You can enable compressed log backups using ZIP.

Optimize log files automatically
When engaged, log files will automatically be defragmented if the fragmentation percentage is higher than value specified in the If the number of unused records exceeds (%) field. Click Optimize to begin defragmenting the log files. All empty log entries are removed to improve performance and log processing speed. This improvement can be observed especially if the logs contain a large number of entries.

Enable text protocol
To enable the storage of logs in another file format separate from Log files:

- **Target directory** - The directory where log files will be stored (only applies to Text/CSV). Each log section has its own file with a pre-defined file name (for example, virlog.txt for Detected threats section of Log files, if you use plain text file format to store logs).

- **Type** - If you select the Text file format, logs will be stored in a text file; data will be separated by tabs. The same applies to comma-separated CSV file format. If you choose Event, logs will be stored in the Windows Event log (can be viewed using Event Viewer in Control panel) as opposed to file.

- **Delete all log files** - Erases all stored logs currently selected in the Type drop-down menu.

**NOTE**
In order to help resolve issues more quickly, ESET Technical Support may ask you to provide logs from your computer. ESET Log Collector makes it easy for you to collect the information needed. For more information about ESET Log Collector, see our Knowledgebase article.

Log export

Export to Windows Application and Services Logs
Allows you to duplicate records from the Mail server protection log to the Applications and Services Logs. To view the Mail server protection log, open Windows Event Viewer and navigate to Applications and Services Logs > ESET > Security > DominoServer > MailProtection. The Application and Services logs are supported on Microsoft Windows Server 2008 R2 SP1 or newer.

**NOTE**
In order to help resolve issues more quickly, ESET Technical Support may ask you to provide logs from your computer. ESET Log Collector makes it easy for you to collect the information needed. For more information about ESET Log Collector, see our Knowledgebase article.
6.6.9 Proxy server

In large LAN networks, the connection of your computer to the internet can be mediated by a proxy server. If this is the case, the following settings need to be defined. If you do not define the settings, the program will not be able to update itself automatically. In ESET Mail Security, proxy server setup is available in two different sections within the Advanced setup window (F5):

1. **Advanced setup (F5) > Update > Profiles > Updates > Connection options > HTTP Proxy**
   This setting applies for the given update profile and is recommended for laptops that often receive modules from different locations.

2. **Advanced setup (F5) > Tools > Proxy server**
   Specifying the proxy server at this level defines global proxy server settings for all of ESET Mail Security. Parameters here will be used by all modules that connect to the internet.

To specify proxy server settings for this level, turn on the **Use proxy server** switch and then enter the address of the proxy server into the **Proxy server** field, along with the **Port** number of the proxy server.

**Proxy server requires authentication**
If network communication via proxy server requires authentication, enable this option and specify **Username** and **Password**.

**Detect proxy server**
Click **Detect** to automatically detect and populate proxy server settings. The parameters specified in Internet Explorer will be copied.

**NOTE**
This feature does not retrieve authentication data (username and password); you must supply it.

**Use direct connection if proxy is not available**
If a product is configured to utilize HTTP Proxy and the proxy is unreachable, the product will bypass the proxy and communicate directly with ESET servers.

6.6.10 Email notifications

ESET Mail Security can automatically send notification emails if an event with the selected verbosity level occurs.

**Send event notifications by email**
Enable to activate email notifications.

**NOTE**
SMTP servers with TLS encryption are supported by ESET Mail Security.

**SMTP server**
The name of the SMTP server used for sending alerts and notifications. This is typically the name of your Microsoft Exchange Server.

**Username and password**
If the SMTP server requires authentication, these fields should be filled in with a valid username and password to access the SMTP server.

**Sender address**
Enter sender's address that will appear in the header of notification emails. This is what the recipient will see in the **From** field.

**Recipient address**
Specify recipient's email address To whom notifications will be delivered.

**Minimum verbosity for notifications**
Specifies the minimum verbosity level of notifications to be sent.

**Enable TLS**
Enable alert and notification messages supported by TLS encryption.

**Interval after which new notification emails will be sent (min)**
Interval in minutes after which new notification will be sent via email. Set this value to 0 if you want to send those notifications immediately.

**Send each notification in a separate email**
When enabled, the recipient will receive a new email for each individual notification. This may result in a large number of emails being received in a short period of time.

