

# Kaspersky Security for Windows Server

Administrator's Guide

*Application version: 10.1.0.622*

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# About this Guide

The Kaspersky Security for Windows Server 10.1.0.622 (hereinafter referred to as "Kaspersky Security 10.1 for Windows Server") Administrator's Guide is intended for specialists who install and administer Kaspersky Security 10.1 for Windows Server on all protected devices, and for specialists who provide technical support to organizations using Kaspersky Security 10.1 for Windows Server.

This guide contains information about configuring and using Kaspersky Security 10.1 for Windows Server.

This Guide will also help you to learn about sources of information about the application and ways to receive technical support.

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## In this document

The Administrator's Guide for Kaspersky Security 10.1 for Windows Server contains the following sections:

### [Sources of information about Kaspersky Security 10.1 for Windows Server](#)

This section lists the sources of information about the application.

### [Kaspersky Security 10.1 for Windows Server](#)

This section describes the functions, components, and distribution kit of Kaspersky Security 10.1 for Windows Server, and provides a list of hardware and software requirements of Kaspersky Security 10.1 for Windows Server.

### [Installation and uninstallation of Kaspersky Security 10.1 for Windows Server](#)

This section provides step-by-step instructions for installing and removing Kaspersky Security 10.1 for Windows Server.

### [Application interface](#)

This section contains information about elements of the Kaspersky Security 10.1 for Windows Server interface.

### [Application licensing](#)

This section provides information about the main concepts related to licensing of the application.

### [Starting and stopping Kaspersky Security 10.1 for Windows Server](#)

This section contains information about starting and stopping the Kaspersky Security 10.1 for Windows Server Administration Plug-in (hereinafter referred to as Kaspersky Security 10.1 for Windows Server Administration Plug-in) and the Kaspersky Security Service.

### [About access permissions for Kaspersky Security 10.1 for Windows Server functions](#)

This section contains information about permissions to manage Kaspersky Security 10.1 for Windows Server and

Windows® services registered by the application, and instructions on how to configure these permissions.

### [Creating and configuring policies](#)

This section contains information about using Kaspersky Security Center policies for managing Kaspersky Security 10.1 for Windows Server on several servers.

### [Creating and configuring tasks using Kaspersky Security Center](#)

This section contains information about Kaspersky Security 10.1 for Windows Server tasks, and how to create them, configure task settings, and start and stop them.

### [Managing application settings](#)

This section contains information about configuring Kaspersky Security 10.1 for Windows Server general settings in Kaspersky Security Center.

### [Real-Time Server Protection](#)

This section provides information about Real-Time Protection tasks: Real-Time File Protection, Script Monitoring, KSN Usage and Exploit Protection. It also provides instructions on how to configure Real-Time Protection tasks and manage the security settings of a protected server.

### [Local Activity Control](#)

This section provides information about Kaspersky Security 10.1 for Windows Server functionality that controls applications launches and connections by external devices via USB.

### [Network Activity Control](#)

This section contains information about the Firewall Management and Anti-Cryptor tasks.

### [System Inspection](#)

This section contains information about the File Integrity Monitor task and features for inspecting the operating system log.

### [Monitoring performance. Kaspersky Security 10.1 for Windows Server counters](#)

This section provides information about Kaspersky Security 10.1 for Windows Server counters: System Monitor performance counters, and SNMP counters and traps.

### [Working with Kaspersky Security 10.1 for Windows Server from the command line](#)

This section describes working with Kaspersky Security 10.1 for Windows Server from the command line.

### [Contacting Technical Support](#)

This section describes the ways to receive technical support and the conditions on which it is available.

### [Glossary](#)

This section contains a list of terms, which are mentioned in the document, as well as their respective definitions.

### [AO Kaspersky Lab](#)

This section provides information about AO Kaspersky Lab.

### [Information about third-party code](#)

This section contains information about the third-party code used in the application.

### [About this Guide](#)

### Trademark notices

This section lists trademarks reserved to third-party owners and mentioned in the document.

### Index

This section allows you to quickly find required information through the document.

## Document conventions

This document uses the following conventions (see table below).

Table 1. Document conventions

Sample text	Description of document convention
Note that...	Warnings are highlighted in red and set off in a box. Warnings contain information about actions that may have undesirable consequences.
We recommend that you use...	Notes are set off in a box. Notes contain supplementary and reference information.
Example: ...	Examples are given in blocks against a blue background under the heading "Example".
Update means... The Databases are out of date event occurs.	The following elements are italicized in the text: <ul style="list-style-type: none"> <li>• New terms</li> <li>• Names of application statuses and events</li> </ul>
Press ENTER. Press ALT+F4.	Names of keyboard keys appear in bold and are capitalized. Names of keys that are connected by a + (plus) sign indicate the use of a key combination. These keys must be pressed simultaneously.
Click the Enable button.	Names of application interface elements, such as text boxes, menu items, and buttons, are set off in bold.
► <i>To configure a task schedule:</i>	Introductory phrases of instructions are italicized and accompanied by the arrow sign.

Sample text	Description of document convention
In the command line, type <code>help</code> The following message then appears: Specify the date in <code>dd:mm:yy</code> format.	The following types of text content are set off with a special font: <ul style="list-style-type: none"><li>• Text in the command line</li><li>• Text of messages displayed on the screen by the application</li><li>• Data that must be entered from the keyboard</li></ul>
<User name>	Variables are enclosed in angle brackets. Instead of a variable, the corresponding value should be inserted, omitting the angle brackets.

# Sources of information about Kaspersky Security 10.1 for Windows Server

This section lists the sources of information about the application.

You can select the most suitable information source, depending on the importance level and urgency of the issue.

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## Sources for independent retrieval of information

You can use the following sources to find information about Kaspersky Security 10.1 for Windows Server:

- Kaspersky Security 10.1 for Windows Server page on the Kaspersky Lab website.
- Kaspersky Security 10.1 for Windows Server page on the Technical Support website (Knowledge Base).
- Manuals.

If you did not find a solution to your problem, contact Kaspersky Lab Technical Support  
<https://support.kaspersky.com/>.

An Internet connection is required to use online information sources.

### Kaspersky Security 10.1 for Windows Server page on the Kaspersky Lab website

On the Kaspersky Security 10.1 for Windows Server page  
<https://www.kaspersky.com/small-to-medium-business-security/windows-server-security>, you can view general information about the application, its functions and features.

The Kaspersky Security 10.1 for Windows Server page contains a link to eStore. There you can purchase the application or renew your license.

### Kaspersky Security 10.1 for Windows Server page in Knowledge Base

Knowledge Base is a section on the Technical Support website.

The Kaspersky Security 10.1 for Windows Server page in the Knowledge Base  
<https://support.kaspersky.com/ksws10/> features articles that provide useful information, recommendations, and



answers to frequently asked questions about how to purchase, install, and use the application.

Knowledge Base articles can answer questions relating to not only Kaspersky Security 10.1 for Windows Server but also to other Kaspersky Lab applications. Knowledge Base articles can also include Technical Support news.

#### [Kaspersky Security 10.1 for Windows Server documentation](#)

Kaspersky Security 10.1 for Windows Server Administrator's Guide contains information about the application installation, uninstallation, settings configuring and usage.

## Discussing Kaspersky Lab applications on the forum

If your question does not require an immediate answer, you can discuss it with Kaspersky Lab experts and other users on our forum <https://forum.kaspersky.com/>.

On this forum you can view existing threads, leave your comments, and create new discussion threads.

# Kaspersky Security 10.1 for Windows Server

This section describes the functions, components, and distribution kit of Kaspersky Security 10.1 for Windows Server, and provides a list of hardware and software requirements of Kaspersky Security 10.1 for Windows Server.

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## About Kaspersky Security 10.1 for Windows Server

Kaspersky Security 10.1 for Windows Server (previously Kaspersky Anti-Virus for Windows Servers Enterprise Edition) protects servers running on Microsoft® Windows® operating systems and network attached storages against viruses and other computer security threats to which servers are exposed through file exchange. Kaspersky Security 10.1 for Windows Server is designed for use on local area networks of medium to large organizations. Kaspersky Security 10.1 for Windows Server users are corporate network administrators and specialists responsible for anti-virus protection of the corporate network.

You can install Kaspersky Security 10.1 for Windows Server on the following servers:

- Terminal servers.
- Print servers.
- Application servers.
- Domain controllers.
- Servers that are protecting network attached storages.
- File servers – these servers are more likely to get infected because they exchange files with user workstations.

Kaspersky Security 10.1 for Windows Server can be managed in the following ways:

- Via Kaspersky Security 10.1 Console installed on the same server as Kaspersky Security 10.1 for Windows Server or on a different computer.
- Using commands in the command line.
- Via Administration Console of Kaspersky Security Center.

The Kaspersky Security Center application can also be used for centralized administration of multiple servers running Kaspersky Security 10.1 for Windows Server.

It is possible to review Kaspersky Security 10.1 for Windows Server performance counters for the "System Monitor"

application, as well as SNMP counters and traps.

### Kaspersky Security 10.1 for Windows Server components and functions

The application includes the following components:

- **Real-Time Protection.** Kaspersky Security 10.1 for Windows Server scans objects when they are accessed. Kaspersky Security 10.1 for Windows Server scans the following objects:
  - Files
  - Alternate file system threads (NTFS threads)
  - Master boot record and boot sectors on local hard and removable drives
- **On-Demand Scan.** Kaspersky Security 10.1 for Windows Server runs a single scan of the specified area for viruses and other computer security threats. Application scans files, RAM, and startup objects on a protected computer.
- **RPC-Network Storage Protection and ICAP-Network Storage Protection.** Kaspersky Security 10.1 for Windows Server installed on a server under a Microsoft Windows operating system protects network attached storages against viruses and other security threats that infiltrate the server through exchange of files.
- **Applications Launch Control.** The component tracks users' attempts to launch applications and controls applications launches.
- **Device Control.** The component controls registration and usage of mass storage devices and CD/DVD drives in order to protect the computer against computer security threats that may arise while exchanging files with USB-connected flash drives or other types of external device.
- **Anti-Cryptor and Anti-Cryptor for NetApp.** The components protect shared folders on servers and network attached storages from malicious encryption, by blocking the hosts that show malicious activity.
- **Script Monitoring.** This component controls the execution of scripts created using Microsoft Windows Script Technologies.
- **Traffic Security.** This component intercepts and scans objects transferred through web traffic (including mail) to detect known computer and other threats on the protected server.
- **Firewall Management.** This component provides the ability to manage the Windows Firewall: configure settings and operating system firewall rules, and block all other ways to configure firewall settings.
- **File Integrity Monitor.** Kaspersky Security 10.1 for Windows Server detects changes in files within the monitoring scopes specified in the task settings. These changes may indicate a security breach on the protected computer.
- **Log Inspection.** This component monitors the integrity of the protected environment based on the results of an inspection of Windows event logs.

The following functions are implemented in the application:

- **Database Update and Software Modules Update.** Kaspersky Security 10.1 for Windows Server downloads updates of application databases and modules from FTP or HTTP update servers of Kaspersky Lab, Kaspersky Security Center Administration Server, or other update sources.
- **Quarantine.** Kaspersky Security 10.1 for Windows Server quarantines probably infected objects by moving such objects from their original location to *Quarantine*. For security purposes, objects are stored in Quarantine in encrypted form.
- **Backup.** Kaspersky Security 10.1 for Windows Server stores encrypted copies of objects classified as *Infected* or *Probably infected* in *Backup* before disinfecting or deleting them.

- **Administrator and user notifications.** You can configure the application to notify the administrator and users who access the protected computer about events in Kaspersky Security 10.1 for Windows Server operation and the status of Anti-Virus protection on the computer.
- **Importing and exporting settings.** You can export Kaspersky Security 10.1 for Windows Server settings to an XML configuration file and import settings into Kaspersky Security 10.1 for Windows Server from the configuration file. You can save all application settings or only settings for individual components to a configuration file.
- **Applying templates.** You can manually configure a node's security settings in the tree or in a list of the computer's file resources, and save the configured setting values as a template. This template can then be used to configure the security settings of other nodes in Kaspersky Security 10.1 for Windows Server protection and scan tasks.
- **Managing access permissions for Kaspersky Security 10.1 for Windows Server functions.** You can configure the rights to manage Kaspersky Security 10.1 for Windows Server and the Windows services registered by the application, for users and groups of users.
- **Writing events to the application event log.** Kaspersky Security 10.1 for Windows Server logs information about software component settings, the current status of tasks, events that occur while tasks run, events associated with Kaspersky Security 10.1 for Windows Server management, and information required to diagnose errors in Kaspersky Security 10.1 for Windows Server.
- **Hierarchical storage.** Kaspersky Security 10.1 for Windows Server can operate in hierarchical storage management mode (HSM systems). HSM systems allow data relocation between fast local drives and slow long-term data storage devices.
- **Trusted Zone.** You can generate the list of exclusions from the protection or scan scope, that Kaspersky Security 10.1 for Windows Server will apply in the on-demand and real-time protection tasks.
- **Exploit Prevention.** You can protect process memory from exploits using an Agent injected into the process.
- **Blocked Hosts.** You can block remote hosts that try to access the server's shared network folders if any malicious activity is detected on their side.

## What's new

Kaspersky Security 10.1 for Windows Server is a solution for protecting corporate servers and data storage systems. The available protection scope (servers running Windows, data storage systems) and the set of functional components depend on the type of a purchased license.

Kaspersky Security 10.1 for Windows Server improves and fully retains the functionality of the previous version of the program, while also adding new protection components.

The new Kaspersky Security 10.1 for Windows Server brings you the following:

- A newly added Traffic Security component (see Section "Traffic Security" on page [192](#)): now you can protect your server from web threats sent through HTTP or HTTPS traffic, in addition to threats delivered via email. This new component supports the following protection scenarios:
  - anti-virus and anti-phishing protection of email traffic using the Kaspersky Security 10.1.0.622 Microsoft Outlook® Add-In (hereinafter referred to as "Kaspersky Security 10.1 Microsoft Outlook Add-in");
  - anti-virus and anti-phishing protection of web traffic;

- link verification using databases of malicious web addresses;
- link verification using cloud-based databases of malicious web addresses;
- web control using rules for links and certificates;
- web resource control based on categories;
- verification of web server certificates when connecting.

Traffic is protected using the ICAP service in one of three configurations:

- External Proxy: analysis of traffic redirected from an external proxy server (without a network driver).
- Redirector: analysis of traffic redirected from browsers launched in a terminal session (without a network driver). The program uses an internal system proxy.
- Driver Interceptor: Traffic is intercepted using a network driver in a terminal session.
- A new Anti-Cryptor component for NetApp: now you can use a server with Kaspersky Security 10.1 for Windows Server installed to protect connected NetApp network attached storage from malicious encryption.

[See the \*Network Attached Storage Implementation Guide\*.](#)

- A new Device Control component (see Section "Rules generation based on system data about external devices connected to network computers" on page [235](#)): now you can form lists of rules that the program uses to allow or block the exchange of files with external data storage devices (USB and MTP-connected mass storage devices, CD/DVD devices).
- A new Exploit Prevention component (see Section "Exploit Prevention" on page [185](#)): now you can configure settings to protect processes from exploits using impact reduction techniques.
- A new File Integrity Monitor component (see Section "File Integrity Monitor" on page [252](#)): now you can indicate the objects whose integrity you want to monitor.
- A new Log Inspection component (see Section "Log Inspection" on page [259](#)): now you can generate log inspection rules for Windows event logs, and configure the use of the heuristic analyzer for Windows event logs.
- New ability to integrate with external SIEM systems (see Section "Configuring SIEM integration settings" on page [161](#)): Now you can configure settings to export application logs to external event aggregation systems using the syslog protocol.
- New ability to track USB connections to protected devices (see Section "About Device Control task" on page [232](#)): now you can configure settings for notifications about USB connections to protected computers made by various types of devices.
- Security Event Log (on page [160](#)) implemented: now you can view, in a single log, all events logged by application components that indicate the protected system may be compromised.
- A new Firewall Management component (see Section "Firewall Management" on page [240](#)): now you can manage Windows firewall rules through the graphical user interface of Kaspersky Security 10.1 for Windows Server.
- New ability to scan USB mass storage devices (see Section "Removable Drives Scan" on page [152](#)): now you can scan mass storage devices when they are connected to a protected computer.
- New ability to enable password protection for application management (see Section "Password-protected

- access to Kaspersky Security 10.1 for Windows Server functions" on page [102](#)): now you can also protect Kaspersky Security 10.1 for Windows Server and use a password to restrict access to critical operations.
- New ability to automatically allow the launch of applications (see Section "Configuring software distribution control" on page [223](#)) from trusted distribution packages: now you can add exclusions for distribution packages in the Applications Launch Control task settings in order to simplify the process of allowing files to start when installing or updating software.
  - New ability to perform anti-virus scanning and protection of Microsoft Windows Server 2016 containers (see Section "About Real-Time File Protection task" on page [166](#)) is added.
  - Simplified Untrusted Hosts Blocking (see Section "Untrusted hosts blocking. Blocked Hosts" on page [156](#)): now the Anti-Cryptor component and Real-Time File Protection component add identification numbers of attacking hosts into the Blocked Hosts storage. You can disable the population of Blocked Hosts storage in the protection task settings. You can also view all blocked hosts in a centralized list in the Administration Server Console.
  - Optimized ability to generate a list of trusted processes rules (see Section "Adding trusted processes" on page [149](#)) for the Trusted Zone: now you can exclude a process based on its checksum, only its path, or both its path and checksum.
  - Simplified and expanded mechanism for populating lists of application launch control rules (see Section "About generating Applications Launch Control rules for all computers in Kaspersky Security Center" on page [227](#)): newly added ability to simultaneously use lists of rules configured on local hosts and in a policy, and new mechanism to generate rules based on task events in Kaspersky Security Center.

## Distribution kit

The distribution kit includes the welcome application that lets you do the following:

- Start the Kaspersky Security 10.1 for Windows Server Installation Wizard.
- Start the Kaspersky Security 10.1 Console Installation Wizard.
- Start the Installation Wizard that will install Kaspersky Security 10.1 for Windows Server Administration Plug-in for managing the application via the Kaspersky Security Center.
- Read the Administrator's Guide.
- Read the User's Guide.
- Read the Implementation Guide for Network Storages Protection.
- Go to Kaspersky Security 10.1 for Windows Server page <https://www.kaspersky.com/small-to-medium-business-security/windows-server-security> on the Kaspersky Lab website.
- Visit the Technical Support website <https://support.kaspersky.com/>.
- Read information about the current version of Kaspersky Security 10.1 for Windows Server.

The \client folder contains files for the installation of Kaspersky Security 10.1 Console ("Kaspersky Security 10.1 for Windows Server Administration Tools" set of components).

The \server folder contains:

- Files for the installation of Kaspersky Security 10.1 for Windows Server components on a computer running a 32-bit or 64-bit Microsoft Windows operating system.



- File for the installation of a plug-in for managing Kaspersky Security 10.1 for Windows Server via the Kaspersky Security Center.
- Archive of anti-virus databases current at the time the application was released.
- File with the text of the End User License Agreement and Privacy Policy.

The \setup folder contains greeting program start files.

The \email\_plugin folder contains the Kaspersky Security 10.1 Microsoft Outlook Add-in installation package.

The distribution kit files are stored in different folders depending on their intended use (see table below).

*Table 2. Kaspersky Security 10.1 for Windows Server distribution kit files*

File	Purpose
autorun.inf	Autorun file for the Kaspersky Security 10.1 for Windows Server Installation Wizard when installing the application from removable media.
ks4ws_admin_guide_en.pdf	Administrator's Guide.
ks4ws_user_guide_en.pdf	User's Guide.
release_notes.txt	The file contains release information.
setup.exe	Greeting program start file (starts setup.hta).
\client\ks4wstools_x86(x64).msi	Windows Installer installation package; installs Kaspersky Security 10.1 Console on the protected server.
\client\setup.exe	The file that starts the setup wizard for the "Administration tools" set of components (including Kaspersky Security 10.1 Console); it starts the ks4wstools.msi installation package file using the settings specified in the setup wizard.
\server\bases.cab	Archive of anti-virus databases current at the time of application release.
\server\setup.exe	The file that starts the wizard for installing Kaspersky Security 10.1 for Windows Server on the protected server; it starts the installer package file ks4ws.msi with the installation settings specified in the wizard.
\server\ks4ws_x86(x64).msi	Windows Installer installation package; installs Kaspersky Security 10.1 for Windows Server on the protected server.
\server\ks4ws.kud	File in Kaspersky Unicode Definition format with a description of the installation package for remote installation of Kaspersky Security 10.1 for Windows Server via Kaspersky Security Center.
\server\klcfginst.exe	Installer for plug-in to manage Kaspersky Security 10.1 for Windows Server via the Kaspersky Security Center. Install the administration plug-in on each server where the Administration Console of Kaspersky Security Center is installed if you plan to use it to manage Kaspersky Security 10.1 for Windows Server.
\server\license.txt	Text of the End User License Agreement and Privacy Policy.
\setup\setup.hta	Greeting program start file.

File	Purpose
\email_plugin\ksmail_x86(x64).msi	Windows Installer installation package; installs Kaspersky Security 10.1 Microsoft Outlook Add-in on the protected server.

Distribution kit files can be run from the Installation CD. If you have copied the distribution package files onto the local drive beforehand, make sure that the structure of the distribution kit files has been preserved.

## Hardware and software requirements

This section lists the hardware and software requirements of Kaspersky Security 10.1 for Windows Server.

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## Requirements for the server on which Kaspersky Security 10.1 for Windows Server is deployed

Before installing Kaspersky Security 10.1 for Windows Server, you must uninstall other anti-virus applications from the server.

You can install Kaspersky Security 10.1 for Windows Server without uninstalling Kaspersky Anti-Virus 8.0 for Windows Servers Enterprise Edition or Kaspersky Security 10 for Windows Server.

### Hardware requirements for the server

#### General requirements:

- x86-64-compatible single-core or multi-core systems
- disk space requirements:
  - for installing all application components: 70 MB
  - for downloading and storing anti-virus databases of the application: 2 GB (recommended)
  - for storing objects in Quarantine and in Backup: 400 MB (recommended)
  - for storing logs: 1 GB (recommended)

#### Minimum configuration:

- Processor: 1.4 GHz single-core.
- RAM: 1GB.
- Drive subsystem: 4 GB of free space.

#### Recommended configuration:

- Processor: 2.4 GHz quad-core.
- RAM: 2 GB.
- Drive subsystem: 4 GB of free space.

### Software requirements for the server

You can install Kaspersky Security 10.1 for Windows Server on a server under a 32-bit or 64-bit Microsoft Windows operating system.

For installation and operation of Kaspersky Security 10.1 for Windows Server, Microsoft Windows Installer 3.1 must be installed on the server.

You can install Kaspersky Security 10.1 for Windows Server on a server under one of the following 32-bit Microsoft Windows operating systems:

- Windows Server® 2003 Standard / Enterprise / Datacenter SP2 or later
- Windows Server 2003 R2 Standard / Enterprise / Datacenter SP2 or later

- Windows Server 2008 Standard / Enterprise / Datacenter SP1 or later
- Windows Server 2008 Core Standard / Enterprise / Datacenter SP1 or later

You can install Kaspersky Security 10.1 for Windows Server on a server under one of the following 64-bit Microsoft Windows operating systems:

- Windows Server 2003 Standard / Enterprise / Datacenter SP2
- Windows Server 2003 R2 Standard / Enterprise / Datacenter SP2
- Windows Server 2008 Standard / Enterprise / Datacenter SP1 or later
- Microsoft Small Business Server 2008 Standard / Premium
- Windows Server 2008 R2 Foundation / Standard / Enterprise / Datacenter SP1 or later
- Windows Server 2008 R2 Core / Standard / Enterprise / Datacenter SP1 or later
- Windows Hyper-V® Server 2008 R2 SP1 or later
- Microsoft Small Business Server 2011 Essentials / Standard
- Microsoft Windows MultiPoint Server 2011
- Windows Server 2012 Foundation / Essentials / Standard / Datacenter / MultiPoint Server
- Windows Server 2012 Core Standard / Datacenter
- Windows Storage Server 2012
- Windows Hyper-V Server 2012
- Windows Server 2012 R2 Foundation / Essentials / Standard / Datacenter
- Windows Server 2012 R2 Core Standard / Datacenter
- Windows Storage Server 2012 R2
- Windows Hyper-V Server 2012 R2
- Windows Server 2016 Essentials / Standard / Datacenter / MultiPoint Premium Server
- Windows Server 2016 Core Standard / Datacenter
- Windows Storage Server 2016
- Windows Hyper-V Server 2016

The following operating systems are no longer supported by Microsoft Windows: Windows Server 2003 Standard / Enterprise / Datacenter SP2, Windows Server 2003 R2 Standard / Enterprise / Datacenter SP2 32-bit, 64-bit. There might be limitations for the technical support of servers running these operating systems on the Kaspersky Lab side.

You can install Kaspersky Security 10.1 for Windows Server on the following terminal servers:

- Microsoft Remote Desktop Services based on Windows Server 2008
- Microsoft Remote Desktop Services based on Windows Server 2008 R2
- Microsoft Remote Desktop Services based on Windows Server 2012
- Microsoft Remote Desktop Services based on Windows Server 2012 R2

- Microsoft Remote Desktop Services based on Windows Server 2016
- Citrix XenApp 6.0, 6.5, 7.0, 7.5 - 7.9, 7.15
- Citrix XenDesktop 7.0, 7.1, 7.5 - 7.9, 7.15



## Requirements for the protected network attached storage

Kaspersky Security 10.1 for Windows Server can be used to protect the following network attached storages:

- NetApp with one of the following operating systems:
  - Data ONTAP 7.x and Data ONTAP 8.x in 7-mode
  - Data ONTAP 8.2.1 or higher in cluster-mode
- Dell™ EMC™ Celerra™ / VNX™ with the following software:
  - EMC DART 6.0.36 or higher
  - Celerra (CAVA) Anti-Virus Agent 4.5.2.3 or higher
- Dell EMC Isilon™ with the operating system OneFS™ 7.0 or later
- Hitachi NAS on one of the following platforms:
  - HNAS 4100
  - HNAS 4080
  - HNAS 4060
  - HNAS 4040
  - HNAS 3090
  - HNAS 3080
- IBM NAS series IBM System Storage N series
- Oracle® NAS Systems series Oracle ZFS Storage Appliance
- Dell NAS on the platform Dell Compellent™ FS8600

## Requirements for the computer on which Kaspersky Security 10.1 Console is installed

### Hardware requirements for the computer

Recommended RAM amount: at least 128 MB.

Free disk space: 30 MB.

### Software requirements for the computer

You can install Kaspersky Security 10.1 Console on a computer running a 32-bit or 64-bit Microsoft Windows operating system.

The computer should have Microsoft Windows Installer 3.1 in order to support installation and operation of Kaspersky Security 10.1 Console.

You can install Kaspersky Security 10.1 Console on a computer running one of the following 32-bit Microsoft Windows operating systems:

- Windows Server 2003 Standard / Enterprise / Datacenter SP2 or later
- Windows Server 2003 R2 Standard / Enterprise / Datacenter SP2 or later
- Windows Server 2008 Standard / Enterprise / Datacenter SP1 or later
- Microsoft Windows XP Professional SP2 or later
- Microsoft Windows Vista® Editions
- Microsoft Windows 7
- Microsoft Windows 8
- Microsoft Windows 8.1
- Microsoft Windows 10

You can install Kaspersky Security 10.1 Console on a computer running one of the following 64-bit Microsoft Windows operating systems:

- Windows Server 2003 Standard / Enterprise / Datacenter SP2 or later
- Windows Server 2003 R2 Standard / Enterprise / Datacenter SP2 or later
- Windows Server 2008 Standard / Enterprise / Datacenter SP1 or later
- Microsoft Small Business Server 2008 Standard / Premium
- Windows Server 2008 R2 Foundation / Standard / Enterprise / Datacenter SP1 or later
- Microsoft Small Business Server 2011 Essentials / Standard
- Microsoft Windows MultiPoint™ Server 2011
- Windows Server 2012 Foundation / Essentials / Standard / Datacenter / MultiPoint Server
- Windows Storage Server 2012
- Windows Server 2012 R2 Foundation / Essentials / Standard / Datacenter
- Windows Storage Server 2012 R2
- Windows Server 2016 Essentials / Standard / Datacenter / MultiPoint Premium Server

- Windows Storage Server 2016
- Microsoft Windows XP Professional Edition SP2 or later
- Microsoft Windows Vista
- Microsoft Windows 7
- Microsoft Windows 8
- Microsoft Windows 8.1
- Microsoft Windows 10

## Functional Requirements and Limitations

This section describes additional functional requirements and existing limitations for Kaspersky Security 10.1 for Windows Server components.

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## Installation and Uninstallation

- During application installation a warning appears, if a new path to the Kaspersky Security 10.1 for Windows Server installation folder contains more than 150 symbols. The warning does not affect the installation process: Kaspersky Security 10.1 for Windows Server will install and run successfully.
- For installation of the SNMP protocol support component the SNMP service must be restarted, if it is running.
- For installation and functioning of Kaspersky Security 10.1 for Windows Server on the device managed by the embedded operating system, the Filter Manager component must be installed.
- The Kaspersky Security 10.1 for Windows Server Administration Tools installation is not available via the Microsoft Active Directory® group policies.
- When installing application on computers running on the older operating systems, which cannot receive regular updates, it is required to check the following root certificates: DigiCert Assured ID Root CA, DigiCert\_High\_Assurance\_EV\_Root\_CA, DigiCertAssuredIDRootCA. Lack of specified certificates can lead to incorrect application functioning. It is recommended to install specified certificates in any possible way.
- Kaspersky Security 10.1 Console cannot be uninstalled via the Start menu. You can uninstall Kaspersky Security 10.1 Console using the link in the **Add / Remove Programs** window.

## Traffic Security

- The component is available only on the servers running on operating systems higher than Microsoft Windows Server 2008 R2.
- Traffic cannot be verified when web connections are made using a cryptographic token.
- It is not recommended to include the VPN traffic in the protection scope (port 1723).
- Working with IP addresses in IPv6 format is not available.
- Application considers self-signed certificates as invalid and blocks such connections if the **Do not trust web-servers with invalid certificate** check box is selected in the task settings.
- Application processes only TCP packets.
- Mail threat protection does not scan outgoing mail traffic.
- It is recommended to install the Administration Plug-in before deploying Traffic Security component, as the Network Agent of the Administration Server detects the Traffic Security component when connecting to the application. If Traffic Security was installed and the task started before the installation of Administration Plug-in, restart the Traffic Security task.
- Traffic Security does not work with Yandex.Disk, Dropbox.
- VPN limitations: there might appear issues when working via the Microsoft VPN connection protocols.
- If the installation is performed via KSC in the Driver Interceptor mode, Traffic Security blocks the connection from MMC Console to the Kaspersky Security Center server, as such connection type uses the untrusted certificate.
- The component blocks connection to sites which use old technologies of generating root certificates, for example, sha1 certificate.
- The **Do not scan objects larger than (MB)** value cannot exceed 100Mb. If the large value is specified and the Internet connection speed is slow, there might be difficulties when receiving large files. The recommended value is 20 Mb.
- The application recognizes HTTPS connections as dangerous and blocks them if the following conditions are satisfied:
  - The task runs in the **Driver Interceptor** mode.
  - Traffic is redirected from external devices.
  - The devices from which traffic is redirected are protected by Kaspersky Security 10.1 for Windows Server and the preset Traffic Security task has been run at least once.

We do not recommend using **Redirector** mode to check traffic redirected from external computers: besides the aforementioned false positives, such a configuration may cause high server load and reduce application performance.

## File Integrity Monitor

By default, the File Integrity Monitor does not monitor changes in system folders or the file system's housekeeping

files, in order to prevent information about routine file changes, which are performed constantly by the operating system, from getting into the task reports. The user cannot manually include such folders in the monitoring scope.

The following folders/files are excluded from the monitoring scope:

- NTFS housekeeping files with file id from 0 to 33
- L"%SystemRoot%\Prefetch\"
- L"%SystemRoot%\ServiceProfiles\LocalService\AppData\Local\"
- L"%SystemRoot%\System32\LogFiles\Scm\"
- L"%SystemRoot%\Microsoft.NET\Framework\v4.0.30319\"
- L"%SystemRoot%\Microsoft.NET\Framework64\v4.0.30319\"
- L"%SystemRoot%\Microsoft.NET\"
- L"%SystemRoot%\System32\config\"
- L"%SystemRoot%\Temp\"
- L"%SystemRoot%\ServiceProfiles\LocalService\"
- L"%SystemRoot%\System32\winevt\Logs\"
- L"%SystemRoot%\System32\wbem\repository\"
- L"%SystemRoot%\System32\wbem\Logs\"
- L"%ProgramData%\Microsoft\Windows\WER\ReportQueue\"
- L"%SystemRoot%\SoftwareDistribution\DataStore\"
- L"%SystemRoot%\SoftwareDistribution\DataStore\Logs\"
- L"%ProgramData%\Microsoft\Windows\AppRepository\"
- L"%ProgramData%\Microsoft\Search\Data\Applications\Windows\"
- L"%SystemRoot%\Logs\SystemRestore\"
- L"%SystemRoot%\System32\Tasks\Microsoft\Windows\TaskScheduler\"

The application excludes top-level folders.

The component does not monitor files changes that bypass the ReFS/NTFS file system (file changes made through BIOS, LiveCD, etc.).

## Firewall Management

- Working with IP addresses in IPv6 format is not available when specified applied rule scope consists of one address.
- Preset Firewall policy rules provide execution of basic scenarios of interaction between local computers and Administration Server. For full usage of Kaspersky Security Center functions, it is required to set up rules for ports manually. Information about port numbers, protocols and their functions is contained in Kaspersky Security Center Knowledge base (article ID: 9297).
- The application does not control modification of Windows Firewall rules and rule groups during the minutely inquiries of the Firewall management task, if those rules were not added to the task configuration upon the

application installation. To update the status and include such rules the Firewall management task must be restarted.

- For the Microsoft Windows Server family of operating systems, 2008 and higher: the Windows Firewall service must be started (started by default) before installing the Firewall Management component.
- When the Firewall Management task is started, the following types of rules are automatically removed from the operating system's firewall settings:
  - denying rules;
  - rules monitoring outgoing traffic.

## Other limitations

### On-Demand Scan, Real-Time File Protection:

- MTP-devices on connection scanning is not available.
- Archive object scanning is not available without SFX-archive scanning: if archive scanning is enabled in the protection settings of Kaspersky Security 10.1 for Windows Server, the application automatically scans objects in both archives and SFX-archives. SFX-archives scanning without archives scanning is available.

### Computer control and diagnostics:

- Protection scope of the Device Control task includes MTP-connected devices, if a protected computer is running on Microsoft Windows Server 2008 R2 or higher operating systems.
- Log Inspection task only detects potential Kerberos attack patterns (MS14-068) on computers running on Windows Server 2008 or higher as a domain controller with installed updates.

### Licensing:

- Application activation with the key via the Setup wizard is not available, if the key is stored on the disk, which was created with the SUBST command, or if the network path to the key file is specified.

### Updates:

- After the installation of Kaspersky Security 10.1 for Windows Server critical modules updates, the application icon is hidden by default.
- KLRAMDISK is not supported on computers running Windows XP or Windows 2003 operating system.

### Interface:

- If you use filtering in Kaspersky Security 10.1 Console in the Quarantine, Backup, System audit log or Task log tasks, the case should be maintained.
- You can use only one mask and only in the path end, when configuring protection or scan scope in Kaspersky Security 10.1 Console. Correct mask usage examples: "C:\Temp\Temp\*", or "C:\Temp\Temp????.doc", or "C:\Temp\Temp\*.doc". Limitation does not affect Trusted Zone configuration.

### Security:

- If the User Account Control in the operating system settings is activated, a user account must be a part of KAVWSEE Administrators group to open the Kaspersky Security 10.1 Console with a double-click on the application icon in the tray notification area. In other case, "About the application" window opens.
- Application uninstallation via the "Programs and Features" window of Microsoft Windows is not available if the User Account Control is activated.

**Integration with Kaspersky Security Center:**

- Administration Server checks the database updates validity when receiving the update packages, and before sending the updates to network computers. Administration Server does not check validity of the received software module updates.
- Make sure the required check boxes are selected in the Interaction with the Administration Server settings, when you use the components that transmit the dynamically changed data to Kaspersky Security Center with the help of network lists (Quarantine, Backup).

**Exploit Prevention:**

- Exploit Prevention is not available if apphelp.dll libraries are not loaded in the current environment configuration.
- The Exploit Prevention component is incompatible with Microsoft's EMET utility on computers running the Microsoft Windows 10 operating system: Kaspersky Security 10.1 for Windows Server blocks EMET, if the Exploit Prevention component is being installed on a computer with EMET installed.

**Anti-Cryptor for NetApp:**

- Anti-Cryptor protection cannot be provided for NASes running new operating systems (ONTAP 9 and higher) if FlexGroup containers are used for these servers.
- File threats detection functionality on network attached storages NetApp in 7 Mode is limited.
- Anti-Cryptor for NetApp is available in the cluster mode only.
- A server can use only one network interface and only one IP v4 address.

**Blocked Host Storage:** runs continuously when the Anti-Cryptor or Real-Time File Protection components are enabled.

**ICAP-Network Storage Protection:** Management of the contents of the protected storage depends on the storage settings. For example, detected infected objects cannot be deleted if the storage does not allow this action. HP 3Par storage only works in block access mode. Trusted zone cannot be used.

**RPC-Network Storage Protection:** Active Directory is required for the cluster mode.

**KSN Usage:** For Windows Vista and lower, this component does not support statistics for web Anti-Virus and mail Anti-Virus.

# Installing and removing the application

This section provides step-by-step instructions for installing and removing Kaspersky Security 10.1 for Windows Server.

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## Kaspersky Security 10.1 for Windows Server software components and their codes for Windows Installer service

By default, \server\ks4ws\_x86(x64).msi files are intended to install all Kaspersky Security 10.1 for Windows Server components. You can install this component by including it in a custom installation.

The \client\ks4wstools\_x86(x64).msi files install all software components from the "Administrative Tools" set.

The following sections list the codes of the Kaspersky Security 10.1 for Windows Server components for the Windows Installer service. These codes can be used to define a list of components to be installed when installing Kaspersky Security 10.1 for Windows Server from the command line.

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## Kaspersky Security 10.1 for Windows Server software components

The following table contains codes for and a description of Kaspersky Security 10.1 for Windows Server software components.

Table 3. Description of Kaspersky Security 10.1 for Windows Server software components

Component	Code	Functions performed
Basic functionality	Core	This component contains the set of basic application functions and ensures their operation.
Applications Launch Control	AppCtrl	This component monitors user attempts to run applications and allows or denies application launch in accordance with the set Applications Launch Control rules. It is implemented in the Applications Launch Control task.
Device Control	DevCtrl	This component tracks attempts to connect USB mass storage devices to a protected server and allows or denies use of these devices according to the specified device control rules. The component is implemented in the Device Control task.
Traffic Security	WebGW	This component processes web traffic (including traffic received via the mail services) and intercepts and scans objects transferred through web traffic to detect known computer and other threats on the protected server.
Anti-Virus protection	AVProtection	This component ensures anti-virus protection and contains the following components: <ul style="list-style-type: none"> <li>• On-Demand Scan</li> <li>• Real-Time File Protection</li> </ul>
On-Demand Scan	Ods	This component installs Kaspersky Security 10.1 for Windows Server system files and On-demand scan tasks (scanning of objects on the protected server upon request). If other Kaspersky Security 10.1 for Windows Server components are specified when installing Kaspersky Security 10.1 for Windows Server from the command line, but the Core component is not specified, the Core component is installed automatically.

Component	Code	Functions performed
Real-Time File Protection	Oas	<p>This component performs anti-virus scans of files on the protected server when these files are accessed.</p> <p>It implements the Real-Time File Protection task.</p>
Use of Kaspersky Security Network	Ksn	<p>This component provides protection on the basis of Kaspersky Lab cloud technologies. It implements the KSN Usage task (sending requests to and receiving conclusions from the Kaspersky Security Network service).</p>
File Integrity Monitor	Fim	<p>This component logs operations performed on files in the specified monitoring scope. The component implements the File Integrity Monitor task.</p>
Exploit Prevention	AntiExploit	<p>This component makes it possible to manage settings to protect memory used by processes in a protected server's memory.</p>
Firewall Management	Firewall	<p>This component makes it possible to manage Windows Firewall through the Kaspersky Security 10.1 for Windows Server graphical user interface.</p> <p>The component implements the Firewall Management task.</p>
Module for integration with Kaspersky Security Center Network Agent	AKIntegration	<p>Provides a connection between the Kaspersky Security 10.1 for Windows Server and the Kaspersky Security Center Network Agent. You can install this component on the protected server if you intend to manage the application via the Kaspersky Security Center.</p>
Log Inspection	LogInspector	<p>This component monitors the integrity of the protected environment based on the results of an inspection of Windows event logs.</p>
RPC-Network Storage Protection	RPCProt	<p>This component protects RPC-network storages (such as NetApp network attached storages) against viruses and other computer security threats that infiltrate the server through the exchange of files.</p>
ICAP-Network Storage Protection	ICAPProt	<p>This component protects ICAP-network storages (such as EMC Isilon) against viruses and other security threats that infiltrate the server through the exchange of files.</p>

Component	Code	Functions performed
Anti-Cryptor for NetApp	AntiCryptorNAS	This component provides encryption protection for the folders on the Network Attached Storages. If any malicious encrypting is detected, Kaspersky Security 10.1 for Windows Server blocks access to the folders of the protected network attached storage.
Anti-Cryptor	AntiCryptor	This component fills the list of untrusted computers with names of remote devices that show malicious activity. It implements the Anti-Cryptor task.
Script Monitoring	ScriptChecker	This component scans the code of scripts created using Microsoft Windows Script Technologies. Scanning is performed when an attempt is made to run a script. This component implements the Script Monitoring task.
Set of "System Monitor" performance counters	PerfMonCounters	This component installs a set of System Monitor performance counters. Performance counters enable Kaspersky Security 10.1 for Windows Server performance to be measured and potential bottlenecks to be localized on the computer when Kaspersky Security 10.1 for Windows Server is used with other programs.
SNMP counters and traps	SnmpSupport	This component publishes Kaspersky Security 10.1 for Windows Server counters and traps via Simple Network Management Protocol (SNMP) in Microsoft Windows. This component may be installed on the protected server only if Microsoft SNMP is installed on the same computer.
Kaspersky Security 10.1 for Windows Server icon in the notification area	TrayApp	This component displays the Kaspersky Security 10.1 for Windows Server icon in the task tray notification area of the protected server. The Kaspersky Security 10.1 for Windows Server icon displays the status of computer protection and can be used open the Kaspersky Security 10.1 Console in MMC (if installed) and the About the application window.
Command line utility	Shell	Makes it possible to control Kaspersky Security 10.1 for Windows Server from the command line of a protected server.

## "Administration tools" set of software components

The following table contains codes for and a description of the "Administration tools" set of software components.

Table 4. Description of the "Administration tools" software components

Component	Code	Component functions
Kaspersky Security 10.1 for Windows Server snap-ins	MmcSnapin	This component installs the Microsoft Management Console snap-in via Kaspersky Security 10.1 Console. If other components are specified during the installation of "Administration Tools" from the command line, and the MmcSnapin component is not specified, the component will be installed automatically.
Help	Help	.chm help file; saved in the folder with the Kaspersky Security 10.1 for Windows Server Administration Tools files. You can open Help file using the <b>Start</b> menu or by clicking the <b>F1</b> key with a Kaspersky Security 10.1 Console window opened.
Documentation	Docs	Kaspersky Security 10.1 for Windows Server stores the Implementation Guide for Network Attached Storage Protection, the Administrator's Guide and User's Guide in PDF format on the protected server. All guides can be opened from the <b>Start</b> menu.

## System changes after Kaspersky Security 10.1 for Windows Server installation

When Kaspersky Security 10.1 for Windows Server and Kaspersky Security 10.1 Console (set of "Administration Tools") are installed together, the Windows Installer service will make the following modifications on the server:

- Creates Kaspersky Security 10.1 for Windows Server folders on the protected server and on the server, where the Kaspersky Security 10.1 Console is installed.
- Registers Kaspersky Security 10.1 for Windows Server services.
- Creates a Kaspersky Security 10.1 for Windows Server group of users.
- Registers Kaspersky Security 10.1 for Windows Server keys in the system register.

These changes are described in the table below.

## Kaspersky Security 10.1 for Windows Server folders

Table 5. Kaspersky Security 10.1 for Windows Server folders on a protected server

Folder	Kaspersky Security 10.1 for Windows Server files
<p>Folder %Kaspersky Security 10.1 for Windows Server%; by default:</p> <p>In the Microsoft Windows 32-bit version – %ProgramFiles%\Kaspersky Lab\Kaspersky Security 10.1 for Windows Server\</p> <p>In the Microsoft Windows 64-bit version – %ProgramFiles(x86)%\Kaspersky Security 10.1 for Windows Server\</p>	<p>Executable Kaspersky Security 10.1 for Windows Server files (destination folder specified during installation).</p>
<p>%Kaspersky Security 10.1 for Windows Server%\mibs folder</p>	<p>Management Information Base (MIB) files; these files contain a description of the counters and hooks published by Kaspersky Security 10.1 for Windows Server via the SMNP protocol.</p>
<p>%Kaspersky Security 10.1 for Windows Server%\x64 folder</p>	<p>64-bit versions of Kaspersky Security 10.1 for Windows Server executable files (the folder will be created only during the installation of Kaspersky Security 10.1 for Windows Server in the 64-bit version of Microsoft Windows).</p>
<p>%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Data\</p> <p>%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Settings\</p> <p>%ALLUSERSPROFILE%\Application Data\Kaspersky Security for Windows Server\10.1\Dskm\</p>	<p>Kaspersky Security 10.1 for Windows Server service files.</p>
<p>%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Update\</p>	<p>Files with update sources settings.</p>
<p>%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Update\Distribution\</p>	<p>Updates of databases and software modules downloaded using Copying Updates task (the folder will be created the first time updates are downloaded using the Copying Updates task).</p>
<p>%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Reports\</p>	<p>Task logs and system audit log.</p>

Folder	Kaspersky Security 10.1 for Windows Server files
%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Bases\Current\	Set of databases used at current time.
%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Bases\Backup\	Backup copy of databases; will be overwritten each time databases are updated.
%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Bases\Temp\	Temporary files created during execution of update tasks.
%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Quarantine\	Quarantined objects (default folder).
%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Backup\	Objects in backup (default folder).
%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Restored\	Objects restored from backup and quarantine (default folder for restored objects).