**Message format**
Communications between the program and a remote user or system administrator are done via emails or LAN messages (using the Windows messenger service). The default format of the alert messages and notifications will be optimal for most situations. In some circumstances, you may need to change the message format of event messages.

**Format of event messages**
Format of event messages that are displayed on remote computers.

**Format of threat warning messages**
Threat alert and notification messages have a predefined default format. We advise against changing this format. However, in some circumstances (for example, if you have an automated email processing system), you may need to change the message format.

Keywords (strings separated by % signs) are replaced in the message by the actual information as specified. The following keywords are available:

- **%TimeStamp%** - Date and time of the event.
- **%Scanner%** - Module concerned.
- **%ComputerName%** - Name of the computer where the alert occurred.
- **%ProgramName%** - Program that generated the alert.
- **%InfectedObject%** - Name of infected file, message, etc.
- **%VirusName%** - Identification of the infection.
- **%ErrorDescription%** - Description of a non-virus event.

The keywords **%InfectedObject%** and **%VirusName%** are only used in threat warning messages, and **%ErrorDescription%** is only used in event messages.

**Charset**
You can choose encoding from the drop-down menu. Email message will be converted according to the selected character encoding.

**Use Quoted-printable encoding**
The email message source will be encoded to Quoted-printable (QP) format which uses ASCII characters and can correctly transmit special national characters by email in 8-bit format (áéíóú).
6.6.11 Presentation mode

Presentation mode is a feature for users that demand uninterrupted usage of their software, do not want to be disturbed by pop-up windows, and want to minimize CPU usage. Presentation mode can also be used during presentations that cannot be interrupted by antivirus activity. When enabled, all pop-up windows are disabled and scheduled tasks are not run. System protection still runs in the background but does not require any user interaction.

Enable Presentation mode when running applications in full-screen mode automatically

Presentation mode is activated automatically whenever you run a full-screen application. With Presentation mode engaged, you will not be able to see notifications or a status change of your ESET Mail Security.

Disable Presentation mode automatically after

To define the amount of time in minutes after which Presentation mode will automatically be disabled.

6.6.12 Diagnostics

Diagnostics provides application crash dumps of ESET processes (for example, ekrn). If an application crashes, a dump will be generated. This can help developers debug and fix various ESET Mail Security problems.

Click the drop-down menu next to Dump type and select one of three available options:

- **Disable** - To disable this feature.
- **Mini** - (default) Records the smallest set of useful information that may help identify why the application crashed unexpectedly. This kind of dump file can be useful when space is limited. However, because of the limited information included, errors that were not directly caused by the thread that was running at the time of the problem may not be discovered by an analysis of this file.
- **Full** - Records all the contents of system memory when the application stops unexpectedly. A complete memory dump may contain data from processes that were running when the memory dump was collected.

Enable Network protection advanced logging

Record all network data passing through network protection in PCAP format in order to help developers diagnose and fix the problems related to network protection.

Enable Protocol filtering advanced logging

Record all data passing through Protocol filtering engine in PCAP format in order to help developers diagnose and fix the problems related to Protocol filtering.

Enable Update engine advanced logging

Record all events that occur during update process to help developers diagnose and fix the problems related to Update engine.

Enable Licensing advanced logging

Record all product communication with license server.

Enable Operating System advanced logging

Additional information about Operating system such as running processes, CPU activity, disc operations will be gathered.

Target directory

Directory where the dump during the crash will be generated.

Open diagnostics folder

Click **Open** to open this directory within a new *Windows Explorer* window.

Create diagnostic dump
Click **Create** to create diagnostic dump files in the Target directory.

Submit system configuration data
Select **Always submit** not to be prompted before submitting your ESET Mail Security configuration data to customer care, or use **Ask before submission**.

### 6.6.13 Cluster

Enable Cluster is automatically enabled when the ESET Cluster is configured. You can disable it manually in the **Advanced setup** (F5) window by clicking the switch icon (for example, when you need to change configuration without affecting other nodes in the ESET Cluster). This switch only enables or disables the ESET Cluster functionality. To set up or destroy the cluster, to use the Cluster wizard or **Destroy** the cluster located in the **Tools > Cluster** section of the main program window.