Table 6. Folders created during the installation of Kaspersky Security 10.1 Console

Folder	Kaspersky Security 10.1 for Windows Server files
<p>Folder %Kaspersky Security 10.1 for Windows Server%; by default:</p> <ul style="list-style-type: none"> <li>In the Microsoft Windows 32-bit version – %ProgramFiles%\Kaspersky Lab\Kaspersky Security 10.1 for Windows Server\</li> <li>In the Microsoft Windows 64-bit version – %ProgramFiles(x86)%\Kaspersky Lab\Kaspersky Security 10.1 for Windows Server\</li> </ul>	"Administration Tools" files (destination folder specified during the installation of Kaspersky Security 10.1 Console).

## Kaspersky Security 10.1 for Windows Server services

Kaspersky Security 10.1 for Windows Server services start using the Local system (SYSTEM) account.

Table 7. Kaspersky Security 10.1 for Windows Server services

Service	Purpose
Kaspersky Security Service (KAVFS) service	Essential Kaspersky Security 10.1 for Windows Server service that manages Kaspersky Security 10.1 for Windows Server tasks and workflows
Kaspersky Security Management Service (KAVFSGT)	The service is intended for Kaspersky Security 10.1 for Windows Server application management through the Kaspersky Security 10.1 Console
Kaspersky Security Broker Service (KAVFSWH)	A service that acts as an intermediary to communicate security settings to external security agents, and to receive data about security events.
Kaspersky Security Script Checker (KAVFSSCS)	The service is started along with the Script Monitoring task and allows to controls the execution of scripts created using Microsoft Windows Script Technologies.

## Kaspersky Security 10.1 for Windows Server groups

Table 8. Kaspersky Security 10.1 for Windows Server groups

Group	Purpose
KAVWSEE Administrators	A group on the protected server whose users have full access to the Kaspersky Security Management Service and to all Kaspersky Security 10.1 for Windows Server functions

## System registry keys

Table 9. System registry keys

Key	Purpose
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\KAVFS]	Kaspersky Security 10.1 for Windows Server service properties.
[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Eventlog\Kaspersky Security]	Kaspersky Security 10.1 for Windows Server event log settings (Kaspersky Event Log).

[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\KAVFSGT]	Kaspersky Security 10.1 for Windows Server management service properties.
In Microsoft Windows 32-bit version: [HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Kaspersky Security\Performance] In Microsoft Windows 64-bit version: [HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Kaspersky Security x64\Performance].	Performance counters settings.
In Microsoft Windows 32-bit version: [HKEY_LOCAL_MACHINE\SOFTWARE\KasperskyLab\WSEE\10.1\SnmpAgent] In Microsoft Windows 64-bit version: [HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\KasperskyLab\WSEE\10.1\SnmpAgent]	SNMP Protocol Support component settings.
In Microsoft Windows 32-bit version: HKEY_LOCAL_MACHINE\SOFTWARE\KasperskyLab\WSEE\10.1\CrashDump\ In Microsoft Windows 64-bit version: HKEY_LOCAL_MACHINE\Software\Wow6432Node\KasperskyLab\WSEE\10.1\CrashDump\ mp\ mp\	Dump file writing settings.
In Microsoft Windows 32-bit version: HKEY_LOCAL_MACHINE\Software\KasperskyLab\WSEE\10.1\Trace\ In Microsoft Windows 64-bit version: HKEY_LOCAL_MACHINE\Software\Wow6432Node\KasperskyLab\WSEE\10.1\Trace\ Trace\ Trace\ Trace\ Trace\ Trace\ Trace\ Trace\ Trace\ Trace\ Trace	Trace log settings.
[HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\KasperskyLab\WSEE\10.1\Environment]	Configuration of the application's tasks and functions.

## Kaspersky Security 10.1 for Windows Server processes

Kaspersky Security 10.1 for Windows Server starts processes described in the table below.

Table 10. Kaspersky Security 10.1 for Windows Server processes

File name	Purpose
kavfswp.exe	Kaspersky Security 10.1 for Windows Server workflow.
kavtray.exe	Process for the Kaspersky Security 10.1 for Windows Server task bar icon.
kavshell.exe	Command line utility process
kavfsrcn.exe	Kaspersky Security 10.1 for Windows Server remote management process.



File name	Purpose
kavfs.exe	Kaspersky Security Service process
kavfsgt.exe	Kaspersky Security Management Service process
kavfswh.exe	Kaspersky Security Broker Host Service external control process
kavfsscs.exe	Kaspersky Security Script Checker service

## Installation and uninstallation settings and command-line options for Windows Installer service

The tables provided below contain descriptions of the settings to install and uninstall Kaspersky Security 10.1 for Windows Server, their default values, keys for changing the values of the installation settings, and their possible values. These keys can be used in conjunction with standard keys for the command `msiexec` of the Windows Installer service when installing Kaspersky Security 10.1 for Windows Server from the command line.

Table 11. Installation parameters and command-line options in Windows Installer

Setting	Default Value	Windows Installer command-line options and possible values	Description
Acceptance of the terms of the End User License Agreement	Rejection of the terms of the End User License Agreement	EULA=<value> 0 – you reject the terms of the End User License Agreement. 1 – you accept the terms of the End User License Agreement.	You must accept the terms of the End User License Agreement to install Kaspersky Security 10.1 for Windows Server.
Acceptance of the terms of Privacy Policy	Rejection of the terms of Privacy Policy	PRIVACYPOLICY=<value> 0 – you reject the terms of Privacy Policy. 1 – you accept the terms of Privacy Policy.	You must accept the terms of Privacy Policy to install Kaspersky Security 10.1 for Windows Server.

Setting	Default Value	Windows Installer command-line options and possible values	Description
Destination folder	Kaspersky Security 10.1 for Windows Server: %ProgramFiles%\Kaspersky Lab\Kaspersky Security 10.1 for Windows Server Administration tools: %ProgramFiles%\Kaspersky Lab\ Kaspersky Security 10.1 for Windows Server Admins Tools In the x64-bit version of Microsoft Windows: %ProgramFiles(x86)%\	INSTALLDIR=<full path to the folder>	Folder in which Kaspersky Security 10.1 for Windows Server files will be saved during installation. A different folder can be specified.
Startup of the Real-Time File Protection task when Kaspersky Security 10.1 for Windows Server starts ( <b>Enable real-time protection after installation of application</b> )	Start	RUNRTP=<value> 1 – start; 0 – do not start.	Turn on this setting to start Real-Time File Protection and Script Monitoring at the start of Kaspersky Security 10.1 for Windows Server (recommended).
Exclusions from scan as recommended by Microsoft Corporation ( <b>Add Microsoft recommended files to exclusions list</b> )	Exclude	ADDMSEXCLUSION=<value > 1 – exclude; 0 – do not exclude.	In the Real-Time File Protection task exclude from the protection scope objects on the server that Microsoft Corporation recommends to exclude. Some applications on the server may become unstable when the anti-virus application intercepts or modifies files used by such applications. For example, Microsoft Corporation includes some domain controller applications in the list of such objects.

Setting	Default Value	Windows Installer command-line options and possible values	Description
Objects excluded from the scanning scope according to Kaspersky Lab recommendations ( <b>Add Kaspersky Lab recommended files to exclusions list</b> )	Exclude	ADDKLEXCLUSION=<value> > 1 – exclude; 0 – do not exclude.	In the Real-Time File Protection task exclude from the protection scope objects on the server that Kaspersky Lab recommends to exclude.
Allow remote connection to Kaspersky Security 10.1 Console.	Deny	ALLOWREMOTECON=<value> 1 – allow; 0 – deny.	By default, remote connection is not allowed to the Kaspersky Security 10.1 Console installed on the protected server. During installation, you can allow connection. Kaspersky Security 10.1 for Windows Server creates allowing rules for the process kavfsgt.exe using the TCP protocol for all ports.

Setting	Default Value	Windows Installer command-line options and possible values	Description
Path to the key file ( <b>Key</b> )	\server directory in the distribution kit	LICENSEKEYPATH=<key file name>	<p>By default, the installer attempts to find the file with .key extension in the \server folder of the distribution kit.</p> <p>If the \server folder contains several key files, the installer will select the key file that has the farthest expiration date.</p> <p>A key file can be saved beforehand in the \server folder or by specifying another path to the key file using the <b>Add key</b> setting.</p> <p>You can add a key after Kaspersky Security 10.1 for Windows Server is installed using an administration tool of your choice: for example, Kaspersky Security 10.1 Console. If you do not add a key during installation of the application, Kaspersky Security 10.1 for Windows Server will not function.</p>
Path to the configuration file	Not specified	CONFIGPATH=<configuration file name>	<p>Kaspersky Security 10.1 for Windows Server imports settings from the specified configuration file created in the application.</p> <p>Kaspersky Security 10.1 for Windows Server does not import passwords from the configuration file, for example, account passwords for starting tasks, or passwords for connecting to a proxy server. Once the settings are imported, you will have to enter all passwords manually.</p> <p>If the configuration file is not specified, the application will start to work with the default settings after setup.</p>

Setting	Default Value	Windows Installer command-line options and possible values	Description
Enabling network connections for the Console	Disabled	ADDWFEXCLUSION=<value> <b>1</b> – allow; <b>0</b> – deny.	<p>Use this option to install Kaspersky Security 10.1 for Windows Server on another server. You can remotely manage a server protection from another device with the Kaspersky Security 10.1 Console installed.</p> <p>Port 135 (TCP) is opened in the Microsoft Windows firewall, network connections for the executable file kavfsrcn.exe for remote management of Kaspersky Security 10.1 for Windows Server are allowed, and access is granted to DCOM applications.</p> <p>Upon installation completion add users to KAVWSEE Administrators group to allow them remote application management, if the server operates on the Microsoft Windows Server 2008, and allow network connections to Kaspersky Security Management Service (kavfsgt.exe file) on the server.</p> <p>You can read more about additional configuration when the Kaspersky Security 10.1 Console is installed on another computer (see Section "Advanced settings after installation of Kaspersky Security 10.1 Console on another computer" on page <a href="#">56</a>).</p>

Setting	Default Value	Windows Installer command-line options and possible values	Description
Disabling the check for incompatible software	The check is performed	SKIPINCOMPATIBLESW = <value> 0 - The check for incompatible software is performed 1 - The check for incompatible software is not performed	Use this setting to enable or disable the check for incompatible software during background installation of the application on the device.  Regardless of the value of this setting, during installation of Kaspersky Security 10.1 for Windows Server, the application always warns about other versions of the application installed on the device.

Table 12. Uninstallation settings and command-line options in Windows Installer

Setting	Default Value	Description, Windows Installer command-line options and their possible values
Restoring quarantined objects	Remove	RESTOREQTN =<value> 0 – delete quarantined content; 1 – restore quarantined content to the folder specified by the RESTOREPATH parameter.
Restoring the content of backup	Remove	RESTOREBCK =<value> 0 – delete backup content; 1 – restore backup contents to the folder specified by the RESTOREPATH parameter.
Enter of the current password to confirm the deletion (if password protection is enabled)	Not specified	UNLOCK_PASSWORD=<specified password>
Folder for restored objects	%ALLUSERSPROFILE%\Application Data\Kaspersky Lab\Kaspersky Security for Windows Server\10.1\Restored	RESTOREPATH=<full path to the folder> Restored objects will be saved to the folder specified in this setting: Objects from the quarantine will be saved into the subfolder \Quarantine. Objects from Backup – into the subfolder \Backup.

## Kaspersky Security 10.1 for Windows Server install and uninstall log

If Kaspersky Security 10.1 for Windows Server is installed or uninstalled using the Installation (Uninstallation) Wizard, the Windows Installer service creates an install (uninstall) log. Log file `ks4ws_install_<uid>.log` (where `<uid>` – unique 8-character log identifier) will be saved into a `%temp%` folder of the user from whose account the `setup.exe` file was started.

If Kaspersky Security 10.1 for Windows Server is installed or uninstalled from the command line, the install file log will not be created by default.

► *To install Kaspersky Security 10.1 for Windows Server with the log file `ks4ws.log` created on disk `C:`:*

- `msiexec /i ks4ws_x86.msi /l*v C:\log.txt /qn EULA=1`
- `msiexec /i ks4ws_x64.msi /l*v C:\log.txt /qn EULA=1`

## Installation planning

This section contains description of Kaspersky Security 10.1 for Windows Server administration tools set, and special aspects of Kaspersky Security 10.1 for Windows Server installation and uninstallation using a wizard (see Section "Installing and uninstalling the application using a wizard" on page [52](#)), command line (see Section "Installing and uninstalling the application from the command line" on page [64](#)), via Kaspersky Security Center (see Section "Installing and uninstalling the application using Kaspersky Security Center" on page [69](#)) and via Active Directory® group policy (see Section "Installing and uninstalling via Active Directory group policies" on page [74](#)).

Before starting to install Kaspersky Security 10.1 for Windows Server, plan its main stages.

1. Determine which administration tools will be used to manage and configure Kaspersky Security 10.1 for Windows Server.
2. Select the necessary product components for installation (see Section "Kaspersky Security 10.1 for Windows Server software components and their codes for Windows Installer service" on page [34](#)).
3. Select installation method.

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## Selecting administration tools

Determine the administration tools that will be used to configure Kaspersky Security 10.1 for Windows Server settings and to manage it. Kaspersky Security 10.1 for Windows Server can be managed using the Kaspersky Security 10.1 Console, command-line utility, and Kaspersky Security Center Administration Console.

### Kaspersky Security 10.1 Console

Kaspersky Security 10.1 Console is an isolated snap-in added to the Microsoft Management Console. Kaspersky Security 10.1 for Windows Server can be managed via the Kaspersky Security 10.1 Console installed on the protected server or on another computer on the corporate network.

Multiple Kaspersky Security 10.1 for Windows Server snap-ins can be added to one Microsoft Management Console opened in author mode to use it to manage the protection of multiple servers on which Kaspersky Security 10.1 for Windows Server is installed.

Kaspersky Security 10.1 Console is included in the "Administration Tools" product components set.

### Command line utility

You can manage Kaspersky Security 10.1 for Windows Server from the command line of a protected server.

The command line utility is included in the Kaspersky Security 10.1 for Windows Server software components group.

### Kaspersky Security Center

If the Kaspersky Security Center application is used for centralized management of anti-virus protection of computers at your company, you can manage Kaspersky Security 10.1 for Windows Server via the Kaspersky Security Center Administration Console.

The following components must be installed:

- **Module for integration with Kaspersky Security Center Network Agent.** This component is included in the Kaspersky Security 10.1 for Windows Server software components group. It ensures Kaspersky Security 10.1 for Windows Server communication with the Network Agent. Install the module for integration with Kaspersky Security Center Network Agent onto the protected server.
- **Kaspersky Security Center Network Agent.** Install this component on each protected server. This component supports interaction between Kaspersky Security 10.1 for Windows Server installed on the server and Kaspersky Security Center Administration Console. The Network Agent installation file is included in the Kaspersky Security Center distribution kit folder.
- **Kaspersky Security 10.1 for Windows Server plugin.** Additionally, install the plug-in for managing Kaspersky Security 10.1 for Windows Server via the Administration Console on the computer where the Kaspersky Security Center Administration Server is installed. This ensures the application management interface via the Kaspersky Security Center. The plug-in installation file, `\server\klcfginst.exe`, is included in the Kaspersky Security 10.1 for Windows Server distribution kit.

## Selecting the installation type

After specifying the software components for installation of Kaspersky Security 10.1 for Windows Server (see Section "Kaspersky Security 10.1 for Windows Server software components and their codes for Windows Installer service" on page [34](#)), you need to select the application installation method.

Select the installation method depending on the network architecture and the following conditions:

- Whether special Kaspersky Security 10.1 for Windows Server installation settings will need to be set, or whether the recommended installation settings (see Section "Installation and uninstallation settings and command-line options for Windows Installer service" on page [43](#)) will be used.
- Will the installation settings will be the same for all servers or specific to each server.

Kaspersky Security 10.1 for Windows Server can be installed interactively using the Setup Wizard or in silent mode without user participation, and invoked by running the installation package file with setup settings from the



command line. A centralized remote installation of Kaspersky Security 10.1 for Windows Server can be performed using Active Directory group policies or using the Kaspersky Security Center remote installation task.

Kaspersky Security 10.1 for Windows Server can be installed on a single server, configured for operation and its settings saved to a configuration file; the file created can then be used to install Kaspersky Security 10.1 for Windows Server on other server (this possibility does not apply when the product is installed using Active Directory group policies).

### Starting the Setup Wizard

The Setup Wizard can install the following:

- Kaspersky Security 10.1 for Windows Server components (see Section "Kaspersky Security 10.1 for Windows Server software components" on page [35](#)) on a protected server out of a `\server\setup.exe` file included into distribution kit.
- Kaspersky Security 10.1 Console (see Section "Kaspersky Security 10.1 Console installation" on page [55](#)) from the `\client\setup.exe` file of the distribution kit on the protected server or another LAN host.

### Running the installation package file from the command line with the necessary installation settings

If the installation package file is started without command-line options, Kaspersky Security 10.1 for Windows Server will be installed with the default settings. Kaspersky Security 10.1 for Windows Server options can be used to modify the installation settings.

Kaspersky Security 10.1 Console can be installed on the protected server and / or administrator's workstation.

Sample commands for the installation of Kaspersky Security 10.1 for Windows Server and Kaspersky Security 10.1 Console can be found in the section "Installing and Uninstalling Kaspersky Security 10.1 for Windows Server from the command line (see Section "Installing and uninstalling the application from the command line" on page [64](#))".

### Centralized installation via the Kaspersky Security Center

If the Kaspersky Security Center is used in your network for managing networked computers' anti-virus protection, Kaspersky Security 10.1 for Windows Server can be installed on multiple servers by using the Kaspersky Security Center remote installation task.

The servers on which you wish to install Kaspersky Security 10.1 for Windows Server via Kaspersky Security Center (see Section "Installing and uninstalling the application using Kaspersky Security Center" on page [69](#)) may either be located in the same domain as the Kaspersky Security Center as well as in a different domain, or not belong to any one domain at all.

### Centralized installation using Active Directory group policies

Active Directory group policies can be used to install Kaspersky Security 10.1 for Windows Server on the protected server. The Kaspersky Security 10.1 Console can be installed on the protected server or administrator's workstation.

Kaspersky Security 10.1 for Windows Server can be installed using just the recommended installation settings.

The servers on which Kaspersky Security 10.1 for Windows Server is installed using Active Directory group policies (see Section "Installing and uninstalling via Active Directory group policies" on page [74](#)) must be located in the same domain and in the same organizational unit. Installation is performed at computer startup before logging in to Microsoft Windows.

## Installing and uninstalling the application using a wizard

This section contains description of the Kaspersky Security 10.1 for Windows Server and the Kaspersky Security 10.1 Console installation and uninstallation processes by means of installation wizard, as well as information about additional Kaspersky Security 10.1 for Windows Server configuration and actions to be performed upon installation.

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## Installing using the Setup Wizard

The following sections contain information about the installation of Kaspersky Security 10.1 for Windows Server and the Kaspersky Security 10.1 Console.

► *To install and proceed with using Kaspersky Security 10.1 for Windows Server, take the following steps:*

1. Install Kaspersky Security 10.1 for Windows Server on a protected server.
2. Install Kaspersky Security 10.1 Console on the computers from which you intend to manage Kaspersky Security 10.1 for Windows Server.
3. If the Kaspersky Security 10.1 Console has been installed on any computer in the network, other than protected server, perform the additional adjustment to allow console users to manage Kaspersky Security 10.1 for Windows Server remotely.
4. Perform actions after Kaspersky Security 10.1 for Windows Server installation.

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## Kaspersky Security 10.1 for Windows Server installation

Before installing Kaspersky Security 10.1 for Windows Server, take the following steps:

- Make sure no other anti-virus programs are installed on the server. You can install Kaspersky Security 10.1 for Windows Server without removing Kaspersky Anti-Virus 8.0 for Windows Servers Enterprise Edition or Kaspersky Security 10 for Windows Server.
- Make sure that the account which you are using to start the Setup Wizard is registered in the administrators group on the protected server.

After completing the actions described above, proceed with the installation procedure. Following the Setup Wizard instructions, specify the settings for Kaspersky Security 10.1 for Windows Server installation. The Kaspersky Security 10.1 for Windows Server installation process can be stopped at any step of the Setup Wizard. To do so, press the **Cancel** button in the Setup Wizard's window.

You can read more about the installation (uninstallation) settings (see Section "Installation and uninstallation settings and command-line options for Windows Installer service" on page [43](#)).

► *To install Kaspersky Security 10.1 for Windows Server using an installation wizard:*

1. Start the welcome file setup.exe on the server.
2. In the window that opens, in the Installation section, click the **Install Kaspersky Security 10.1 for Windows Server** link.
3. In the welcome screen of the Kaspersky Security 10.1 for Windows Server Setup Wizard, click the **Next** button.

The **EULA and Privacy Policy** window opens.

4. Review the terms of License Agreement and Privacy Policy.
5. If you agree with the terms and conditions of EULA and Privacy Policy, select the check boxes **the terms and conditions of this EULA and Privacy Policy describing the handling of data** in order to proceed with the installation.

If you do not accept EULA and/or Privacy Policy the installation will be aborted.

6. Click the **Next** button.

If the server has any compatible version of the application installed, the **Previous version of the application detected** window will open.

If previous versions of the application are not detected, proceed to step 8 of these instructions.

7. To upgrade from the previous version of the application, click the **Install** button. The Setup Wizard will upgrade application to Kaspersky Security 10.1 for Windows Server and save compatible settings in the new version. On the upgrade completion, wizard will open the **Complete installation** window (proceed to the Step 15 of these instructions).

The **Quick scan of the computer before installation** window opens.

8. In the **Quick scan of the computer before installation**, check the box **Scan computer for viruses** to scan system memory and boot sectors of the local server drives for threats. Press the **Next** button. On completion of the scanning procedure the wizard will open a window reporting the scan results.

This window displays information about scanned server objects: the total number of scanned objects, the number of threat types detected, the number of infected or probably infected objects detected, the number of dangerous or suspicious processes removed from memory by Kaspersky Security 10.1 for Windows Server, and the number of dangerous or suspicious processes that the application was unable to remove.

To see exactly which objects were scanned, press the **List of processed objects** button.

9. Click the **Next** button in the **Quick scan of the computer before installation** window.

The **Custom installation** window opens.

10. Select the components to be installed.

By default, all Kaspersky Security 10.1 for Windows Server components are included in recommended installation set, except the Firewall management and Script Monitoring components.

The SNMP protocol support component of Kaspersky Security 10.1 for Windows Server will only appear in the list of components suggested for installation if the Microsoft Windows SNMP service is installed on the server.

11. To cancel all changes, press the **Reset** button in the **Custom installation** window. Click the **Next** button.
12. In the **Select destination folder** window:
  - If required, specify a folder to which Kaspersky Security 10.1 for Windows Server files will be copied.
  - If required, review the information about available space on local drives by clicking the **Disk** button.Click the **Next** button.
13. In the **Advanced installation settings** window, configure the following installation settings:
  - **Enable real-time protection after installation of application.**
  - **Add Microsoft recommended files to exclusions list.**
  - **Add Kaspersky Lab recommended files to exclusions list.**Click the **Next** button.
14. In the opened **Import settings from configuration file** window:
  - a. Specify the configuration file to import Kaspersky Security 10.1 for Windows Server settings from an existing configuration file created in any compatible previous version of the application.
  - b. Press the **Next** button.
15. In the **Activation of the application** window, do one of the following:
  - If you want to activate the application, specify a Kaspersky Security 10.1 for Windows Server key file for application activation.
  - If you want to activate the application later, press the **Next** button.
  - If a key file has been saved beforehand in the \server folder of the distribution kit, the name of this file will be displayed in the **Key** field.
  - To add the key using a key file stored in another folder, specify the key file.

You cannot activate the application using an activation code via Setup Wizard. If you want to activate the application using activation code, you need to enter the code after installation.

Once the key file is added, license information will be shown in the window. Kaspersky Security 10.1 for Windows Server displays the calculated date of license expiry. The license term runs from the time when you add a key and expires no later than the key file expiration date.

Click **Next** button to apply the key in the application.

16. In the **Ready to install** window, press the **Install** button. The wizard will start the installation of Kaspersky Security 10.1 for Windows Server components.
17. The **Installation complete** window opens when installation is completed.

18. Select the **View Release Notes** check box to view information about the release after the Setup Wizard is done.
19. Click **OK**.

The Setup Wizard's window closes. Once installation is completed, Kaspersky Security 10.1 for Windows Server is ready for use if you have added the activation key.

## Kaspersky Security 10.1 Console installation

Follow the instructions of the Setup Wizard to adjust the installation settings for Kaspersky Security 10.1 Console. The installation process can be stopped at any step of the wizard. To do so, press the **Cancel** button in the wizard window.

► *To install Kaspersky Security 10.1 Console, take the following steps:*

1. Make sure that the account from which you are running the Setup Wizard is included in the administrators group on the computer.
2. Run the setup.exe welcome file on the computer.  
The welcome window opens.
3. Click on the **Install Kaspersky Security 10.1 Console** link.  
The Setup Wizard's welcome window opens. Click the **Next** button.
4. Review the terms of the End User License Agreement and Privacy Policy in the opened window, and select **the terms and conditions of this EULA** and **Privacy Policy describing the handling of data** in order to proceed with the installation. Click the **Next** button.
5. In the **Advanced installation settings** window:
  - If you intend to use the Kaspersky Security 10.1 Console to manage Kaspersky Security 10.1 for Windows Server installed on a remote computer, select the **Allow remote access** check box.
  - To open the **Custom installation** window and select components:
    - a. Click the **Advanced** button.  
The **Custom installation** window opens.
    - b. Select the components of "Administration Tools" set from a list.  
By default, all the components are installed.
    - c. Click the **Next** button.

You can find more detailed information about Kaspersky Security 10.1 for Windows Server components (see Section "Kaspersky Security 10.1 for Windows Server software components and their codes for Windows Installer service" on page 34).

6. In the **Select destination folder** window:
  - a. If required, specify a different folder in which the files being installed should be saved.
  - b. Click the **Next** button.
7. In the **Ready to install** window, press the **Install** button.  
The wizard will begin installing the selected components.

8. Click **OK**.

The Setup Wizard's window closes. Kaspersky Security 10.1 Console will be installed on a protected server.

If the "Administration tools" set has been installed on any computer in the network, other than protected server, adjust the advanced settings (see Section "Advanced settings after installation of Kaspersky Security 10.1 Console on another computer" on page [56](#)).

## Advanced settings after installation of Kaspersky Security 10.1 Console on another computer

If the Kaspersky Security 10.1 Console has been installed on any computer in the network, other than protected server, perform the actions described below to allow users to manage Kaspersky Security 10.1 for Windows Server remotely:

- Add Kaspersky Security 10.1 for Windows Server users to the KAVWSEE Administrators group on the protected server.
- Allow network connections for Kaspersky Security Management Service (kavfsgt.exe), if the protected server uses Windows Firewall or a third-party firewall.
- If **Allow remote access** check box is not selected during Kaspersky Security 10.1 Console installation on a computer under Microsoft Windows, you should manually allow network connections for Kaspersky Security 10.1 Console via computer's firewall.

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## About access permissions for the Kaspersky Security Management Service

You can review the list of Kaspersky Security 10.1 for Windows Server services.

During installation, Kaspersky Security 10.1 for Windows Server registers Kaspersky Security 10.1 for Windows Server Management Service (KAVFSGT). To manage the application via Kaspersky Security 10.1 Console installed on a different computer, the account whose permissions are used to connect to Kaspersky Security 10.1 for Windows Server must have full access to Kaspersky Security 10.1 for Windows Server Management Service on the protected server.

By default, access to the Kaspersky Security Management Service is granted to users of the Administrators group on the protected server and users of the KAVWSEE Administrators group created on the protected server during Kaspersky Security 10.1 for Windows Server installation.

You can manage Kaspersky Security Management Service only via the Microsoft Windows **Services** snap-in.

You cannot allow or block user access to Kaspersky Security 10.1 for Windows Server Management Service by configuring Kaspersky Security 10.1 for Windows Server.

You can connect to Kaspersky Security 10.1 for Windows Server from a local account if an account with the same name and password is registered on the protected server.

## Allowing network connections for Kaspersky Security 10.1 Console

The names of settings may vary under different Windows operating systems.

Kaspersky Security 10.1 Console on the remote computer uses DCOM protocol to receive information about Kaspersky Security 10.1 for Windows Server events (such as objects scanned, tasks completed, etc.) from the Kaspersky Security 10.1 for Windows Server management service on the protected server. You need to allow network connections for Kaspersky Security 10.1 Console in the Windows firewall settings in order to establish connections between Kaspersky Security 10.1 Console and the Kaspersky Security 10.1 for Windows Server management service.

Do the following:

- Make sure that anonymous remote access to COM applications is allowed (but not remote start and activation of COM applications).
- In the Windows firewall open TCP port 135 and allow network connections for the executable file of the Kaspersky Security 10.1 for Windows Server remote management process, kavfsrcn.exe.

The client computer on which Kaspersky Security 10.1 Console is installed uses port TCP 135 to access the protected server and to receive a response.

If Kaspersky Security 10.1 Console was opened while you were configuring the connection between the protected server and the server on which the Console is installed, close Kaspersky Security 10.1 Console, wait till the Kaspersky Security 10.1 for Windows Server remote management process kavfsrcn.exe is finished, and restart the Console. The new connection settings are applied.

► *To allow anonymous remote access to COM applications, take the following steps:*

1. On the server with Kaspersky Security 10.1 Console installed, open the Component Services console.
2. Select **Start > Run**.
3. Enter the command `dcomcnfg`.
4. Click **OK**.
5. Expand the **Computers** node in the Component Services console on your server.
6. Open the context menu on the **My Computer** node.



7. Select **Properties**.
  8. On the **COM Security** tab of the **Properties** window, click the **Edit limits** button in the **Access permissions** group of settings.
  9. Make sure that the **Allow Remote Access** check box is selected for the ANONYMOUS LOGON user in the **Allow Remote Access** window.
  10. Click **OK**.
- *To open TCP port 135 in the Windows Firewall and to allow network connections for the Kaspersky Security 10.1 for Windows Server remote management process executable file:*
1. Close Kaspersky Security 10.1 Console on the remote computer.
  2. Perform one of the following steps:
    - In Microsoft Windows XP or Microsoft Windows Vista:
      - a. In Microsoft Windows XP SP2 or later, select **Start > Windows Firewall**.  
In Microsoft Windows Vista, select **Start > Control Panel > Windows Firewall** and in the **Windows Firewall** window select the command **Change settings**.
      - b. In the Windows Firewall window (or Windows Firewall settings) click the **Add port** button on the **Exclusions** tab.
      - c. In the **Name** field specify the part name RPC (TCP/135) or enter another name, for example Kaspersky Security 10.1 for Windows Server DCOM, and specify port number (135) in the **Port name** field.
      - d. Select **TCP** protocol.
      - e. Click **OK**.
      - f. Click the **Add** button on the **Exclusions** tab.
    - In Microsoft Windows 7 or later:
      - a. Select **Start > Control panel > Windows Firewall**. In the **Windows Firewall** window select **Allow a program or feature through Windows Firewall**.
      - b. In the **Allow programs to communicate through Windows Firewall** window click the **Allow another program...** button.
  3. Specify the kavfsrnc.exe file in the **Add Program** window. This is located in the folder specified as a destination folder during the installation of Kaspersky Security 10.1 Console using MMC.
  4. Click **OK**.
  5. Click the **OK** button in the **Windows Firewall (Windows Firewall settings)** window.

## Enabling network connections for the Kaspersky Security Management Service

The names of settings may vary under different Windows operating systems.

To establish a connection between Kaspersky Security 10.1 Console and the Kaspersky Security Management Service, you need to allow network connections for the service through the firewall on the protected server.



Network connections have to be configured if Kaspersky Security runs under Microsoft Windows Server 2003 / 2008 / 2012 / 2012 R2.

► *To allow network connections for the Kaspersky Security Management Service:*

1. On a protected server running Windows Server, select **Start > Control Panel > Security > Windows Firewall**.
2. In the **Windows Firewall settings** window, select the **Change settings** command.
3. In the list of predefined exclusions on the **Exclusions** tab check the flags: **COM + Network access**, **Windows Management Instrumentation (WMI)** and **Remote Administration**.
4. Click the **Add Program** button.
5. Specify the kavfsqt.exe file in the **Add Program** dialog window. This is located in the folder specified as a destination folder during the installation of Kaspersky Security 10.1 for Windows Server using MMC.
6. Click **OK**.
7. Press the **OK** button in the **Windows Firewall settings** dialog window.

Network connections for the Kaspersky Security Management Service are now enabled.

## Actions to perform after Kaspersky Security 10.1 for Windows Server installation

Kaspersky Security 10.1 for Windows Server starts the protection and scan tasks immediately after installation if you have activated the application. If **Enable real-time protection after installation of application** (default option) was selected during installation of Kaspersky Security 10.1 for Windows Server, Kaspersky Security 10.1 for Windows Server scans server's file system objects when they are accessed. If the Script monitoring component was installed during custom installation, Kaspersky Security scans the program code of all scripts when they are run. Kaspersky Security 10.1 for Windows Server will run the Critical Areas Scan task every Friday at 20:00.

We recommend taking the following steps after installing Kaspersky Security 10.1 for Windows Server:

- Start Kaspersky Security 10.1 for Windows Server databases update task. After installation Kaspersky Security 10.1 for Windows Server will scan objects using the database included in the application distribution kit.

We recommend updating Kaspersky Security 10.1 for Windows Server databases immediately since they may be out of date.

The application will then update the databases every hour according to the default schedule configured in the task.

- Run a Critical Areas Scan on the server if no anti-virus software with real-time file protection was installed on the protected server before installing Kaspersky Security 10.1 for Windows Server.
- Configure administrator notifications about Kaspersky Security 10.1 for Windows Server events.

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## Starting and configuring Kaspersky Security 10.1 for Windows Server databases update task

► *To update the application database after installation, do the following:*

1. In the Database Update task settings, configure a connection with an update source – Kaspersky Lab HTTP or FTP update servers.
2. Start the Database Update task.

► *To configure the connection with the Kaspersky Lab's update servers, in the Database Update task:*

1. Start the Kaspersky Security 10.1 Console in one of the following ways:
  - Open Kaspersky Security 10.1 Console on the protected server. To do this, choose **Start > Programs > Kaspersky Security 10.1 for Windows Server > Administration Tools > Kaspersky Security 10.1 Console**.
  - If Kaspersky Security 10.1 Console has been started not on a protected server, connect to the protected server:
    - a. Open the context menu of the **Kaspersky Security** node in the Kaspersky Security 10.1 Console tree.
    - b. Select the **Connect to another computer** item.
    - c. In the **Select computer** window, select **Other computer** and in the text field indicate the network name of the protected server.

If the account you used to sign in to Microsoft Windows does not have access permissions for the Kaspersky Security Management Service (see Section "About access permissions for the Kaspersky Security Management Service" on page [56](#)), indicate an account with the required permissions.

Kaspersky Security 10.1 Console window opens.

2. In the Kaspersky Security 10.1 Console tree, expand the **Update** node.
3. Select the **Database Update** subnode.
4. Click the **Properties** link in the details pane.
5. In the **Task settings** window that opens, open the **Connection settings** tab.
6. Do the following:
  - a. If Web Proxy Auto-Discovery Protocol (WPAD) is not configured on your network to detect proxy server settings automatically in the LAN, specify the proxy server settings: in the **Proxy server settings** section, select the **Use specified proxy server settings** check box, enter the address in the **Address** field, and enter the port number for the proxy server in the **Port** field.

- b. If your network requires authentication when accessing the proxy server, select the necessary authentication method in the drop-down list of the **Proxy server authentication settings** section:
- **Use NTLM authentication**, if the proxy server supports the built-in Microsoft Windows NTLM authentication. Kaspersky Security 10.1 for Windows Server will use the user account specified in the task settings to access the proxy server (by default the task will run under the **Local system (SYSTEM)** user account).
  - **Use NTLM authentication with name and password**, if the proxy server supports the built-in Microsoft Windows NTLM authentication. Kaspersky Security 10.1 for Windows Server will use the account specified for accessing the proxy server. Enter a user name and password or select a user from the list.
  - **Use user name and password**, to select basic authentication. Enter a user name and password or select a user from the list.
7. Click **OK** in the **Task settings** window.

The settings for connecting with the update source in the Database Update task will be saved.

► *To run the Database Update task:*

1. In the Kaspersky Security 10.1 Console tree, expand the **Update** node.
2. In the context menu on the **Database Update** subnode, select the **Start** item.

The Database Update task starts.

After the task has successfully completed, you can view the release date of the latest database updates installed in the details pane of the **Kaspersky Security** node.

## Critical Areas Scan

After you have updated the Kaspersky Security 10.1 for Windows Server databases, scan the server for malware using the Critical Areas Scan task.

► *To run the Critical Areas Scan task, take the following steps:*

1. Expand the **On-Demand Scan** node in the Kaspersky Security 10.1 Console tree.
2. In the context menu of the **Critical Areas Scan** subnode, select the **Start** command.

The task starts; the task status **Running** is displayed in the workspace.

► *To view the task log,*

in the details pane of the **Critical areas scan** node, click the **Open log** link.

## Modifying set of components and recovering Kaspersky Security 10.1 for Windows Server

Kaspersky Security 10.1 for Windows Server components can be added or removed. You need to stop the Real-Time File Protection task before you can remove the Real-Time File Protection component. In other circumstances there is no need to stop the Real-Time File Protection task or Kaspersky Security Service.

If the application management access is password protected, Kaspersky Security 10.1 for Windows Server requests password when you attempt to delete or modify the set of components on the additional step in Setup Wizard.

► *To modify the set of Kaspersky Security 10.1 for Windows Server components:*

1. In the **Start** menu, select **All programs > Kaspersky Security 10.1 for Windows Server > Modify or Remove**.

The Setup Wizard's **Modify, repair or remove** window opens.

2. Select **Modify set of components**. Click the **Next** button.

The **Custom installation** window opens.

3. In the **Custom installation** window, in the list of available components, select the components that you want to add to Kaspersky Security 10.1 for Windows Server or that you want to remove. To do this, perform the following actions:

- To change the set of components, click the button next to the name of the selected component, and in the context menu select:
  - **Component will be installed on local hard drive**, if you want to install one component;
  - **Component and its subcomponents will be installed on local hard drive**, if you want to install a group of components.
- To remove previously installed components, click the button next to the name of the selected component, and in the context menu select **Component will be unavailable**.

Click the **Install** button.

4. In the **Ready to install** window, confirm the change to the set of software components by clicking the **Install** button.
5. In the window that opens when installation is complete, click the **OK** button.

The set of Kaspersky Security 10.1 for Windows Server components will be modified based on the specified settings.

If problems occur in the operation of Kaspersky Security 10.1 for Windows Server (Kaspersky Security 10.1 for Windows Server crashes; tasks crash or do not start), it is possible to attempt to restore the Kaspersky Security 10.1 for Windows Server. You can perform a restore while saving the current settings of Kaspersky Security 10.1 for Windows Server, or you can select an option to reset all Kaspersky Security 10.1 for Windows Server settings to their default values.

► *To recover Kaspersky Security 10.1 for Windows Server after the application or a task crashes, take the following steps:*

1. In the **Start** menu, select **All programs > Kaspersky Security 10.1 for Windows Server > Modify or Remove**.

The Setup Wizard's **Modify, repair or remove** window opens.

2. Select **Repair installed components**. Click the **Next** button.

This opens the **Repair installed components** window.

3. In the **Repair installed components** window, select the **Restore recommended application settings**

check box if you want to reset the configured application settings and restore Kaspersky Security 10.1 for Windows Server with its default settings. Click the **Install** button.

4. In the **Ready to repair** window, confirm the repair operation by clicking the **Install** button.
5. In the window that opens upon completion of the repair operation, click the **OK** button.

Kaspersky Security 10.1 for Windows Server will be restored based on the specified settings.

## Uninstalling using the Setup Wizard

This section contains instructions on removing Kaspersky Security 10.1 for Windows Server and the Kaspersky Security 10.1 Console from a protected server using the Setup Wizard.

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## Kaspersky Security 10.1 for Windows Server uninstallation

The names of settings may vary under different Windows operating systems.

Kaspersky Security 10.1 for Windows Server can be uninstalled from the protected server using the Setup / Uninstallation Wizard.

After Kaspersky Security 10.1 for Windows Server uninstallation from a protected server a reboot may be required. Rebooting can be postponed.

Uninstallation, recovery and installation of the application via the Windows control panel is not available, if the operating system uses the UAC feature (User Account Control) or the access to the application is password-protected.

If the application management access is password protected, Kaspersky Security 10.1 for Windows Server requests password when you attempt to delete or modify the set of components on the additional step in Setup Wizard.

► *To uninstall Kaspersky Security 10.1 for Windows Server:*

1. In the **Start** menu, select **All programs > Kaspersky Security 10.1 for Windows Server > Modify or Remove**.

The Setup Wizard's **Modify, repair or remove** window opens.

2. Select **Remove software components**. Click the **Next** button.  
The **Advanced uninstallation settings** window opens.
3. If necessary, in the **Advanced uninstallation settings** window:
  - a. Select the **Export Quarantine objects** check box in order for Kaspersky Security 10.1 for Windows Server to export objects that have been quarantined. The check box is cleared by default.
  - b. Check the **Export Backup objects** checkbox, in order to export objects from Kaspersky Security 10.1 for Windows Server Quarantine. The check box is cleared by default.
  - c. Click the **Save to** button and select the folder to which you want to export the objects being restored. By default, the objects will be exported to %ProgramData%\Kaspersky Lab\Kaspersky Security 10.1 for Windows Server\Uninstall.  
Click the **Next** button.
4. In the **Ready to uninstall** window, confirm the uninstallation by clicking the **Uninstall** button.
5. In the window that opens upon completion of uninstallation, click the **OK** button.  
Kaspersky Security 10.1 for Windows Server will be uninstalled from a protected server.

## Kaspersky Security 10.1 Console uninstallation

The names of settings may vary under different Windows operating systems.

You can uninstall Kaspersky Security 10.1 Console from the server using the Setup / Uninstallation Wizard.

After you have uninstalled Kaspersky Security 10.1 Console, you do not need to restart the server.

### ► To uninstall Kaspersky Security 10.1 Console:

1. In the **Start** menu, select **All programs > Kaspersky Security 10.1 for Windows Server > Administration tools > Modify or Remove**.
2. The wizard's **Modify, repair or remove** window opens.  
Select **Remove software components** and click the **Next** button.
3. The **Ready to uninstall** window opens. Click the **Remove** button.  
The **Uninstallation complete** window opens.
4. Click **OK**.  
Removal is now complete, and the Setup Wizard closes.

## Installing and uninstalling the application from the command line

This section describes the particulars of installing and uninstalling Kaspersky Security 10.1 for Windows Server from the command line and contains examples of commands to install and uninstall Kaspersky Security 10.1 for Windows Server from the command line, and examples of commands to add and remove Kaspersky Security 10.1 for Windows Server components from the command line.

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## About installing and uninstalling Kaspersky Security 10.1 for Windows Server from command line

Kaspersky Security 10.1 for Windows Server can be installed or uninstalled, and its components added or removed, by running the `\server\ks4ws_x86(x64).msi` installation package files from the command line after the installation settings have been specified using keys.

The "Administration Tools" set can be installed on the protected server or on another computer on the network to work with Kaspersky Security 10.1 Console locally or remotely. To do this, use the `\client\ks4wstools.msi` installation package.

Perform the installation using the rights of an account included in the administrators group on the server where the application is installed.

If one of the `\server\ks4ws_x86(x64).msi` files is run on the protected server without additional keys, Kaspersky Security 10.1 for Windows Server will be installed with the recommended installation settings.

The set of components to be installed can be assigned using the `ADDLOCAL` command-line option by listing the codes for the selected components or sets of components.

## Example commands for installing Kaspersky Security 10.1 for Windows Server

This section provides examples of commands used to install Kaspersky Security 10.1 for Windows Server.

On servers running a 32-bit version of Microsoft Windows, run the files with the `x86` suffix in the distribution kit.  
On servers running a 64-bit version of Microsoft Windows, run the files with the `x64` suffix in the distribution kit.

Detailed information about the use of Windows Installer's standard commands and command-line options is provided in the documentation supplied by Microsoft.

## Examples for Kaspersky Security 10.1 for Windows Server installation from file setup.exe

- ▶ To install Kaspersky Security 10.1 for Windows Server with the recommended installation settings in the mode without interaction with the user, run the following command:

```
\server\setup.exe /s/p EULA=1 PRIVACYPOLICY=1
```

- ▶ To install Kaspersky Security 10.1 for Windows Server with the following settings:

- install Real-Time File Protection and On-Demand Scan components only;
- do not run Real-Time Protection when starting Kaspersky Security 10.1 for Windows Server;
- do not exclude from the scan files that Microsoft Corporation recommends to exclude;

perform the following command:

```
\server\setup.exe /p "ADDLOCAL=Oas RUNRTP=0 ADDMSEXCLUSION=0"
```

## Examples of commands used for installation: running the .msi file of an installation package

- ▶ To install Kaspersky Security 10.1 for Windows Server with the recommended installation settings in the mode without interaction with the user, run the following command:

```
msiexec /i ks4ws.msi /qn EULA=1 PRIVACYPOLICY=1
```

- ▶ To install Kaspersky Security 10.1 for Windows Server with the recommended installation settings; display the installation interface, run the following command:

```
msiexec /i ks4ws.msi /qf EULA=1 PRIVACYPOLICY=1
```

- ▶ In order to install Kaspersky Security 10.1 for Windows Server with activation using the key file C:\0000000A.key:

```
msiexec /i ks4ws.msi LICENSEKEYPATH=C:\0000000A.key /qn EULA=1  
PRIVACYPOLICY=1
```

- ▶ To install Kaspersky Security 10.1 for Windows Server with a preliminary scan of active processes and boot sectors of the local disks, run the following command:

```
msiexec /i ks4ws.msi PRESCAN=1 /qn EULA=1 PRIVACYPOLICY=1
```

- ▶ To install Kaspersky Security 10.1 for Windows Server while saving its files in the destination folder C:\WSEE, execute the following command:

```
msiexec /i ks4ws.msi INSTALLDIR=C:\WSEE /qn EULA=1 PRIVACYPOLICY=1
```

- ▶ To install Kaspersky Security 10.1 for Windows Server: save the installation log file with name ks4ws.log in the folder in which the msi file of the Kaspersky Security 10.1 for Windows Server installation package is stored, and execute the following command:

```
msiexec /i ks4ws.msi /l*v ks4ws.log /qn EULA=1 PRIVACYPOLICY=1
```



- ▶ *To install Kaspersky Security 10.1 Console, run the following command:*

```
msiexec /i ks4wstools.msi /qn EULA=1 PRIVACYPOLICY=1
```

- ▶ *To install Kaspersky Security 10.1 for Windows Server with activation using the key file C:\0000000A.key; configure Kaspersky Security 10.1 for Windows Server according to the settings described in the configuration file C:\settings.xml, and execute the following command:*

```
msiexec /i ks4ws.msi LICENSEKEYPATH=C:\0000000A.key  
CONFIGPATH=C:\settings.xml /qn EULA=1 PRIVACYPOLICY=1
```

## Actions to perform after Kaspersky Security 10.1 for Windows Server installation

Kaspersky Security 10.1 for Windows Server starts the protection and scan tasks immediately after installation if you have activated the application. If you selected **Enable real-time protection after installation of application** during installation of Kaspersky Security 10.1 for Windows Server, Kaspersky Security 10.1 for Windows Server scans server file system objects when they are accessed. If the Script monitoring component was installed during custom installation, Kaspersky Security 10.1 for Windows Server scans the program code of all scripts when they are run. Kaspersky Security 10.1 for Windows Server will run the Critical Areas Scan task every Friday at 8 p.m.