ESET Cluster not configured and disabled:

ESET Cluster properly configured with its details and options:
6.7 User interface

Configure the Graphical user interface (GUI) behavior of ESET Mail Security. You can adjust the program's visual appearance and effects.

User interface elements

Use the GUI start mode drop-down menu to select from the following Graphical user interface (GUI) start modes:

- **Full** - The complete GUI will be displayed.
- **Terminal** - No notifications or alerts will be displayed. GUI can only be started by the Administrator. The user interface should be set to Terminal if graphical elements slow the performance of your computer or cause other problems. You may also want to turn off the GUI on a Terminal server. For more information about ESET Mail Security installed on Terminal server, see Disable GUI on Terminal Server topic.

Show splash-screen at startup

Disable this option if you prefer not to have the splash-screen displayed when GUI of your ESET Mail Security starts, for example when logging into the system.

Use sound signal

ESET Mail Security plays a sound when important events occur during a scan, for example, when a threat is discovered or when the scan has finished.

Integrate into the context menu

When enabled, ESET Mail Security control elements are integrated into the context menu. The context menu is displayed after right-clicking an object (file). The menu lists all of the actions that you can perform on an object.

Application statuses
Click **Edit** to select statuses that are displayed in the Monitoring window. Alternatively, you can use [ESET Security Management Center policies](#) to configure your application statutes. An application status will also be displayed if your product is not activated or if your license has expired.

**License Information / Show license information**

When enabled, messages and notifications about your license will be displayed.

**Customization**

You can customize the messages used in notification.

**Alerts and notifications**

By configuring Alerts and notifications, you can change the behavior of detected threat alerts and system notifications. These can be customized to fit your needs. If you choose not to display some notifications, they will be displayed in the **Disabled messages and statuses** area. Here you can check their status, show more details or remove them from this window.

**Access setup**

You can prevent any unauthorized changes using the Access setup tool to ensure that security remains high.

**ESET Shell**

You can configure access rights to product settings, features and data via eShell by changing the ESET Shell execution policy.

**System tray icon**

**Revert all settings in this section**

### 6.7.1 Alerts and notifications

You can configure how threat alerts and system notifications (such as successful update messages) are handled by ESET Mail Security. For example, the display time **Duration** and **Transparency** of system tray notifications (this applies only to the systems that support system tray notifications).

**Display alerts**

Disabling this feature will prevent ESET Mail Security from displaying any alerts in Windows notification area.

**Desktop notification**

Notifications on the Desktop and balloon tips are informative only, and do not require user interaction. They are displayed in the notification area at the bottom right corner of the screen. More detailed options, such as notification display time and window transparency can be modified below. Turn the **Do not display notifications when running applications in full screen mode** switch on to suppress all non-interactive notifications.

**Minimum verbosity of events to display** drop-down menu enables you to select the severity level of alerts and notification. The following options are available:

- **Diagnostic** - Logs information needed to fine-tune the program and all records above.
- **Informative** - Records informative messages, including successful update messages, plus all records above.
- **Warnings** - Records critical errors and warning messages.
- **Errors** - Errors such as "Error downloading file" and critical errors will be recorded.
- **Critical** - Logs only critical errors (error starting antivirus protection, etc.).

The **On multi-user systems, display notifications on the screen of this user** field specifies which user will receive system and other notifications on systems allowing multiple users to connect at the same time. Normally, this would be a system or network administrator. This option is especially useful for terminal servers, provided that all system notifications are sent to the administrator.

**Message boxes**
Message boxes are used to display short text messages or questions.

**Close message boxes automatically**
To close pop-up windows automatically after a certain period of time. If they are not closed manually, alert windows are automatically closed after the specified time period elapses.

**Confirmation messages**
When you click **Edit**, a pop-up window will open with a list of confirmation messages that ESET Mail Security displays before an action is performed. Use the check boxes to customize your preferences for confirmation messages.

### 6.7.2 Access setup

For maximum security of your system, it is essential that ESET Mail Security is correctly configured. Any unqualified modifications may result in issues or even a loss of important data. To avoid unqualified modifications, you can have your ESET Mail Security configuration password protected.

**IMPORTANT**
If you are uninstalling ESET Mail Security while using access setup password protection, you will be prompted to enter the password. You will otherwise not be able to uninstall ESET Mail Security.