We recommend taking the following steps after installing Kaspersky Security 10.1 for Windows Server:

- Start Kaspersky Security 10.1 for Windows Server databases update task. After installation Kaspersky Security 10.1 for Windows Server will scan objects using the database included in its distribution kit. We recommend updating Kaspersky Security 10.1 for Windows Server database immediately. To do so, you must run the Database Update task. The database will then be updated every hour according to the default schedule.

For example, you can run the Database Update task by running the following command:

```
KAVSHELL UPDATE /KL /PROXY:proxy.company.com:8080 /AUTHTYPE:1 /PROXYUSER:inetuser  
/PROXYPWD:123456
```

In this case, updates of Kaspersky Security 10.1 for Windows Server databases are downloaded from Kaspersky Lab update servers. Connection to an update source is established via a proxy server (proxy server address: proxy.company.com, port: 8080) using built-in Windows NTLM authentication to access the server under an account (username: inetuser; password: 123456).

- Run a Critical Areas scan of the computer if no anti-virus software with real-time file protection was installed on the protected server before installing Kaspersky Security 10.1 for Windows Server.

- ▶ *To start the Critical Areas Scan task using the command line:*

```
KAVSHELL SCANCRITICAL W:scancritical.log
```

This command saves the task log in a file named scancritical.log contained in the current folder.

- Configure administrator notifications about Kaspersky Security 10.1 for Windows Server events.

## Adding / removing components. Sample commands

The On-Demand Scan component is installed automatically. You do not need to specify it in the list of ADDLOCAL key values by adding or deleting Kaspersky Security 10.1 for Windows Server components.

- ▶ *To add the Applications Launch Control component to already installed components, run the following command:*

```
msiexec /i ks4ws.msi ADDLOCAL=Oas,AppCtrl /qn EULA=1 PRIVACYPOLICY=1
```

or

```
\server\setup.exe /s /p "ADDLOCAL=Oas,AppCtrl EULA=1 PRIVACYPOLICY=1"
```

If you enumerate the components you want to install along with the already installed components, Kaspersky Security 10.1 for Windows Server will reinstall the existing components.

- ▶ *To remove the installed components run the following command:*

```
msiexec /i ks4ws.msi REMOVE=AppCtrl,WiFiControl /qn EULA=1 PRIVACYPOLICY=1
```

## Kaspersky Security 10.1 for Windows Server uninstallation. Sample commands

- ▶ *To uninstall Kaspersky Security 10.1 for Windows Server from the protected server, run the following command:*

```
msiexec /x ks4ws.msi /qn EULA=1 PRIVACYPOLICY=1
```

- ▶ *To uninstall Kaspersky Security 10.1 Console, run the following command:*

```
msiexec /x ks4wstools.msi /qn EULA=1 PRIVACYPOLICY=1
```

or

- For 32-bit operating systems:

```
msiexec /x {232497F6-6572-4934-A6AF-24986952598B} /qn
```

- For 64-bit operating systems:

```
msiexec /x {F96C7F1F-9B03-480D-A8F3-19D43CA89090} /qn
```

- ▶ *To uninstall Kaspersky Security 10.1 for Windows Server from a protected server on which password protection is enabled, perform the following command:*

- For 32-bit operating systems:

```
msiexec /x {DD1532DD-387B-43C5-8968-7E8130CC8A5E} UNLOCK_PASSWORD=*** /qn
```

- For 64-bit operating systems:

```
msiexec /x {D025308B-AA7E-42D6-8058-B2B79A3D71F5} UNLOCK_PASSWORD=*** /qn
```

- To uninstall Kaspersky Security 10.1 for Windows Server plug-in from a protected server on which password protection is enabled, perform the following command:

```
msiexec.exe /x {DA15CF4A-75FF-4C92-AFC2-0A16DC645D2E} UNLOCK_PASSWORD=*** /qn
```

## Return codes

The below table contains a list of command-line return codes.

Table 13. Return codes

Code	Description
1324	The destination folder name contains invalid characters.
25001	Insufficient rights to install Kaspersky Security 10.1 for Windows Server. To install the application, start the installation wizard with local administrator rights.
25003	Kaspersky Security 10.1 for Windows Server cannot be installed on computers running this version of Microsoft Windows. Please start the installation wizard for 64-bit versions of Microsoft Windows.
25004	Incompatible software detected. To continue the installation, uninstall the following software: <list of incompatible software>.
25010	The indicated path cannot be used to save quarantined objects.
25011	The name of the folder for saving quarantined objects contains invalid characters.
26251	Unable to download the Performance Counters DLL.
26252	Unable to download the Performance Counters DLL.
27300	The driver cannot be installed.
27301	The driver cannot be uninstalled.
27302	The network component cannot be installed. Maximum supported number of filtered devices reached.
27303	Anti-virus databases not found.

## Installing and uninstalling the application using Kaspersky Security Center

This section contains general information about installing Kaspersky Security 10.1 for Windows Server via Kaspersky Security Center. It also describes how to install and uninstall Kaspersky Security 10.1 for Windows Server via Kaspersky Security Center and actions after installing Kaspersky Security 10.1 for Windows Server.

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## General information about installing via Kaspersky Security Center

You can install Kaspersky Security 10.1 for Windows Server via Kaspersky Security Center using the remote installation task.

After the remote installation task is complete, Kaspersky Security 10.1 for Windows Server will be installed with identical settings on several servers.

All servers can be combined in a single administration group and a group task created to perform Kaspersky Security 10.1 for Windows Server installation on the servers of this group.

You can create a task to remotely install Kaspersky Security 10.1 for Windows Server on a set of servers that are not in the same administration group. When creating this task you must generate a list of the individual servers on which Kaspersky Security 10.1 for Windows Server should be installed.

Detailed information on the remote installation task is provided in the *Kaspersky Security Center Help*.

## Rights to install or uninstall Kaspersky Security 10.1 for Windows Server

The account specified in the remote installation (removal) task must be included in the administrators group on each of the protected servers in all cases except those described below:

- If the Kaspersky Security Center Network Agent is already installed on computers on which Kaspersky Security 10.1 for Windows Server is to be installed (no matter in which domain the computers are located and whether they belong to any domain).

If the Network Agent is not yet installed on the servers, you can install it with Kaspersky Security 10.1 for Windows Server using a remote installation task. Before installing the Network Agent, make sure that the account that you want to specify in the task is included in the administrators group on each of the servers.

- All computers on which you want to install Kaspersky Security 10.1 for Windows Server are in the same domain as the Administration Server, and the Administration Server is registered under the **Domain Admin** account (if this account has local administrator's rights on the computers within the domain).

By default, when using the **Forced installation** method, the remote installation task is run from the account from which the Administration Server runs.

When working with group tasks or with tasks for sets of computers in the forced installation (uninstallation) mode, an account should have the following rights on a client computer:

- Right to execute applications remotely.
- Rights to the **Admin\$** resource.
- The **Log on as a service** right.

## Kaspersky Security 10.1 for Windows Server installation procedure via Kaspersky Security Center

Detailed information about generating an installation package and creating a remote installation task is provided in the [Kaspersky Security Center Implementation Guide](#).

If you intend to manage Kaspersky Security 10.1 for Windows Server via Kaspersky Security Center in the future, make sure that the following conditions are met:

- The server where the Kaspersky Security Center Administration Server is installed also has the Kaspersky Security 10.1 for Windows Server Administration Plug-in installed (\server\klcfginst.exe file in the Kaspersky Security 10.1 for Windows Server distribution kit).
- Kaspersky Security Center Network Agent is installed on protected servers. If Kaspersky Security Center Network Agent is not installed on the protected servers, you can install it together with Kaspersky Security 10.1 for Windows Server using a remote installation task.

Servers can also be combined into an administration group beforehand in order to later manage the protection settings using Kaspersky Security Center policies and group tasks.

► *To install Kaspersky Security 10.1 for Windows Server with the help of remote installation task:*

1. Start the Administration Console of Kaspersky Security Center.
2. In Kaspersky Security Center, expand the **Remote installation** node and in the **Installation Packages** subnode select the **Create a new installation package for a Kaspersky Lab application** option.
3. Enter the installation package name.
4. Specify the ks4ws.kud file from the Kaspersky Security 10.1 for Windows Server distribution kit as the installation package file.

The **EULA and Privacy Policy** window opens.

5. If you agree with the terms and conditions of EULA and Privacy Policy, select the check boxes **the terms and conditions of this EULA** and **Privacy Policy describing the handling of data** in order to proceed with the installation.

You must accept the License Agreement and the Privacy Policy to proceed.

6. To change the set of Kaspersky Security 10.1 for Windows Server components to be installed (see Section "Modifying set of components and recovering Kaspersky Security 10.1 for Windows Server" on page [61](#))

and the default installation settings (see Section "Installation and uninstallation settings and command-line options for Windows Installer service" on page 43) in the installation package:

In Kaspersky Security Center, expand the **Remote installation** node and in the **Installation packages** subnode in the workspace open the context menu of the created Kaspersky Security 10.1 for Windows Server installation package and select **Properties**. In the **Properties:<name of installation package>** window in the **Settings** section, do the following:

- a. In the **Components to install** group of settings check boxes next to the names of the Kaspersky Security 10.1 for Windows Server components you wish to install.
  - b. In order to indicate a destination folder other than the default one, specify the name of the folder and the path to it in the **Destination folder** field.  
  
The path to the destination folder may contain system environment variables. If the folder does not exist on the server, it will be created.
  - c. In the **Advanced installation settings** group, configure the following settings:
    - Scan the server for viruses before installation.
    - Enable real-time protection after installation of application.
    - Add Microsoft recommended files to exclusions list.
    - Add Kaspersky Lab recommended files to exclusions list.
  - d. If you want to import settings from the configuration file created in the previous version of Kaspersky Security 10.1 for Windows Server, specify the required configuration file.
  - e. In the **Properties: <name of installation package>** dialog window, click **OK**.
7. In the **Installation Packages** node create a task to remotely install Kaspersky Security 10.1 for Windows Server on the selected servers (administration group). Configure the task settings.

To learn more about creating and configuring remote installation tasks, see the *Kaspersky Security Center Help*.

8. Run the remote installation task for Kaspersky Security 10.1 for Windows Server.

Kaspersky Security 10.1 for Windows Server will be installed on the servers specified in the task.

## Actions to perform after Kaspersky Security 10.1 for Windows Server installation

After Kaspersky Security 10.1 for Windows Server is installed we recommend that Kaspersky Security 10.1 for Windows Server databases on the servers are updated, and that a Critical Areas Scan of the servers is performed, if no anti-virus applications with enabled Real-Time Protection function were installed on the servers before the installation of Kaspersky Security 10.1 for Windows Server.

If the servers on which Kaspersky Security 10.1 for Windows Server was installed are unified in a single administration group in the Kaspersky Security Center, you can perform these tasks using the following methods:

1. Create Database Update tasks for the group of servers on which Kaspersky Security 10.1 for Windows Server was installed. Set Kaspersky Security Center Administration Server as the update source.
2. Create an On-Demand Scan group task with the Critical Areas Scan task status. Kaspersky Security Center evaluates the security status of each computer in the group based on the results of the execution of this task, not based on the results of the Critical Areas scan task.

3. Create a new policy for the group of servers. In the created policy's properties on the **System tasks** tab, deactivate the scheduled start of system scan tasks as required and the database update tasks on the administration group's servers.

You can also configure administrator notifications about Kaspersky Security 10.1 for Windows Server events.

## Installing Kaspersky Security 10.1 Console via Kaspersky Security Center

Detailed information about creating an installation package and a remote installation task is provided in the [Kaspersky Security Center Implementation Guide](#).

► *To install Kaspersky Security 10.1 Console using a remote installation task:*

1. In the Kaspersky Security Center Administration Console expand the **Remote installation** node, and in the **Installation Packages** subnode create a new installation package on the basis of the client\setup.exe file. While creating a new installation package:

- In the **Select the distribution package for installation** select client\setup.exe file from the Kaspersky Security 10.1 for Windows Server distribution kit folder and select the **Copy folder to the installation package** check box.
- If required, use the ADDLOCAL command-line option to modify the set of components to be installed in the **Executable file launch settings** (optional) field and change the destination folder.

For instance, in order to install the Kaspersky Security 10.1 Console alone in the folder C:\KasperskyConsole without installing the help file and documentation, proceed as follows:

```
/s /p EULA=1 "ADDLOCAL=MmcSnapin INSTALLDIR=C:\KasperskyConsole
EULA=1 PRIVACYPOLICY=1"
```

2. In the Installation packages node, create a task to remotely install Kaspersky Security 10.1 Console on the selected computers (administration group). Configure the task settings.

To learn more about creating and configuring remote installation tasks, see the [Kaspersky Security Center Help](#).

3. Run the created remote installation task.

The Kaspersky Security 10.1 Console is installed on the computers specified in the task.



## Uninstalling Kaspersky Security 10.1 for Windows Server via Kaspersky Security Center

If the Kaspersky Security 10.1 for Windows Server management access on network computers is password protected, enter the password when creating a multiple applications uninstallation task. If the password protection is not managed centrally by the Kaspersky Security Center policy, Kaspersky Security 10.1 for Windows Server will be successfully uninstalled from the access protected servers, on which the entered password matched the set value. Kaspersky Security 10.1 for Windows Server will not be uninstalled from the rest computers.

- ▶ *In order to uninstall Kaspersky Security 10.1 for Windows Server, take the following steps in the Kaspersky Security Center Administration Console:*
  1. In the Kaspersky Security Center Administration Console, create and start the application removal task.
  2. In the task, select the uninstallation method (similar to selecting the installation method; see the previous section) and specify an account whose rights the Administration Server will use to address the servers. You can uninstall Kaspersky Security 10.1 for Windows Server only with default uninstallation settings (see Section "Installation and uninstallation settings and command-line options for Windows Installer service" on page [43](#)).

## Installing and uninstalling via Active Directory group policies

This section describes installing and uninstalling Kaspersky Security 10.1 for Windows Server via Active Directory group policies. It also contains information about actions after installing Kaspersky Security 10.1 for Windows Server through group policies.

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## Installing Kaspersky Security 10.1 for Windows Server via Active Directory group policies

You can install Kaspersky Security 10.1 for Windows Server on several servers via the Active Directory group policy. You can install Kaspersky Security 10.1 Console in the same fashion.

Servers on which you wish to install Kaspersky Security 10.1 for Windows Server or Kaspersky Security 10.1 Console must be in a single domain and a single organized unit.



The operating systems on the servers on which you wish to install Kaspersky Security 10.1 for Windows Server with the help of the policy must be of the same version (32-bit or 64-bit).

You must have domain administrator rights.

To install Kaspersky Security 10.1 for Windows Server, use the ks4ws\_x86(x64).msi installation packages. To install Kaspersky Security 10.1 Console, use the ks4wstools.msi installation packages.

Detailed information about the use of Active Directory group policies is provided in the documentation supplied by Microsoft.

► *To install Kaspersky Security 10.1 for Windows Server (Kaspersky Security 10.1 Console):*

1. Save the msi file of the installation package that corresponds to the word size (32- or 64-bit) of the installed version of the Microsoft Windows operating system, in the public folder on the domain controller.
2. On the domain controller create a new policy for the group that the servers belong to.
3. Using the **Group Policy Object Editor** create a new installation package in the **Computer configuration** node. Specify the path to the msi file of the installation package of Kaspersky Security 10.1 for Windows Server (Kaspersky Security 10.1 Console) in the UNC format (Universal Naming Convention).
4. Select the Windows Installer's **Always install with elevated privileges** check box in both the **Computer configuration** node and in the **User configuration** node of the selected group.
5. Apply the changes with the `gpupdate / force` command.

Kaspersky Security 10.1 for Windows Server will be installed on the computers of the group after they have been restarted, and before logging into Microsoft Windows.

## Actions to perform after Kaspersky Security 10.1 for Windows Server installation

After installing Kaspersky Security 10.1 for Windows Server on the protected servers, it is recommended that you immediately update the application databases and run a Critical Areas scan. You can perform these actions (see Section "Actions to perform after Kaspersky Security 10.1 for Windows Server installation" on page [59](#)) from Kaspersky Security 10.1 Console.

You can also configure administrator notifications about Kaspersky Security 10.1 for Windows Server events.

## Uninstalling Kaspersky Security 10.1 for Windows Server via Active Directory group policies

If you installed Kaspersky Security 10.1 for Windows Server (or Kaspersky Security 10.1 Console) on the group servers using the Active Directory group policy, you may use this policy to uninstall the Kaspersky Security 10.1 for Windows Server (or Kaspersky Security 10.1 Console).

You can uninstall the application only with default uninstallation parameters.

Detailed information about the use of Active Directory group policies is provided in the documentation supplied by Microsoft.

If the application management access is password protected, Kaspersky Security 10.1 for Windows Server uninstallation using Active Directory group policies is not available.

- *To uninstall Kaspersky Security 10.1 for Windows Server (Kaspersky Security 10.1 Console):*
1. Select the organizational unit on the domain controller from whose servers you wish to delete Kaspersky Security 10.1 for Windows Server or Kaspersky Security 10.1 Console.
  2. Select the policy created for the installation of Kaspersky Security 10.1 for Windows Server and in the **Group policies editor**, in the **Software Installation node (Computer configuration > Program configuration > Software Installation)** open the context menu of the Kaspersky Security 10.1 for Windows Server (Kaspersky Security 10.1 Console) installation package and select the **All tasks > Remove command**.
  3. Select the uninstallation method **Delete program immediately** from all servers.
  4. Apply the changes with the `gpupdate / force` command.

Kaspersky Security 10.1 for Windows Server is removed from the servers after they are restarted and before logging in to Microsoft Windows.

## Kaspersky Security 10.1 for Windows Server functions check. Using the EICAR test virus

This section describes the EICAR test virus and how to use the EICAR test virus to verify Kaspersky Security 10.1 for Windows Server's Real-Time Protection and On-Demand Scan features.

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## About the EICAR test virus

This test virus is designed to verify the operation of anti-virus applications. It was developed by the European Institute for Computer Antivirus Research (EICAR).

The test virus is not a virus and does not contain program code to your computer, but most vendors' anti-virus applications identify it as a threat.

The file containing this test virus is called eicar.com. You can download it from the EICAR website [http://www.eicar.org/anti\\_virus\\_test\\_file.htm](http://www.eicar.org/anti_virus_test_file.htm).

Before saving the file in a folder on the computer's hard drive, make sure that Real-Time File Protection on that drive is disabled.

The eicar.com file contains a line of text. When scanning the file Kaspersky Security 10.1 for Windows Server detects a test threat in this text line, assigns the **Infected** status to this file and deletes it. Information about the threat detected in the file will appear in Kaspersky Security 10.1 Console and in the task log.

You can use the eicar.com file in order to check how Kaspersky Security 10.1 for Windows Server disinfects infected objects and how it detects probably infected objects. To do this, open the file using a text editor, add one of the prefixes listed in the table below to the beginning of the line of text in the file, and save the file under a new name, e.g. eicar\_cure.com.

In order to make sure that Kaspersky Security 10.1 for Windows Server processes the eicar.com file with a prefix, in the **Objects protection** security settings section, set the **All objects** value for the Kaspersky Security 10.1 for Windows Server Real-Time File Protection tasks and Default On-Demand Scan tasks.

Table 14. Prefixes in EICAR files

Prefix	File status after the scan and Kaspersky Security 10.1 for Windows Server action
No prefix	Kaspersky Security 10.1 for Windows Server assigns the <b>Infected</b> status to the object and deletes it.
SUSP-	Kaspersky Security 10.1 for Windows Server assigns <b>Probably infected</b> status to the object (detected by the heuristic analyzer) and deletes it (probably infected objects are not disinfecting).
WARN-	Kaspersky Security 10.1 for Windows Server assigns <b>Probably infected</b> status to the object (the object's code partly matches the code of a known threat) and deletes it (probably infected objects are not disinfecting).
CURE-	Kaspersky Security 10.1 for Windows Server assigns the <b>Infected</b> status to the object and disinfects it. If disinfection is successful, the entire text in the file is replaced with the word "CURE".

## Real-Time Protection and On-Demand Scan test

After installing Kaspersky Security 10.1 for Windows Server, you can confirm that Kaspersky Security 10.1 for Windows Server finds objects containing malicious code. To check, you can use a test virus from EICAR (see Section "About the EICAR test virus" on page [77](#)).

► *In order to check the Real-Time Protection feature, take the following steps:*

1. Download file eicar.com from the EICAR website [http://www.eicar.org/anti\\_virus\\_test\\_file.htm](http://www.eicar.org/anti_virus_test_file.htm). Save it into the public folder on the local drive of any of the computers on the network.

Before you save the file to the folder, make sure that Real-Time File Protection is disabled in the folder.

2. If you wish to check the functioning of network user notifications, make sure that the Microsoft Windows Messenger Service is enabled both on the protected server and on the computer where you saved the eicar.com file.
3. Open Kaspersky Security 10.1 Console.
4. Copy the saved eicar.com file to the local drive of the protected server using one of the following methods:
  - To test notifications through the Terminal Services window, copy the eicar.com file to the server after connecting to the server using the Remote Desktop Connection utility.
  - To test notifications through the Microsoft Windows Messenger Service, use the computer's network places to copy the eicar.com file from the computer where you saved it.

Real-Time File Protection works correctly if the following conditions are met:

- The eicar.com file has been deleted from the protected server.
- In the Kaspersky Security 10.1 Console, the task log was given the status **Critical**. A line has appeared in the log with information about a threat in the eicar.com file. (To view the task log, in the Kaspersky Security 10.1 Console tree expand the **Real-Time Server Protection** node, select the Real-Time File Protection task and in the details panel of the node click the **Open log** link).
- A Microsoft Windows Messenger Service message will have appeared on the computer from which you copied the file, as follows: `Kaspersky Security 10.1 for Windows Server blocked access to <path to file on the computer>\eicar.com on computer <network name of computer> at <time that event occurred>. Reason: Threat detected. Virus: EICAR-Test-File. User name: <user name>. Computer name: <network name of the computer from which you copied the file>.`

Make sure that Microsoft Windows Messenger Service is functioning on the computer from which you have copied the eicar.com file.

► To check the On-Demand Scan feature, take the following steps:

1. Download eicar.com file from the EICAR website [http://www.eicar.org/anti\\_virus\\_test\\_file.htm](http://www.eicar.org/anti_virus_test_file.htm). Save it into the public folder on the local drive of any of the computers on the network.

Before you save the file to the folder, make sure that Real-Time File Protection is disabled in the folder.

2. Open Kaspersky Security 10.1 Console.
3. Do the following:
  - a. Expand the **On-Demand Scan** node in the Kaspersky Security 10.1 Console tree.
  - b. Select the **Critical Areas Scan** subnode.
  - c. On the **Scan scope settings** tab, open the context menu on the **Network** node and select **Add network file**.
  - d. Enter the network path to the eicar.com file on the remote computer in UNC format (Universal Naming Convention).
  - e. Select the check box to include the added network path in the scan scope.
  - f. Run the Critical Areas Scan task.

The On-Demand Scan works as it should if the following conditions are met:

- The eicar.com file has been deleted from the computer's hard drive.
- In the Kaspersky Security 10.1 Console, the task log was given the status **Critical**; in the execution log of the task Critical Areas Scan a line appeared with information on a threat in the eicar.com file. (To view the task log, in the Kaspersky Security 10.1 Console tree expand the **On-Demand Scan** subnode, select the Critical Areas Scan task and in the details panel click the **Open log** link).

# Application interface

You can control Kaspersky Security 10.1 for Windows Server through a local Console and the Kaspersky Security Center Administration Plugin. Actions with the local Console are described in the *Kaspersky Security 10.1 for Windows Server User's Guide*. The Kaspersky Security Center Administration Console interface is used to take actions with the Administration Plugin. Detailed information about the Kaspersky Security Center interface can be found in the documentation for Kaspersky Security Center.

# Application licensing

This section provides information about the main concepts related to licensing of the application.

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## About End User License Agreement

The *End User License Agreement* is a binding agreement between you and AO Kaspersky Lab, stipulating the terms on which you may use the application.

Carefully review the terms of the End User License Agreement before you start using the application.

You can review the terms of the End User License Agreement in the following ways:

- During the Kaspersky Security 10.1 for Windows Server installation
- By reading the file `license.txt`. This document is included in the application's distribution kit

By confirming that you agree with the End User License Agreement when installing the application, you signify your acceptance of the terms of the End User License Agreement. If you do not accept the terms of the End User License Agreement, you must abort application installation and must not use the application.

## About the license

A *license* is a time-limited right to use the application, granted to you under the End User License Agreement.

A valid license entitles you to receive the following services:

- Use of the application in accordance with the terms of the End User License Agreement
- Technical support

The scope of service and the term of application use depend on the type of license under which the application has been activated.

The following license types are possible:

- A *trial* license is a free license intended for trying out the application.

A trial license is valid for a short period. When the trial license expires, Kaspersky Security 10.1 for Windows Server ceases to be fully functional. To continue using the application, you must purchase a commercial license.

You can activate the application under a trial license one time only.

- A *commercial* license is a paid license granted upon purchase of the application.

When a commercial license expires, the application continues to run but some of its features become unavailable (for example, Kaspersky Security databases cannot be updated). To continue using all the features of Kaspersky Security 10.1 for Windows Server, you must renew your commercial license.

To ensure maximum protection of your computer against security threats, we recommend renewing the license before it expires.

Kaspersky Security 10.1 for Windows Server does not keep track of the expiration date of the license. If you activate the program one more time (while the first activation code is active) with the license that has expired, you will need to use a valid license to add an activation code again.

## About license certificates

A *license certificate* is a document that you receive along with a key file or an activation code.

A license certificate contains the following information about the license provided:

- Order number
- Information about the user who has been granted the license
- Information about the application that can be activated under the license provided
- Limit of the number of licensing units (e.g., devices on which the application can be used under the license provided)
- License validity start date
- License expiration date or license term
- License type



## About license types

Kaspersky Security 10.1 for Windows Server is part of various solutions for corporate protection. The available functionality of Kaspersky Security 10.1 for Windows Server depends on the selected solution. The table below shows the types of offered solutions and the application functionality available for each solution.

<b>Kaspersky Endpoint Security for Business Basic</b>	
Available by subscription	
Components	File Anti-Virus Exploit Prevention Anti-Cryptor (for shared folders) Firewall Management

<b>Kaspersky Endpoint Security for Business Select</b>	
Available by subscription	
Components	File Anti-Virus Exploit Prevention Anti-Cryptor (for shared folders) Firewall Management

<b>Kaspersky Endpoint Security for Business Advanced</b>	
Available by subscription	
Components	File Anti-Virus Exploit Prevention Anti-Cryptor (for shared folders) Firewall Management Applications Launch Control Device Control Traffic Security

<b>Kaspersky Endpoint Security for Business Total</b>	
Components	File Anti-Virus Exploit Prevention Anti-Cryptor (for shared folders) Firewall Management Applications Launch Control Device Control Traffic Security

<b>Kaspersky Security for File Server</b>	
Components	File Anti-Virus Exploit Prevention Anti-Cryptor (for shared folders) Firewall Management Applications Launch Control Device Control File Integrity Monitor Log Inspection Traffic Security (External Proxy mode unavailable)

<b>Kaspersky Security for Data Storage Systems</b>	
Components	File Anti-Virus Exploit Prevention Anti-Cryptor (for shared folders) Firewall Management Applications Launch Control Device Control File Integrity Monitor Log Inspection Traffic Security NAS Protection (Storage) + Anti-Cryptor for NAS

<b>Kaspersky Security for Virtualization</b>
Available by subscription

<b>Kaspersky Security for Virtualization</b>	
Components	File Anti-Virus Exploit Prevention Anti-Cryptor (for shared folders) Firewall Management Device Control Traffic Security

<b>Kaspersky Security for xSP</b>	
Available by subscription	
Components	File Anti-Virus Exploit Prevention Firewall Management Traffic Security

<b>Kaspersky Hybrid Cloud Security</b>	
Available by subscription	
Components	File Anti-Virus Exploit Prevention Anti-Cryptor (for shared folders) Firewall Management Device Control Traffic Security

<b>Kaspersky Hybrid Cloud Security Enterprise</b>	
Available by subscription	
Components	File Anti-Virus Exploit Prevention Anti-Cryptor (for shared folders) Firewall Management File Integrity Monitor Log Inspection Applications Launch Control Device Control Traffic Security

<b>AWS Prepaid subscription</b>	
Components	File Anti-Virus Exploit Prevention Anti-Cryptor (for shared folders) Firewall Management File Integrity Monitor Log Inspection Applications Launch Control Traffic Security Device Control

<b>Kaspersky Security Internet Gateway</b>	
Components	File Anti-Virus Exploit Prevention Firewall Management Traffic Security

## About key

A key is a sequence of bits with which you can activate and subsequently use the application in accordance with the terms of the End User License Agreement. A key is generated by Kaspersky Lab.

You can add a key to the application by using a key file. After you add a key to the application, the key is displayed in the application interface as a unique alphanumeric sequence.

Kaspersky Lab can black-list a key over violations of the License Agreement. If your key is blocked, a different key must be added in order for the application to work.

A key may be an "active key" or an "additional key".

An *active key* is the key that the application currently uses to function. A key for either a trial or commercial license may be added as the active key. The application can have no more than one active key.

An *additional key* is a key that confirms the right to use the application but is not currently in use. An additional key automatically becomes active when the license associated with the current active key expires. An additional key may be added only if there is an active key.

A key for a trial license may be added only as an active key. A key for a trial license may not be added as an additional key.

## About the activation code

*Activation code* is a code that you receive after purchasing a Kaspersky Security 10.1 for Windows Server commercial license. This code is required to receive a key file and activate the application by installing the key file.

The activation code is a sequence of twenty digits and Latin characters in the format xxxxx-xxxxx-xxxxx-xxxxx.

The license term begins when the application is activated. If you purchase a license for use of Kaspersky Security 10.1 for Windows Server on several computers, then the license term begins when the application is activated on the first computer.

If the activate code is lost or accidentally deleted after activation, then you must send a request to Kaspersky Lab Technical Support to recover it.

## About key file

A *key file* is a file with the .key extension that you receive from Kaspersky Lab. Key files are designed to activate the application by adding a key.

You receive a key file at the email address that you provided when you bought Kaspersky Security 10.1 for Windows Server or ordered the trial version of Kaspersky Security 10.1 for Windows Server.

You do not need to connect to Kaspersky Lab activation servers in order to activate the application with a key file.

You can recover a key file if it is accidentally deleted. You may need a key file to register with Kaspersky CompanyAccount.

To recover a key file, you should perform any of the following actions:

- Contact Technical Support <https://support.kaspersky.com/>.
- Obtain a key file on the Kaspersky Lab website based on your existing activation code.

## About data provision

The License Agreement for Kaspersky Security 10.1 for Windows Server, specifically the section entitled "Terms of data processing", specifies the terms, liability, and procedure for sending and processing the data indicated in this

Guide. Before accepting the License Agreement, carefully review its terms as well as all documents linked to by the License Agreement.

The data Kaspersky Lab receives from you when you use the application is protected and processed in accordance with the Privacy Policy available at [www.kaspersky.com/Products-and-Services-Privacy-Policy](http://www.kaspersky.com/Products-and-Services-Privacy-Policy).

By accepting the terms of the License Agreement, you agree to automatically send the following data to Kaspersky Lab:

- To support the mechanism for receiving updates – information about the installed application and licensing certificate: identifier of the application being installed and its full version, including build number, type, and license identifier, installation identifier, unique update task identifier.
- To use the ability to navigate to Knowledge Base articles when application errors occur (Redirector service) – information about the application and link type, specifically: the name, locale, and full version number of the application, type of redirecting link, and error identifier.
- To manage confirmations for data processing – information about the status of acceptance of the License Agreement and other documents, that stipulate data transferring terms: identifier and version of License Agreement or other document, as a part of which the data processing terms are accepted or declined; an attribute, signifying the user's action (confirmation or recall of the terms acceptance); date and time of status changes of the data processing terms acceptance.

### Local data processing

While executing the application's primary functions described in this Guide, Kaspersky Security 10.1 for Windows Server locally processes and stores a sequence of data on the protected server:

- information about scanned files and detected objects, for example, names and attributes of processed files and full paths to them on the scanned media, actions taken on scanned files, accounts of users performing any actions on the protected network or protected server, names and data about scanned devices, information about processes running on the system;
- information about operating system activity and settings, for example, Windows Firewall settings, Windows Event Log entries, names of user accounts, instances of executable files being started, and the types, names, checksums, and attributes of these files;
- information about web activity, for example, processed URLs, assigned categories, data about downloaded objects, attributes of processed digital certificates, data about processed email, including the sender, recipient, subject, message body, and attachments;
- information about network activity, including the IP addresses of blocked client computers.

Kaspersky Security 10.1 for Windows Server processes and stores data as part of the application's basic functionality, including to log application events and receive diagnostic data. Locally processed data is processed and protected in accordance with the configured and applied application settings.

Kaspersky Security 10.1 for Windows Server lets you configure the level of protection for data processed locally: you can change user privileges to access process data, change data retention periods for such data, entirely or partially disable functionality that involves data logging, and change the path and attributes of the folder on the drive where data is logged.

Detailed information about configuring application functionality that involves data processing can be found in the corresponding sections of this Guide.

## Activate application with key

You can activate Kaspersky Security 10.1 for Windows Server by applying a key.

If an active key has already been added for Kaspersky Security 10.1 for Windows Server and you add another key as the active key, the new key replaces the key added previously. The active key installed earlier is removed.

If an additional key has already been added for Kaspersky Security 10.1 for Windows Server and you add another key as an additional one, the new key replaces the key added previously. The additional key installed earlier is removed.

If an active key and an additional key have already been added for Kaspersky Security 10.1 for Windows Server and you add a new key as the active key, the new key replaces the active key added previously; the additional key is not deleted.

► *To activate Kaspersky Security 10.1 for Windows Server with the key, take the following steps:*

1. In the Kaspersky Security 10.1 Console tree, expand the **Licensing** node.
2. In the details pane of the **Licensing** node, click the **Add key** link.
3. In the window that opens, click the **Browse** button and select a key file with the .key extension.

You can also add a key as an additional. To add a key as an additional select the **Use as additional key** check box.

4. Click **OK**.

The selected key will be applied. The information about the key added will be available on the **Licensing** node.

## Viewing information about current license

### Viewing the licensing information

Information about the current license is displayed in the details pane of the **Kaspersky Security** node of the Kaspersky Security 10.1 Console. Key status can take the following values:

- **Checking the key status** – Kaspersky Security 10.1 for Windows Server is checking the added key file or activation code applied and waiting for a response about the current key status.
- **License expiration date** – Kaspersky Security 10.1 for Windows Server has been activated until the specified date and time. The key status is highlighted in yellow in the following cases:
  - The license will expire in 14 days and no additional key or activation code have been added.
  - The added key has been black-listed and is about to be blocked.
- **Application not activated** – Kaspersky Security 10.1 for Windows Server is not activated because the key has not been added or the activation code has not been applied. The status is highlighted in red.
- **License has expired** – Kaspersky Security 10.1 for Windows Server is not activated because the license has expired. The status is highlighted in red.
- **End User License Agreement has been violated** – Kaspersky Security 10.1 for Windows Server is not activated because the terms of the End User License Agreement (see Section "About End User License Agreement" on page [81](#)) have been violated. The status is highlighted in red.

- **Key is blacklisted** – the added key file has been blocked and blacklisted by Kaspersky Lab, for example, if the key was used by third parties to activate the application illegally. The status is highlighted in red.
- **Subscription suspended** – the subscription has been suspended temporarily. The status is highlighted in red. You can renew subscription at any time.

## Viewing information about the current license

► To view the information about the current license,

in the Kaspersky Security 10.1 Console tree, expand the **Licensing** node.

General information about the current license is displayed in the details pane of the **Licensing** node (see the table below).

Table 15. General information about the license in the Licensing node

Field	Description
<b>Activation code</b>	Number of activation code. This field is filled in if you activate the application using an activation code.
<b>Activation status</b>	Information about the activation status of the application. Information in the Activation status column in the control panel of the Licensing node may have the following values: <ul style="list-style-type: none"> <li>• <b>Applied</b> – if you have activated the application using an activation code or key.</li> <li>• <b>Activation</b> – if you have applied an activation code to activate the application, but the activation process has not been finalized yet. The status value changes to Applied after application activation has been completed and the contents of the details pane of the node have been refreshed.</li> <li>• <b>Activation error</b> – if application activation failed. You can view the cause of unsuccessful activation in the task log.</li> </ul>
<b>Key</b>	The number of the key that you used to activate the application.
<b>License type</b>	License type: commercial or trial.
<b>Expiration date</b>	Expiry date and time of the license associated with an active key.
<b>Activation code status or key status</b>	Activation code status or key status: Active or Additional.

► To view the detailed information about license,

on the node **Licensing** open the context menu on the string with license data that you want to expand and select **Properties**.

In the **Properties: <Activation code status or key status>** window, the **General** tab displays detailed information about the current license, and the **Advanced** tab displays information about the customer and the contact details of Kaspersky Lab or the retailer from whom you purchased Kaspersky Security 10.1 for Windows Server (see the table below).



Table 16. Detailed license information in the Properties <Key number> window

Field	Description
<b>General tab</b>	
<b>Key</b>	The number of the key that you used to activate the application.
<b>Key addition date</b>	Date when the key was added to the application.
<b>License type</b>	License type: commercial or trial.
<b>Days till expiration</b>	Number of days remaining until the expiry of the license associated with the active key.
<b>Expiration date</b>	Expiry date and time of the license associated with an active key. If you activate the application <i>Unlimited</i> . If Kaspersky Security 10.1 for Windows Server is unable to determine the license expiration date, the field is empty.
<b>Application</b>	The name of the application that was activated with the key or an activation code added.
<b>Key usage restriction</b>	Restriction on key usage (if any).
<b>Eligible for technical support</b>	Information on whether Kaspersky Lab or one of its partners will provide technical support for the application.
<b>Additional tab</b>	
<b>Information about the license</b>	Number and type of current license.
<b>Support information</b>	Contact details of Kaspersky Lab or of its partner providing technical support. This field may be empty.
<b>Owner information</b>	Information about the license customer: a customer name and the name of an organization for which the license was purchased.

## Functional limitations upon license expiration

When the current license expires the following limitations in the work of functional components are applied:

- All tasks are stopped, except the Real-Time File Protection, On-Demand Scan and Application Integrity Control tasks.
- Start of any tasks except the Real-Time Protection, On-Demand Scan and Application Integrity Control tasks is denied. These tasks continue to run using the old anti-virus databases.
- Exploit Prevention functionality is limited:
  - Processes are protected until they are restarted.
  - New processes cannot be added to the protection scope.

Other functions (storage, logs, diagnostic information) will still be available.

## Renewing license

By default, when the license has 14 days remaining before expiration, Kaspersky Security 10.1 for Windows Server notifies you about this. In this case the status **License expiration date** in the details pane of the **Kaspersky Security** node is highlighted in yellow.

You can renew the license expiration date before it comes to an end using an additional key or an activation code. This ensures that your computer remains protected after expiration of the existing license and before you activate the application with a new license.

► *To renew a license, take the following steps:*

1. Purchase a new activation code or a key file.
2. In the Kaspersky Security 10.1 Console tree, open the **Licensing** node.
3. Perform one of the following actions in the details pane of the **Licensing** node:
  - If you want to renew a license using an additional key:
    - a. Click the **Add key** link.
    - b. In the window that opens, click the **Browse** button and select a new key file with the .key extension.
    - c. Select the **Use as additional key** check box.
  - If you want to renew a license using an activation code:
    - a. Click the **Add activation code** link.
    - b. Enter the purchased activation code in the window that opens.
    - c. Select the **Use as additional key** check box.

An Internet connection is required to apply an activation code.

4. Click **OK**.

The additional key or activation code will be added and automatically applied upon expiration of the current Kaspersky Security 10.1 for Windows Server license.

## Deleting key

You can remove the added key.

If an additional key has been added to Kaspersky Security 10.1 for Windows Server and you remove the active key, the additional key automatically becomes the active key.

If you delete an added key, you can restore it by re-applying the key file.

► *To remove a key that has been added:*

1. In the Kaspersky Security 10.1 Console tree, select the **Licensing** node.
2. In the details pane of the **Licensing** node in the table containing information on added keys, select the key that you want to remove.
3. In the context menu of the line containing information on the selected key, select **Remove**.
4. Click the **Yes** button in the confirmation window to confirm that you want to delete the key.

The selected key will be removed.

# Starting and stopping Kaspersky Security 10.1 for Windows Server

This section contains information about starting and stopping the Kaspersky Security 10.1 for Windows Server Administration Plugin and the Kaspersky Security Service.

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## Starting the Kaspersky Security Center Administration Plugin

No additional actions are required to start the Kaspersky Security Center Plugin, where work with Kaspersky Security 10.1 for Windows Server is performed. After the plugin is installed on the administrator's computer, it is started simultaneously with Kaspersky Security Center. Detailed information about starting Kaspersky Security Center can be found in the *Kaspersky Security Center Help*.

## Starting and stopping Kaspersky Security service

By default, Kaspersky Security Service starts automatically at the startup of the operating system. Kaspersky Security Service manages working processes in which Real-Time Protection, Local Activity Control, Network Attached Storage Protection, On-Demand Scan and update tasks are executed.

By default when Kaspersky Security 10.1 for Windows Server is started, the Real-Time File Protection, Script Monitoring (if installed), Scan at Operating System Startup, and Application Integrity Control tasks are started, as well as other tasks that are scheduled to start **At application launch**.

If the Kaspersky Security Service is stopped, all running tasks are stopped. After you restart Kaspersky Security Service, the application automatically starts only those tasks whose schedule has the start frequency set to **At application launch**, while the other tasks have to be started manually.

You can start and stop Kaspersky Security Service using the context menu of the **Kaspersky Security** node or using the Microsoft Windows **Services** snap-in.

You can start and stop Kaspersky Security 10.1 for Windows Server if you are a member of the Administrators group on the protected server.

► To stop or start application using the Management Console take the following steps:

1. In the Kaspersky Security 10.1 Console tree, open the context menu of the **Kaspersky Security** node.

2. Select one of the following items:

- **Stop the service.**
- **Start the service.**

The Kaspersky Security Service will be started or stopped.

# About access permissions for Kaspersky Security 10.1 for Windows Server functions

This section contains information about permissions to manage Kaspersky Security 10.1 for Windows Server and Windows services registered by the application, and instructions on how to configure these permissions.

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## About permissions to manage Kaspersky Security 10.1 for Windows Server

By default, access to all Kaspersky Security 10.1 for Windows Server functions is granted to users of the Administrators group on the protected server, users of the KAVWSEE Administrators group created on the protected server during installation of Kaspersky Security 10.1 for Windows Server, as well as the SYSTEM group.

Users who have access to the **Edit** permissions function of Kaspersky Security 10.1 for Windows Server can grant access to Kaspersky Security 10.1 for Windows Server functions to other users registered on the protected server or included in the domain.

Users who are not registered in the list of Kaspersky Security 10.1 for Windows Server users cannot open Kaspersky Security 10.1 Console.

You can choose one of the following preset levels of Kaspersky Security 10.1 for Windows Server access levels for a user or group of users:

- **Full control** – access to all application functions: ability to view and edit general Kaspersky Security 10.1 for Windows Server settings, component settings, permissions of Kaspersky Security 10.1 for Windows Server users, and also view Kaspersky Security 10.1 for Windows Server statistics.
- **Edit** – Access to all application functions except editing user permissions: ability to view and edit general settings of Kaspersky Security 10.1 for Windows Server and Kaspersky Security 10.1 for Windows Server component settings.
- **Read** – ability to view Kaspersky Security 10.1 for Windows Server general settings, Kaspersky Security 10.1 for Windows Server component settings, Kaspersky Security 10.1 for Windows Server statistics, and Kaspersky Security 10.1 for Windows Server user permissions.

You can also configure advanced access permissions (see Section "Configuring access permissions for managing Kaspersky Security 10.1 for Windows Server and Kaspersky Security Service" on page [100](#)): allow or block access to specific functions of Kaspersky Security 10.1 for Windows Server.

If you have manually configured access permissions for a user or group, then the **Special permissions** access level is set for this user or group.

Table 17. About access permissions for Kaspersky Security 10.1 for Windows Server functions

User rights	Description
Task management	Ability to start / stop / pause / resume Kaspersky Security 10.1 for Windows Server tasks.
Creating and deleting On-Demand Scan tasks	Ability to create and delete On-Demand Scan tasks.
Edit settings	Ability to: <ul style="list-style-type: none"> <li>• Import Kaspersky Security 10.1 for Windows Server settings from a configuration file.</li> <li>• Edit the application settings.</li> </ul>
Read settings	Ability to: <ul style="list-style-type: none"> <li>• View general Kaspersky Security 10.1 for Windows Server settings and task settings.</li> <li>• Export Kaspersky Security 10.1 for Windows Server settings to the configuration file.</li> <li>• View settings for task logs, system audit log, and notifications.</li> </ul>
Manage storages	Ability to: <ul style="list-style-type: none"> <li>• Move objects to Quarantine.</li> <li>• Remove objects from Quarantine and Backup.</li> <li>• Restore objects from Quarantine and Backup.</li> </ul>
Manage logs	Ability to delete task logs and clear the system audit log.
Read logs	Ability to view Anti-Virus events in task logs and the system audit log.
Read statistics	Ability to view statistics of each Kaspersky Security 10.1 for Windows Server task.
Application licensing	Kaspersky Security 10.1 for Windows Server can be activated or deactivated.
Uninstalling the application	Ability to uninstall Kaspersky Security 10.1 for Windows Server.
Read permissions	Ability to view the list of Kaspersky Security 10.1 for Windows Server users and access privileges of each user.
Edit permissions	Ability to: <ul style="list-style-type: none"> <li>• Edit the list of users with access to application management.</li> <li>• Edit user access permissions for Kaspersky Security 10.1 for Windows Server functions.</li> </ul>

## About permissions to manage the Kaspersky Security Service

During installation, Kaspersky Security 10.1 for Windows Server registers Kaspersky Security Service (KAVFS) in Windows, and internally enables functional components started at operating system startup. To reduce the risk of third-party access to application functions and security settings on the protected server through management of the Kaspersky Security Service, you can restrict permissions for managing the Kaspersky Security Service from the local Kaspersky Security 10.1 Console or the Kaspersky Security Center Administration Plugin.