**Password protect settings**
Locks/unlocks the program's setup parameters. Click to open the **Password setup** window.

**Set password**
To set or change a password to protect setup parameters, click **Set**. To protect the setup parameters of ESET Mail Security in order to avoid unauthorized modification, a new password must be set. When you want to change an existing password, type your old password in the **Old password** field, enter your new password in the **New password** and **Confirm password** fields and then click **OK**. This password will be required for any future modifications to ESET Mail Security.

**Require full administrator rights for limited administrator accounts**
Select this option to prompt the current user (who does not have administrator's rights) to enter administrator account credentials when modifying certain parameters, such as disabling protection modules.

**NOTE**
If the Access Setup password changes and you want to import an existing .xml configuration file (that was signed before the password change) using the ESET CMD command line, make sure to sign it again using your current password. This allows you to use older configuration file without the need to export it on the other machine running ESET Mail Security before the import.

### 6.7.3 ESET Shell

You can configure access rights to product settings, features and data via eShell by changing the **ESET Shell execution policy**. The default setting is **Limited scripting**, but you can change it to **Disabled**, **Read-only** or **Full access** if needed.

**Disabled**
eShell cannot be used at all. Only the configuration of eShell itself is allowed - in **ui eshell** context. You can customize the appearance of eShell, but cannot access product settings or data.

**Read only**
eShell can be used as a monitoring tool. You can view all settings in both Interactive and Batch mode, but you cannot modify any settings or features or modify any data.

**Limited scripting**
In Interactive mode, you can view and modify all settings, features and data. In Batch mode eShell will function as if you were in Read-only mode; however, if you use signed batch files, you will be able to edit settings and modify data.

**Full access**
Access to all settings is unlimited in both Interactive and Batch mode (when running batch files). You can view and modify any setting. You must use an administrator account to run eShell with full access. If UAC is enabled, elevation is also required.

### 6.7.4 Disable GUI on Terminal Server

This chapter describes how to disable the GUI of ESET Mail Security running on Windows Terminal Server for user sessions.

Normally, the ESET Mail Security GUI starts up every time a remote user logs onto the server and creates a terminal session. This is usually undesirable on Terminal Servers. If you want to turn off the GUI for terminal sessions, you can do so via eShell by running `set ui ui gui-start-mode none` command. This will put the GUI into terminal mode. These are the two available modes for GUI startup:

```
set ui ui gui-start-mode full
set ui ui gui-start-mode none
```

If you want to find out what mode is currently in use, run the command `get ui ui gui-start-mode`.

**NOTE**
If you have installed ESET Mail Security on a Citrix server, we recommend that you use the settings described in our [Knowledgebase article](#).

### 6.7.5 Disabled messages and statuses

**Confirmation messages**
Shows you a list of confirmation messages that you can select to display or not to display.

**Application statuses settings**
Allows you to enable or disable display status in the Monitoring page in main menu.
6.7.5.1 Application statuses settings

This dialog window lets you select or deselect which application statuses will be or will not be displayed. For example, when you pause Antivirus and antispyware protection that will result in a change of protection status which will appear in Monitoring page. An application status will also be displayed if your product is not activated or if your license has expired.

Application statuses can be managed via ESET Security Management Center policies. Categories and statutes are shown in a list with two options Show and Send the status. Send column for application statuses is visible only in ESET Security Management Center policy configuration. ESET Mail Security shows settings with lock icon. You can use Override mode to temporarily change Application statuses.

![Selected application statuses will be displayed](image-url)
6.7.6 System tray icon

Serves as a quick access to frequently used items and features of ESET Mail Security. These are available by right-clicking the system tray icon.

- **Maximum protection**
- **Quick links**
  - Monitoring
  - Protection statistics
- **Pause protection**
  - Advanced setup
  - Log files
- **Hide ESET Mail Security**
  - Reset window layout
  - Virus signature database update...
- **About**

**More information**
Opens Monitoring page to show you the current protection status and messages.

**Pause protection**
Displays the confirmation dialog box that disables Antivirus and antispyware protection, which guards against attacks by controlling file, web and email communication. When you temporarily pause the Antivirus and antispyware protection using the system tray icon, the Pause protection dialog box will appear. This will disable malware-related protection for the chosen period of time. To disable protection permanently, you can do so in Advanced setup. Use caution when disabling protection, your system will be exposed to threats.