By default, access permissions for managing the Kaspersky Security Service are granted to users in the "Administrators" group on the protected server as well as to the SERVICE and INTERACTIVE groups with read permissions and to the SYSTEM group with read and execute permissions.

You cannot delete the SYSTEM user account or edit permissions for this account. If the SYSTEM user account permissions were edited, the maximum privileges are restored for this this account when you save the changes.

Users who have access to functions (see Section "About permissions to manage Kaspersky Security 10.1 for Windows Server" on page 96) of the Edit permissions level can grant access permissions for managing Kaspersky Security Service to other users registered on the protected server or included in the domain.

You can choose one of the following preset levels of access permissions for a user or group of users of Kaspersky Security 10.1 for Windows Server for managing Kaspersky Security Service:

- **Full control:** ability to view and edit general settings and user permissions for the Kaspersky Security Service, and to start and stop the Kaspersky Security Service.
- **Read:** ability to view Kaspersky Security Service general settings and user permissions.
- **Modification:** ability to view and edit Kaspersky Security Service general settings and user permissions.
- **Execution:** ability to start and stop the Kaspersky Security Service.

You can also configure advanced access permissions: allow or deny access to specific Kaspersky Security 10.1 for Windows Server functions (see the table below).

If you have manually configured access permissions for a user or group, then the **Special permissions** access level is set for this user or group.

Table 18. Delimitation of access permissions for Kaspersky Security 10.1 for Windows Server functions

Feature	Description
Viewing service configurations	Viewing: ability to view Kaspersky Security Service general settings and user permissions.
Request service status from Service Manager	Ability to request the execution status of the Kaspersky Security Service from Microsoft Windows Service Control Manager.
Request status from service	Ability to request the service execution status from the Kaspersky Security Service.
List dependent services	Ability to view a list of services on which the Kaspersky Security Service depends and which depend on the Kaspersky Security Service.



Feature	Description
Editing service settings	Ability to view and edit Kaspersky Security Service general settings and user permissions.
Start the service	Ability to start the Kaspersky Security Service.
Stop the service	Ability to stop the Kaspersky Security Service.
Pause / Resume the service	Ability to pause and resume the Kaspersky Security Service.
Read permissions	Ability to view the list of Kaspersky Security Service users and each user's access privileges.
Edit permissions	Ability to: <ul style="list-style-type: none"> <li>• Add and remove Kaspersky Security Service users.</li> <li>• Edit user access permissions for Kaspersky Security Service.</li> </ul>
Delete the service	Ability to unregister the Kaspersky Security Service in the Microsoft Windows Service Control Manager.
User defined requests to service	Ability to create and send user requests to the Kaspersky Security Service.

## About access permissions for the Kaspersky Security Management Service

You can review the list of Kaspersky Security 10.1 for Windows Server services.

During installation, Kaspersky Security 10.1 for Windows Server registers Kaspersky Security 10.1 for Windows Server Management Service (KAVFSGT). To manage the application via Kaspersky Security 10.1 Console installed on a different computer, the account whose permissions are used to connect to Kaspersky Security 10.1 for Windows Server must have full access to Kaspersky Security 10.1 for Windows Server Management Service on the protected server.

By default, access to the Kaspersky Security Management Service is granted to users of the Administrators group on the protected server and users of the KAVWSEE Administrators group created on the protected server during Kaspersky Security 10.1 for Windows Server installation.

You can manage Kaspersky Security Management Service only via the Microsoft Windows **Services** snap-in.

You cannot allow or block user access to Kaspersky Security 10.1 for Windows Server Management Service by configuring Kaspersky Security 10.1 for Windows Server.

You can connect to Kaspersky Security 10.1 for Windows Server from a local account if an account with the same name and password is registered on the protected server.

## Configuring access permissions for managing Kaspersky Security 10.1 for Windows Server and Kaspersky Security Service

You can edit the list of users and user groups allowed to access Kaspersky Security 10.1 for Windows Server functions and manage Kaspersky Security Service, and also edit the access permissions of those users and user groups.

► *To add or remove a user or group from the list:*

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node. Expand the administration group with the servers whose application settings you want to configure.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure policy settings for a group of servers select the **Policies** tab and open **<Policy name> > Properties**.
  - If you want to configure application settings for a single server, open the required settings in the **Application Settings** (see Section "**Configuring local tasks in Application settings window of Kaspersky Security Center**" on page [118](#)) window in Kaspersky Security Center.
3. In the **Options** section, perform one of the following steps:
  - Select **Modify user rights of application management** if you want to edit the list of users who have access permissions for managing Kaspersky Security 10.1 for Windows Server functions.
  - Select **Modify user rights of Kaspersky Security Service management** if you want to edit the list of users who have access permissions for managing the application via the Kaspersky Security Service.

The **Permissions for Kaspersky Security 10.1 for Windows Server** group window opens.
4. In the window that opens, perform the following operations:
  - In order to add a user or group to the list, click the **Add** button and select the user or group to whom you want to grant privileges.
  - To remove a user or group from the list, select the user or group whose access you want to restrict and click the **Remove** button.
5. Click the **Apply** button.

The selected users (groups) are added or removed.

► *To edit permissions of a user or group to manage Kaspersky Security 10.1 for Windows Server or Kaspersky Security Service:*

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node. Expand the administration group with the servers whose application settings you want to configure.
2. Perform one of the following actions in the details pane of the selected administration group:

- To configure policy settings, in the Kaspersky Security Center Administration Console, in the computer group select the **Policies** tab and open **<Policy name> > Options**.
  - If you want to configure application settings for a single server, open the required settings in the **Application Settings** (see Section "**Configuring local tasks in Application settings window of Kaspersky Security Center**" on page [118](#)) window in Kaspersky Security Center.
3. In the **Options** section, perform one of the following steps:
    - Select **Modify user rights of application management** if you want to edit the list of users who have access permissions for managing Kaspersky Security 10.1 for Windows Server functions.
    - Select **Modify user rights of Kaspersky Security Service management** if you want to edit the list of users who have access permissions for managing the application via the Kaspersky Security Service.  
The **Permissions for Kaspersky Security 10.1 for Windows Server** group window opens.
  4. In the window that opens, in the **Groups** or users list select the user or group of users for whom you want to change permissions.
  5. In the **Permissions for group "<User (Group)>"** section, select the **Allow** or **Block** check boxes for the following access levels:
    - **Full control**: full set of permissions to manage Kaspersky Security 10.1 for Windows Server or Kaspersky Security Service.
    - **Read**:
      - The following permissions to manage Kaspersky Security 10.1 for Windows Server: **Retrieve statistics, Read settings, Read logs** and **Read** permissions.
      - The following permissions to manage Kaspersky Security Service: **Read service settings, Request service status from Service Manager, Request status from service, List dependent services, Read** permissions.
    - **Modification**:
      - All permissions to manage Kaspersky Security 10.1 for Windows Server, except **Edit** permissions.
      - The following permissions to manage Kaspersky Security Service: **Edit service settings, Read** permissions.
    - **Execution**: the following permissions to manage Kaspersky Security Service: **Starting service, Stopping service, Pause / Resume service, Read** permissions, **User defined requests to service**.
  6. To configure advanced settings of permissions for a user or group (**Special permissions**), click the **Advanced** button.
    - a. In the **Advanced security settings for Kaspersky Security 10.1 for Windows Server** window that opens, select the user or group that you need.
    - b. Click the **Edit** button.
    - c. In the window that opens, click the **Show** special permissions link.
    - d. In the drop down list in the top part of the window, select the type of access control (**Allow** or **Block**).
    - e. Select the check boxes opposite the functions that you want to allow or block for the selected user or group.
    - f. Click **OK**.
    - g. In the **Additional security settings for Kaspersky Security 10.1 for Windows Server** window, click **OK**.

- In the **Permissions for Kaspersky Security 10.1 for Windows Server** group window, click the **Apply** button.

The configured permissions for managing Kaspersky Security 10.1 for Windows Server or Kaspersky Security Service are saved.

## Password-protected access to Kaspersky Security 10.1 for Windows Server functions

You can restrict access to application management and registered services by configuring user permissions (see Section "About access permissions for Kaspersky Security 10.1 for Windows Server functions" on page 96). You can also set password protection in the Kaspersky Security 10.1 for Windows Server settings for additional protection of the execution of critical operations.

Kaspersky Security 10.1 for Windows Server requests a password when you attempt to access the following application functions:

- connection to a local Kaspersky Security 10.1 Console;
- uninstallation of Kaspersky Security 10.1 for Windows Server;
- modification of Kaspersky Security 10.1 for Windows Server components.

The Kaspersky Security 10.1 for Windows Server interface disguises the specified password on screen. Kaspersky Security 10.1 for Windows Server stores the password as a checksum calculated when the password is specified.

You can export and import a password-protected application configuration. The configuration file, created as a result of exporting the protected application configuration, contains the password checksum and the value of the modifier used to pad the password string.

**Do not change the checksum or modifier in the configuration file. Importing a password configuration that has been changed manually may cause access to the application to be entirely blocked.**

► *To protect access to Kaspersky Security 10.1 for Windows Server functions, take the following steps:*

- In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node. Expand the administration group with the servers whose application settings you want to configure.
- Perform one of the following actions in the details pane of the selected administration group:
  - To configure policy settings for a group of servers select the **Policies** tab and open **<Policy name> > Properties**.
  - If you want to configure application settings for a single server, open the required settings in the **Application Settings** (see Section "**Configuring local tasks in Application settings window of Kaspersky Security Center**" on page 118) window in Kaspersky Security Center.
- In the **Security and reliability** section, click the **Settings** button.  
The **Security settings** window opens.
- In the **Password settings** section, select the **Apply password protection** check box.  
The **Password** and **Confirm password** fields become active.

5. In the **Password** field, enter the value you want to use to protect access to Kaspersky Security 10.1 for Windows Server functions.
6. In the **Confirm password** field, enter your password again.
7. Click **OK**.

The specified settings are saved. Kaspersky Security 10.1 for Windows Server will request the specified password for accessing the protected functions.

This password cannot be recovered. Losing your password results in complete loss of control of the application. Additionally, it will be impossible to uninstall the application from the protected server.

You can change or reset the password specified in the application settings at any time.

► *To reset the password, do the following:*

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node. Expand the administration group with the servers whose application settings you want to configure.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure policy settings for a group of servers select the **Policies** tab and open **<Policy name> > Properties**.
  - If you want to configure application settings for a single server, open the required settings in the **Application Settings** (see Section "**Configuring local tasks in Application settings window of Kaspersky Security Center**" on page [118](#)) window in Kaspersky Security Center.
3. In the **Security and reliability** section, click the **Settings** button.  
The **Security** settings window opens.
4. In the **Password settings** group box, clear the **Apply password protection** check box.  
The **Password** and **Confirm password** fields are cleared and become inactive.
5. Click **OK**.

Password protection is disabled. Kaspersky Security 10.1 for Windows Server deletes the old password checksum from the application settings.

## Enabling network connections for the Kaspersky Security Management Service

The names of settings may vary under different Windows operating systems.

► *To allow network connections for the Kaspersky Security Management Service on the protected server, take the following steps:*

1. On a protected server running Microsoft Windows Server , select **Start > Control panel > Security >**

**Windows Firewall.**

2. In the **Windows firewall settings** window, select **Change** settings.
3. In the list of predefined exclusions on the **Exclusions** tab select the following check boxes: **COM + Network access**, **Windows Management Instrumentation (WMI)** and **Remote Administration**.
4. Click the **Add Program** button.
5. Select the kavsgt.exe file in the **Add program** window. This file is stored in the folder that you specified as the destination folder during installation of Kaspersky Security 10.1 Console.
6. Click **OK**.
7. Click **OK** in the **Windows Firewall settings** window.

Network connections for the Kaspersky Security Management Service on the protected server will be allowed.

# Creating and configuring policies

This section provides information on using Kaspersky Security Center policies for managing Kaspersky Security 10.1 for Windows Server on several servers.

## In this chapter

About policies.....	<a href="#">105</a>
Configuring scheduled start of local system tasks.....	<a href="#">112</a>



## About policies



Global Kaspersky Security Center policies can be created for managing protection on several servers where Kaspersky Security 10.1 for Windows Server is installed.


A policy enforces the Kaspersky Security 10.1 for Windows Server settings, functions and tasks specified in it on all the protected servers for one administration group.

Several policies for one administration group can be created and enforced in turns. The policy currently active for a group has the *active* status in Administration Console.

Information on policy enforcement is logged in the Kaspersky Security 10.1 for Windows Server system audit log. This information can be viewed in the Kaspersky Security 10.1 Console in the **System audit log** node.

Kaspersky Security Center offers one way to apply policies on local computers: *Prohibit changing the settings*. After a policy has been applied, Kaspersky Security 10.1 for Windows Server uses the values for settings next to which you have selected the  icon in the policy properties on local computers instead of the values for those settings that had been actual before the policy was applied. Kaspersky Security 10.1 for Windows Server does not apply the values of active policy settings next to which the  icon is selected in the policy properties.

If a policy is active, the values of settings marked with the  icon in the policy are displayed in Kaspersky Security 10.1 Console but cannot be edited. The values of other settings (marked with the  icon in the policy) can be edited in Kaspersky Security 10.1 Console.

The settings configured in the active policy and marked with the  icon also block changes in Kaspersky Security Center for one computer in the **Properties: <Computer name>** window.

The settings, that are specified and sent to the local computer using an active policy, are saved in the local tasks settings after the active policy is disabled.

If the policy defines the settings for any Real-Time Protection task or Network Attached Storage Protection task, and if such a task is currently running, then the settings defined by the policy will be modified as soon as the policy is applied. If the task is not running, the settings are applied when it starts.



## Creating policy

The process of creating a policy involves the following steps:

1. Creating a policy using the policy wizard. Real-Time Protection settings can be configured using the wizard dialogs.
2. Configuring policy settings. In the **Properties: <Policy name>** window of the created policy, you can define the Real-Time Protection settings, the general settings of Kaspersky Security 10.1 for Windows Server, the Quarantine and Backup settings, the level of detail for task logs, as well as user and administrator notifications about Kaspersky Security 10.1 for Windows Server events.

► *In order to create a policy for a group of servers running the installed Kaspersky Security 10.1 for Windows Server, take the following steps:*

1. Expand the **Managed devices** node in the Administration Console tree, then select the administration group containing the servers for which you wish to create a policy.
2. In the details pane of the selected administration group, select the **Policies** tab and click the **Create a policy** link to start the wizard and create a policy.
3. In the **Enter the name of group policy for the application** window, in the **Name** field enter the name of the policy being created. The policy name cannot contain the following symbols: " \* < : > ? \ / | ).
4. In the **Choose an application for creating a group policy** window, in the **Application name** list select Kaspersky Security 10.1 for Windows Server.
5. In the **Operation** type selection window, select one of the following options:
  - **Create**, to create new policy with the settings, set for newly created policies by default.
  - **Import policy created with previous version of Kaspersky Security for Windows Server**, to use that version policy as a template.

Click **Browse** and select a configuration file where an existing policy is stored.
6. In the **Real-Time Server Protection** window, configure the Real-Time File Protection and KSN Usage task settings as required. Allow or block the use of configured policy tasks on local computers on the network:
  - Click the  button to allow changes to task settings on network computers and block the application of task settings configured in the policy.
  - Click the  button to deny changes to task settings on network computers and allow the application of task settings configured in the policy.

The newly created policy uses the default settings of Real-Time Protection tasks.

- To edit the default settings of the Real-Time File Protection task, click the **Settings** button in the **Real-Time File Protection** section. In the **Options** window that opens, configure the task settings according to your needs. Click **OK**.
- To edit the default settings of the KSN Usage task, click the **Settings** button in the **KSN Usage** section. In the **Options** window that opens, configure the task settings according to your needs. Click **OK**.

The KSN Usage task is available of use if the KSN Statement has been accepted.



7. Select one of the following policy statuses in the **Create a group policy** for applications window:
  - **Active policy** if you wish to apply the policy immediately after it is created. If an active policy already exists in the group, this existing policy will become inactive and the policy you create will be activated.
  - **Inactive policy** if you do not want to apply the created policy immediately. In this case the policy may be activated later.
8. Click the **Finish** button in the **Completing the Wizard** window of the Wizard.

The created policy appears in the list of policies on the **Policies** tab of the selected administration group. In the **Properties: <Policy name>** window, you can configure other settings, tasks and functions of Kaspersky Security 10.1 for Windows Server.

## Configuring policy

In the **<Policy name> Properties** window of an existing policy, you can configure general Kaspersky Security 10.1 for Windows Server settings, quarantine and backup settings, Trusted Zone settings, Real-Time Protection settings, Local Activity Control settings, the level of detail for task logs, as well as user and administrator notifications about the Kaspersky Security 10.1 for Windows Server events, access privileges for managing the application and the Kaspersky Security service, and policy profile application settings.

### ► *To configure the policy settings:*

1. Expand the **Managed devices** node in the tree of the Administration Console of Kaspersky Security Center.
2. Expand the administration group, for which you want to configure the associated policy settings, and open the **Policies** subnode in the details pane.
3. Select a policy you want to configure and open the **<Policy name> Properties** window using one of the following ways:
  - By selecting the **Properties** option in the policy context menu.
  - By clicking the **Configure policy** link in the right details pane of the selected policy.
  - By double-clicking the selected policy.
4. On the **General** tab in the **Policy status** section, enable or disable the policy. To do so, select one of the options below:
  - **Active policy**, if you want the policy to be applied on all servers within the selected administration group.
  - **Inactive policy**, if you do not want the policy to be applied on all servers within the selected group.

The **Offline user policy** setting is not available when you manage Kaspersky Security 10.1 for Windows Server.

5. In the **Event notification**, **Application settings**, **Logs and Notifications**, **Supplementary**, **Revision history** sections you can modify the application configuration (see table below).
6. In the **Real-Time Server Protection**, **Local Activity Control**, **Network Activity Control** and **System Inspection** sections, configure the application settings and application launch settings (see the table below).

You can enable or disable the execution of any task on all servers within the administration group by means of a Kaspersky Security Center policy.  
 You can configure the application of policy settings on all network computers for each individual software component.

7. Click **OK**.

The configured settings are applied in the policy.

Detailed instructions on how to configure task settings and application functions via Kaspersky Security 10.1 Console are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

## Sections with Kaspersky Security 10.1 for Windows Server policy settings

### General

In the **General** section, you can configure the following policy settings:

- Indicate policy status.
- Configure the inheritance of settings from parent policies and for child policies.

### Event notifications

In the **Event notifications** section, you can configure settings for the following event categories:

- *Critical events*
- *Failure*
- *Warning*
- *Informational event*

You can use the **Properties** button to configure the following settings for the selected events:

- Indicate the storage location and retention period of information about logged events.
- Indicate the method of notification about logged events.

### Application settings

Table 19. Settings of the Application Settings section

Section	Options
<b>Scalability and interface</b>	<p>In the <b>Scalability and interface</b> section, you can click the <b>Settings</b> button to configure the following settings:</p> <ul style="list-style-type: none"> <li>• Choose whether to configure scalability settings automatically or manually.</li> <li>• Configure the application icon display settings.</li> </ul>
<b>Security</b>	<p>In the <b>Security</b> section, you can click the <b>Settings</b> button to configure the following settings:</p> <ul style="list-style-type: none"> <li>• Configure the task run settings.</li> <li>• Specify how the application should behave when the server is running on UPS power.</li> <li>• Enable or disable password-protection of application functions.</li> </ul>

<b>Connections</b>	<p>In the <b>Connections</b> section, you can use the <b>Settings</b> button to configure the following proxy server settings for connecting with update servers, activation servers, and KSN:</p> <ul style="list-style-type: none"> <li>• Configure the proxy server settings.</li> <li>• Specify the proxy server authentication settings.</li> </ul>
<b>Run system tasks</b>	<p>In the <b>Run system tasks</b> section, you can use the <b>Settings</b> button to allow or block the starting of the following system tasks according to a schedule configured on local computers:</p> <ul style="list-style-type: none"> <li>• On-Demand Scan task.</li> <li>• Update and Copying Updates tasks.</li> </ul>

## Supplementary

Table 20. Settings of the Supplementary section

Section	Options
<b>Trusted Zone</b>	<p>Click the <b>Settings</b> button on the <b>Trusted Zone</b> section to configure the following Trusted Zone application settings:</p> <ul style="list-style-type: none"> <li>• Create a list of Trusted Zone exclusions.</li> <li>• Enable or disable scanning of file backup operations.</li> <li>• Create a list of trusted processes.</li> </ul>
<b>Removable Drives Scan</b>	<p>In the <b>Removable Drives Scan</b> section, you can use the <b>Settings</b> button to configure scan settings for removable USB drives.</p>
<b>User access permissions for application management</b>	<p>In the <b>User access permissions for application management</b> section, you can configure user rights and user group rights to manage Kaspersky Security 10.1 for Windows Server</p>
<b>User access permissions for Security Service management</b>	<p>In the <b>User access permissions for Security Service management</b> section, you can configure user rights and user group rights to manage the Kaspersky Security Service.</p>
<b>Storages</b>	<p>In the <b>Storages</b> section, click the <b>Settings</b> button to configure the following Quarantine, Backup and Blocked Hosts settings:</p> <ul style="list-style-type: none"> <li>• Specify the path to the folder into which you want to place Quarantine or Backup objects.</li> <li>• Configure the maximum size of Backup and Quarantine and also specify the free space threshold.</li> <li>• Specify the path to the folder into which you want to place objects restored from Quarantine or Backup.</li> <li>• Configure transmission of information about Quarantine and Backup objects to Administration Server.</li> <li>• Configure the host blocking term.</li> </ul>

## Real-Time Server Protection

Table 21. Settings of the Real-Time Server Protection section

Section	Options
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<b>Real-Time File Protection</b>	<p>In the <b>Real-Time File Protection</b> section, you can click the <b>Settings</b> button to configure the following task settings:</p> <ul style="list-style-type: none"> <li>• Indicate the protection mode.</li> <li>• Configure use of the Heuristic Analyzer.</li> <li>• Configure use of the Trusted Zone.</li> <li>• Indicate the protection scope.</li> <li>• Set the security level for the selected protection scope: you can select a predefined security level or configure the security settings manually.</li> <li>• Configure the task start settings.</li> </ul>
<b>KSN Usage</b>	<p>In the <b>KSN Usage</b> section, you can click the <b>Settings</b> button to configure the following task settings:</p> <ul style="list-style-type: none"> <li>• Indicate the actions to perform on KSN untrusted objects.</li> <li>• Configure task performance.</li> <li>• Configure settings for using Kaspersky Security Center as a KSN proxy server.</li> <li>• Accept the KSN Statement.</li> <li>• Configure the task start settings.</li> </ul>
<b>Exploit Prevention</b>	<p>In the <b>Exploit Prevention</b> section, you can click the <b>Settings</b> button to configure the following task settings:</p> <ul style="list-style-type: none"> <li>• Select the process memory protection mode.</li> <li>• Indicate the actions to reduce exploit risks.</li> <li>• Add to and edit the list of protected processes.</li> </ul>
<b>Script Monitoring</b>	<p>In the <b>Script Monitoring</b> task, click the <b>Settings</b> button to configure the following task run settings:</p> <ul style="list-style-type: none"> <li>• Allow or block execution of probably dangerous scripts.</li> <li>• Configure the use of Heuristic Analyzer.</li> <li>• Configure application of the trusted zone.</li> <li>• Configure the task run settings.</li> </ul>