**Advanced setup**
Use this option to enter the Advanced setup.

**Log files**
Contains information about all important program events that have occurred and provide an overview of detected threats.

**Hide ESET Mail Security**
Hide the ESET Mail Security window from the screen.

**Reset window layout**
Resets the ESET Mail Security window to its default size and position on the screen.

**Check for updates**
Starts updating modules to ensure your level of protection against malicious code.

**About**
Provides system information, details about the installed version of ESET Mail Security and the installed program modules as well as your license expiration date. Information about your operating system and system resources can be found at the bottom of the page.
6.8 Customization

This message will be shown in the footer of all selected notifications.

Default notification message
A default message to be shown in the notification footer.

Threats

Do not close malware notifications automatically
Enables malware notifications to stay on screen until you close them manually.

Use default message
You can turn off default message and specify custom Treat notification message that will be displayed when a threat is blocked.

Threat notification message
Enter a custom message to display when a threat is blocked.

6.9 Revert to default settings

You can restore settings to their default values within Advanced setup. There are two options. You can revert everything to default or revert settings only for a particular section (settings in other sections will remain unchanged).

Revert all settings
All settings in all sections of advanced setup will be restored to the state they were after you have installed ESET Mail Security. You can think of it as Restore Factory Defaults.

NOTE
Once you click Revert to default, all changes that have been made will be lost. This action cannot be undone.

Revert all settings in this section
Reverts module settings in selected section to values. Any changes you have made in this section will be lost.

Revert contents of tables
When enabled, the rules, tasks or profiles, which were added manually or automatically, will be lost.
6.10 Help and support

ESET Mail Security contains troubleshooting tools and support information that will assist you in solving issues that you may encounter.

Help

Search ESET Knowledgebase  
The ESET Knowledgebase contains answers to the most frequently asked questions as well as recommended solutions for various issues. Regularly updated by ESET technical specialists, the Knowledgebase is the most powerful tool for resolving various types of problems.

Open help
Launches online help pages for ESET Mail Security.

Find quick solution
Select this to find solutions to the most frequently encountered problems. We recommend that you read this section before contacting technical support.

Customer Care

Submit support request  
If you cannot find an answer to your problem, you can also use this form located on the ESET website to quickly contact our Technical Support department.

Details for Customer Care
Display details information (Product name, Product version, etc.) for Technical Support.

Support Tools

Threat encyclopedia  
Links to the ESET Threat Encyclopedia, which contains information about the dangers and symptoms of different types of infiltration.

ESET Log Collector  
Links to the ESET Log Collector download page. Log Collector is an application that automatically collects information, such as configuration and logs from your server in order to help resolve issues more quickly.

Detection Engine history  
Links to ESET Virus radar, which contains information about versions of the ESET detection modules.

ESET Specialized cleaner  
The ESET Specialized Cleaner is a removal tool for common malware infections such as Conficker, Sirefef, Necurs, etc.

Product and License information

Activate product / Change license  
Click to launch the Product activation window. Select one of the available methods to activate ESET Mail Security.

About ESET Mail Security
Displays information about your copy of ESET Mail Security.
6.10.1 Submit support request
In order to provide assistance as quickly and accurate as possible, ESET requires information about your ESET Mail Security configuration, detailed system information, running processes (ESET SysInspector log file) and registry data. ESET will only use this data to provide technical assistance to the customer. This setting can also be configured from the Advanced setup (F5) > Tools > Diagnostics > Technical Support.

NOTE
If you choose to submit system data you must fill and submit the web form, otherwise your ticket will not be created and your system data will be lost.

When you submit the web form, your system configuration data will be sent to ESET. Select Always submit this information to remember this action for this process.

Don’t submit data
Use this option if you do not wish to submit data. You will be redirected to ESET Technical Support web page.

6.10.2 About ESET Mail Security
This window provides details about the installed version of ESET Mail Security. The top part of the window contains information about your operating system and system resources, the current user and full computer name.

Installed components
Contain information about modules, to view a list of installed components and their details. Click Copy to copy the list to your clipboard. This may be useful during troubleshooting or when contacting Technical Support.

6.11 Glossary
Visit Glossary page for more information about technical terms, threats and internet security.