## Local Activity Control

Table 22. Settings of the Local Activity Control section

Section	Options
<b>Applications Launch Control</b>	<p>In the <b>Applications Launch Control</b> section, you can use the <b>Settings</b> button to configure the following task settings:</p> <ul style="list-style-type: none"> <li>• Select the task operating mode.</li> <li>• Configure settings for controlling subsequent application launches.</li> <li>• Indicate the scope for application of the Applications Launch Control rules.</li> <li>• Configure use of KSN.</li> <li>• Configure the task start settings.</li> </ul>

<b>Device Control</b>	<p>In the <b>Device Control</b> section, you can click the <b>Settings</b> button to configure the following task settings:</p> <ul style="list-style-type: none"> <li>• Select the task operating mode.</li> <li>• Configure the task start settings.</li> </ul>
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## Network Activity Control

Table 23. Settings of the Network Activity Control section

Section	Options
<b>Firewall Management</b>	<p>In the <b>Firewall Management</b> section, you can click the <b>Settings</b> button to configure the following task settings:</p> <ul style="list-style-type: none"> <li>• Configure firewall rules.</li> <li>• Configure the task start settings.</li> </ul>
<b>Anti-Cryptor</b>	<p>In the <b>Anti-Cryptor</b> section, you can click the <b>Settings</b> button to configure the following task settings:</p> <ul style="list-style-type: none"> <li>• Configure the Anti-Cryptor protection scope.</li> <li>• Configure the task start settings.</li> </ul>

## System Inspection

Table 24. Settings of the System Inspection section

Section	Options
<b>File Integrity Monitor</b>	<p>In the <b>File Integrity Monitor</b> section you can configure control over the changes in files that can signify a security violation on a protected server.</p>
<b>Log Inspection</b>	<p>In the <b>Log Inspection</b> section you can configure a protected server integrity control basing on the results of the Windows Event Log analysis.</p>

## Logs and Notifications

Table 25. Settings of the Logs and Notifications section

Section	Options
<b>Task logs</b>	<p>In the <b>Task logs</b> section, you can click the <b>Settings</b> button to configure the following settings:</p> <ul style="list-style-type: none"> <li>• Specify the importance level of the logged events for the selected software components.</li> <li>• Specify the task log storage settings.</li> <li>• Specify the SIEM integration with Kaspersky Security Center settings.</li> </ul>
<b>Event notifications</b>	<p>In the <b>Event notifications</b> section, you can click the <b>Settings</b> button to configure the following settings:</p> <ul style="list-style-type: none"> <li>• Specify the user notification settings for the <i>Object detected</i> event.</li> <li>• Specify the administrator notification settings for any event selected in the event list in the <b>Notification settings</b> section.</li> </ul>

<b>Interaction with Administration Server</b>	In the <b>Interaction with Administration Server</b> section, you can click the <b>Settings</b> button to select the types of objects that Kaspersky Security 10.1 for Windows Server will report to Administration Server.
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## Network Attached Storage Protection

Table 26. Settings of Network Attached Storage Protection section

Section	Options
<b>Real-Time File Protection (RPC)</b>	In the <b>Real-Time File Protection (RPC)</b> section, you can click the <b>Settings</b> button to configure the following settings: <ul style="list-style-type: none"> <li>• Heuristic analyzer usage.</li> <li>• Network attached storage connection settings.</li> <li>• Task protection scope.</li> </ul>
<b>Real-Time File Protection (ICAP)</b>	In the <b>Real-Time File Protection (ICAP)</b> section, you can click the <b>Settings</b> button to configure the following settings: <ul style="list-style-type: none"> <li>• ICAP service connection settings.</li> <li>• Integration with other components.</li> <li>• Security level.</li> </ul>
<b>Anti-Cryptor for NetApp</b>	In the <b>Anti-Cryptor for NetApp</b> section, you can click the <b>Settings</b> button to configure the following settings: <ul style="list-style-type: none"> <li>• Task mode.</li> <li>• Heuristic analyzer usage.</li> <li>• Connection and authentication settings.</li> <li>• Specify exclusions from the protection scope.</li> </ul>

To review the detailed information about Network Attached Storage Protection tasks, see the *Kaspersky Security 10.1 for Windows Server Implementation Guide for Network Storages Protection*.

## Revision history

In the **Revision History** section, you can manage revisions: compare with the current revision or other policy, add descriptions of revisions, save revisions to a file or perform a rollback.

# Configuring scheduled start of local system tasks

You can use policies to allow or block start of the local system On-Demand Scan task and the Update task according to the schedule configured locally on each server in the administration group:

- If the scheduled start of a specific type of local system task is prohibited by a policy, these tasks will not be performed on the local computer as per the schedule. You can start the local system tasks manually.
- If the scheduled start of a specific type of local system task is allowed by a policy, these tasks will be performed in accordance with the scheduled parameters configured locally for this task.

By default, start of local system tasks is prohibited by policy.

We recommend that you do not allow local system tasks to start if updates or on-demand scans are being administered by Kaspersky Security Center group tasks.

If you do not use group update or on-demand scan tasks, allow local system tasks to be started in the policy: Kaspersky Security 10.1 for Windows Server will perform application database and module updates, and start all local system on-demand scan tasks in accordance with the default schedule.

You can use policies to allow or block the scheduled start of the following local system tasks:

- On-Demand Scan tasks: Critical Areas Scan, Quarantine Scan, Scan at Operating System Startup, Software Modules Integrity Check;
- Update tasks: Database Update, Software Modules Update and Copying Updates.

If the protected server is excluded from the administration group, the system tasks schedule will be enabled automatically.

► *To allow or block the scheduled start of Kaspersky Security 10.1 for Windows Server system tasks in a policy take the following steps:*

1. In the **Managed devices** node in the Administration Console tree, expand the required group and select the **Policies** tab.
2. On the **Policies** tab in the context menu of the policy with which you want to configure the scheduled start of Kaspersky Security 10.1 for Windows Server system tasks on the group of servers, select the **Properties** command.
3. In the **<Policy name> Properties** window, open the **Application properties** section. In the **Run system tasks** section, click the **Settings** button and perform the following:
  - Select the **Allow on-demand scan tasks launch** and **Allow update tasks and Copying Update task launch** check boxes to allow the scheduled launch of the listed tasks.
  - Clear the **Allow on-demand scan tasks launch** and **Allow update tasks and Copying Update task launch** check boxes to disable the scheduled launch of the listed tasks.

Selecting or clearing the check box will not affect the start settings of any local custom tasks of this type.

4. Make certain that the policy (see Section "About policies" on page [105](#)) you are configuring is active and applied to the group of administration servers.
5. Click **OK**.

The configured scheduled task start settings are applied for the selected tasks.

# Creating and configuring tasks using Kaspersky Security Center

This section contains information about Kaspersky Security 10.1 for Windows Server tasks, and how to create them, configure task settings, and start and stop them.

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## About task creation in Kaspersky Security Center

You can create group tasks for administration groups and sets of computers. You can create the following task types:

- Activation of the application
- Copying Updates
- Database Update
- Software Module Update
- Rollback of Database Update
- On-Demand Scan
- Application Integrity Control
- Rule Generator for Applications Launch Control
- Rule Generator for Device Control

You can create local and group tasks in the following ways:

- for one computer: in the **Properties <Computer name>** window in the Tasks section;
- for an administration group: in the details pane of the node of the selected group of computers on the **Tasks** tab;
- for a set of computers: in the details pane of the **Device selections** node.



Using policies you can disable schedules for update and On-Demand Scan local system tasks (see Section "Configuring scheduled start of local system tasks" on page [112](#)) on all protected servers, from the same administration group.

General information on tasks in Kaspersky Security Center is provided in the *Kaspersky Security Center Help*.

## Creating task using Kaspersky Security Center

The process of configuring the settings of Kaspersky Security 10.1 for Windows Server functional components in Kaspersky Security Center is similar to local configuration of the settings of these components in Kaspersky Security 10.1 Console. Detailed instructions on how to configure task settings and application functions are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

► To create a new task in the Administration Console of Kaspersky Security Center:

1. Start the task wizard in one of the following ways:
  - To create a local task:
    - a. Expand the **Managed devices** node in the tree of the Administration Server of Kaspersky Security Center and select the group that the protected server belongs to.
    - b. In the details pane, on the **Devices** tab open the context menu on the line with information about the protected server and select **Properties**.
    - c. In the window that opens, click the **Add** button in the **Tasks** section.
  - To create a group task:
    - a. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the group for which you want to create a task.
    - b. In the details pane, open the context menu on the **Tasks** tab and select **New > Task**.
  - To create a task for a custom set of computers, in the **Device selections** node in the Kaspersky Security Center Administration Console tree select **New task**.

The task wizard window opens.

2. In the **Specify task name** window, enter the task name (no longer than 100 characters) not containing the symbols `! * < > ? \ / | : .`. It is recommended that the task type is added to its name (for example, "On-demand scan of shared folders").
3. In the **Task type** window under the heading **Kaspersky Security 10.1 for Windows Server**, select the type of the task to be created.
4. If you selected any task type except Roll back database update or Application activation, **Task Settings** window opens. Depending on the type of task created, do one of the following actions:
  - To create an On-Demand Scan task:
    - a. Create a scan scope in the **Scan scope** window.  
By default, scan scope includes critical areas of the server. Scan scopes are marked in the table

with the icon .

You can change the scan scope: add specific preset scan scopes, disks, folders, network objects and files and assign specific security settings for each scope added.

- To exclude all critical areas from the scan, open the context menu on each of the lines and select the **Remove scope** option.
  - To include a predefined scan scope, disk, folder, network object, or file in the scan scope, right-click the **Scan scope** table and select **Add scope**. In the **Add objects to the scan scope** window, select the predefined scope in the **Predefined scope** list, specify the computer drive, folder, network object, or file on the server or on another network computer, and click the **OK** button.
  - To exclude subfolders or files from the scan, select the added folder (disk) in the **Scan scope** window of the wizard, open the context menu and select the **Configure** option, then click the **Settings** button in the Security level window, and in the **On-demand scan** settings window on the **General** tab, clear the **Subfolders** and **Subfiles** check boxes.
  - To change scan scope security settings, open the context menu on the scope whose settings you wish to configure, and select **Configure**. In the **On-demand scan** settings window, select one of the predefined security levels, or click the **Settings** button to configure security settings manually. Security settings configuration is performed in the same way as in Kaspersky Security 10.1 Console.
  - To skip embedded objects in the added scan scope, open the context menu on the **Scan scope** table, select **Add exclusion** and specify the objects to exclude: select predefined scope in the **Predefined scope** list, specify the computer disk, folder, network object, or file on the server or on another network computer, and click the **OK** button.
  - Excluded scan scopes are marked with the  icon in the table.
- a. Do the following in the **Options** window.

Select the **Apply Trusted Zone** check box if you wish to exclude objects described in the Kaspersky Security 10.1 for Windows Server Trusted Zone from the scan scope of the task.

If you plan to use the task created as a Critical Areas Scan task, select the **Perform task in background mode** check box in the **Options** window. Kaspersky Security Center evaluates the security rating of the server (servers) by the performance results of tasks with the *Critical Areas Scan* status, and not only by the performance results of the **Critical Areas Scan** system task. When creating a local On-Demand Scan task, this check box is not available.

To assign the base priority **Low** to the working process in which the task will be executed, select the **Perform task in background mode** check box in the **Options** window. By default, the working processes in which Kaspersky Security 10.1 for Windows Server tasks are run have the **Medium** (Normal) priority. Demoting the process priority increases the time required to execute the task, but it may have a beneficial effect on the execution speed of the processes of other active programs.

- *To create an update task*, configure task settings based on your requirements:
  - a. Select updates source in the **Update source** window.
  - b. Click the **LAN settings** button. The **Connection settings** window opens.
  - c. On the **Connection** settings:

Specify the FTP server mode for connecting to the protected server.

Modify the connection timeout when connecting to the update source, if required.

Configure proxy server access settings when connecting to the update source.

Specify protected server(s) location, to optimize update downloads.

- *To create a Software Modules Update task*, configure the required program modules update settings in the **Settings for application software module updates** window:
  - a. Select download and install critical updates for software modules or check for their availability only.
  - b. If **Copy and install critical software modules updates** is selected: a server restart may be required to apply the installed software modules. If you wish Kaspersky Security 10.1 for Windows Server to restart the server automatically upon task completion, select the **Allow operating system restart** check box. To disable automatic server restart upon task completion, clear the **Allow operating system restart** check box.
  - c. To obtain information about Kaspersky Security 10.1 for Windows Server module upgrades, select **Receive information about available scheduled software modules updates**.

Kaspersky Lab does not publish planned update packages on the update servers for automatic installation; these can be downloaded manually from the Kaspersky Lab website. An administrator notification about the event **New scheduled software modules updates is available** can be configured. This will contain the URL of our website from which scheduled updates can be downloaded.

- *To create the Copying Updates task*, specify the set of updates and the destination folder in the **Copying Updates settings** window.
  - *To create the Application activation task*, in the **Activation settings** window apply the key file or activation code that you want to use to activate the application. Select the **Use as additional key** check box if you want to create a task for renewing the license.
  - *To create the Rule Generator for Applications Launch Control task or the Rule Generator for Device Control task*, in the **Settings** window specify the settings based on which the list of allowing rules will be created:
    - a. Specify a prefix for the rule names (only for the Rule Generator for Applications Launch Control task).
    - b. Configure the usage scope of the allowing rules (only for the Rule Generator for Applications Launch Control task). Click the **Next** button.
    - c. Specify the actions that the allowing task will perform while generating allowing rules (only for the Rule Generator for Applications Launch Control task) and after the task completion.
5. Configure the task schedule (you can configure a schedule for all task types except Database update rollback task). Do the following in the **Schedule** window:
- a. Select the **Run by schedule** check box to enable the schedule;
  - b. Specify the task start frequency: select one of the following values from the **Frequency** list: **Hourly**, **Daily**, **Weekly**, **At application launch**, **After application database update** (the start frequency **After Administration Server has retrieved updates** can also be specified in the following group tasks: Database Update and Software Modules Update):
    - If **Hourly** is selected, specify the number of hours in the **Every <number> hour(s)** in the **Task start settings** configuration group;
    - If **Daily** is selected, specify the number of days in the **Every <number> day(s)** in the **Task start settings** configuration group.
    - If **Weekly** is selected, specify the number of weeks in the **Every <number> week(s)** in the **Task start settings** configuration group. Specify on which days of the week the task will be started (on Mondays, by default).

- c. In the **Start time** field, specify the time when the task will be started; in the **Start date** field specify the date when the schedule will become effective.
- d. Specify the remaining schedule settings if required: click the **Advanced** button and do the following in the **Advanced schedule settings** window:
  - Specify the maximum duration of task execution: enter the number of hours and minutes in the **Duration** field in the **Task stop settings** group.
  - Specify the time interval within a 24-hour period in which a task execution is be paused: in the **Task stop settings** values group, enter the start and end values of the interval in the **Pause from** and **to** fields.
  - Specify the date at which the schedule will be disabled: select the **Cancel schedule from** check box and select the date when schedule will be disabled using the **Calendar** window.
  - Enable start of missed tasks: select the **Run skipped tasks** check box.
  - Enable the start time distribution setting: select the **Randomize the task start time within the interval of** check box and specify the value in minutes.
- e. Click **OK**.
6. If the task created is for sets of computers, select the network (group) of computers on which this task will be executed.
7. In the **Specifying a user account for running tasks** window, specify the account under which you want to run the task.
8. In the **Finishing task creation** window, select the **Run task when the wizard is complete** check box if you want the task to be started as soon as it has been created. Click the **Finish** button.

The task created is displayed in the **Tasks** list.

## Configuring local tasks in Application settings window of Kaspersky Security Center

► *To configure local tasks or general application settings in the Application settings window for a single network server, perform the following tasks:*

1. Expand the **Managed devices** node in the tree of the Administration Server of Kaspersky Security Center and select the group that the protected server belongs to.
2. In the details pane, select the **Devices** tab.
3. Open the **Properties: <Computer name>** window in one of the following ways:
  - Double-click the name of the protected server.
  - Open the context menu of the protected server name and select the **Properties** item.

The **Properties: <Computer name>** window opens.
4. To configure the local task settings perform the following steps:
  - a. Go to the **Tasks** section.
    - In the task list, select a local task to configure.
    - Double-click the task name in the list of tasks.

- Select the task name and click the **Properties** button.
  - Choose **Properties** in the context menu of the selected task.
5. To configure the application settings perform the following steps:
- a. Go to the **Applications** section.
    - In the installed applications list, select an application to configure.
    - Double-click the application name in the list of installed applications.
    - Select the application name in the list of installed applications and click the **Properties** button.
    - Open the context menu of the application name in the list of installed applications and select the **Properties** item.

If the application is currently under the Kaspersky Security Center policy and this policy prohibits changing the application settings, these settings cannot be edited via the **Application settings** window.

The process of configuring the settings of Kaspersky Security 10.1 for Windows Server functional components in Kaspersky Security Center is similar to local configuration of the settings of these components in Kaspersky Security 10.1 Console. Detailed instructions on how to configure task settings and application functions are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

## Configuring group tasks in Kaspersky Security Center

The process of configuring the settings of Kaspersky Security 10.1 for Windows Server functional components in Kaspersky Security Center is similar to local configuration of the settings of these components in Kaspersky Security 10.1 Console. Detailed instructions on how to configure task settings and application functions are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

### ► To configure group task for multiple computers:

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node. Expand the administration group for whose computers you want to configure application tasks settings.
2. On the details pane of a chosen administration group, open **Tasks** tab.
3. In the list of previously created group tasks, choose a task you want to configure. Open the **Properties: <Task name>** window in one of the following ways:
  - Double-click the name of the task in the list of created tasks.
  - Select the name of the task in the list of created tasks and click **Change parameters** link.

- Open the context menu of the task name in the list of created tasks and select the **Properties** item.
4. In the **Notifications** section, configure the task event notification settings.

For detailed information regarding configuring settings in this section, see the *Kaspersky Security Center Help*.

5. Depending on the type of configured task, do one of the following actions:
  - To configure an On-Demand Scan task:
    - a. In the **Settings** section, generate a scan scope.
    - b. In the **Options** section, configure task priority level and integration with other software components.
  - To configure an update task, adjust task settings based on your requirements:
    - a. In the **Update source** section, configure update source settings and disk subsystem usage optimization.
    - b. Click the **Connection settings** to configure general connection settings and update source connection settings.
  - To configure Software Modules Update task, in the **Settings for application software module updates** choose an action to perform: copy and install critical updates of software modules or only check for them.
  - To configure the Copying Updates task, specify the set of updates and the destination folder in the **Copying Updates settings** section.
  - To configure the **Activation of the application task**, in the **Activation Settings** section apply the key file or activation code that you want to use to activate the application. Select the Use as additional activation code or key check box if you want to add an activation code or key for renewing the license.
  - To configure the automatic generation of allowing rules for server control, in the **Settings** section specify the settings based on which the list of allowing rules will be created.
6. Configure the task schedule in the **Schedule** section (you can configure a schedule for all task types except Rollback of Database Update).
7. In the **Account** section specify the account which rights will be used for the task execution. For detailed information regarding configuring settings in this section, see the *Kaspersky Security Center Help*.
8. If required, specify the objects to exclude from the task scope in the **Exclusions from task scope** section. For detailed information regarding configuring settings in this section, see the *Kaspersky Security Center Help*.
9. In the **Properties: <Task name>** window, click **OK**.

The newly configured group tasks settings are saved.

Group tasks settings that are available for configuring are summarized in the table below.

Table 27. Kaspersky Security 10.1 for Windows Server group tasks settings

Kaspersky Security 10.1 for Windows Server task types	Section in the Properties: <Task name> window	Task settings
Automatic rule generation (the Rule Generator for Applications Launch Control task and the Rule Generator for Device Control task).	<b>Settings</b>	<p>While configuring the Rule Generator for Applications Launch Control task settings you can:</p> <ul style="list-style-type: none"> <li>• Change the protection scope by adding or removing the paths to folders and specifying file types for which start is allowed by automatically generated rules.</li> <li>• Take into account currently running applications.</li> </ul>



	<p><b>Options</b></p>	<p>You can specify actions to perform while creating allowing rules for applications launch control:</p> <ul style="list-style-type: none"> <li>• <b>Use digital certificate</b> <p>If this option is selected, the presence of a digital certificate is specified as the rule-triggering criterion in the settings of the newly generated allowing rules for Applications Launch Control. The application will now allow start of programs launched using files with a digital certificate. This option is recommended if you want to allow the start of any applications that are trusted in the operating system.</p> </li> <li>• <b>Use digital certificate subject and thumbprint</b> <p>The check box enables or disables the use of the subject and thumbprint of the file's digital certificate as the criterion for triggering the allowing rules for Applications Launch Control. Selecting this check box lets you specify stricter digital certificate verification conditions.</p> <p>If this check box is selected, the subject and thumbprint values of the digital certificate of files for which the rules are generated are set as the criterion for triggering the allowing rules for Applications Launch Control. Kaspersky Security 10.1 for Windows Server will allow applications that are launched using files with a thumbprint and a digital certificate specified.</p> <p>Selecting this check box strongly restricts the triggering of allowing rules based on a digital certificate because a thumbprint is a unique identifier of a digital certificate and cannot be forged.</p> <p>If this check box is cleared, the existence of any digital certificate that is trusted in the operating system is set as the criterion for triggering the allowing rules for Applications Launch Control.</p> <p>This check box is active if the <b>Use digital certificate</b> option is selected.</p> <p>The check box is selected by default.</p> </li> <li>• <b>If the certificate is missing, use</b> <p>Drop down list that allows you to select the criterion for triggering the</p> </li> </ul>
--	-----------------------	--



	<b>Schedule</b>	You can configure the settings of scheduled startup of the task.
Activation of the application	<b>Application Settings</b>	To activate the application or to renew expiration date you can add activation code or key.
	<b>Schedule</b>	You can configure the settings of scheduled startup of the task.
Copying Updates	<b>Update source</b>	<p>You can specify Kaspersky Security Center Administration Server or Kaspersky Lab update servers as application update source. You can also create a customized list of update sources: by adding custom HTTP and FTP servers or network folders manually and setting them as update sources.</p> <p>You can specify the usage of Kaspersky Lab update servers, if manually customized servers are not available.</p>
	<b>Connection settings window</b>  ▶ <i>To open the <b>Connection settings</b> window,</i>  click the <b>Connection settings</b> button in the <b>Update source</b> section.	In the <b>Update source connection settings</b> section you can specify if connection to Kaspersky Lab update servers or any other server should be established via proxy server.

	<p><b>Copying Updates settings</b></p>	<p>You can specify the set of updates intended for copying.</p> <p>In the <b>Folder for local storage of copied updates</b> field, specify a path to a folder, which will be used by Kaspersky Security 10.1 for Windows Server to store copied updates.</p>
	<p><b>Schedule</b></p>	<p>You can configure the settings of scheduled startup of the task.</p>
<p>Database Update</p>	<p><b>Update source</b></p>	<p>You can specify Kaspersky Security Center Administration Server or Kaspersky Lab update servers as application update source in the <b>Update source</b> section. You can also create a customized list of update sources: by adding custom HTTP and FTP servers or network folders manually and setting them as update sources.</p> <p>You can specify the usage of Kaspersky Lab update servers, if manually customized servers are not available.</p> <p>In the Disk I/O usage optimization section you can configure the feature that reduces the workload on the disk subsystem:</p> <ul style="list-style-type: none"> <li>• <b>Lower the load on the disk I/O</b></li> </ul> <p>This check box enables or disables the feature of the disk subsystem optimization through storing update files on a virtual drive in the RAM.</p> <p>If the check box is selected, this function is enabled.</p> <p>The check box is cleared by default.</p> <ul style="list-style-type: none"> <li>• <b>RAM used for optimization (MB)</b></li> </ul>
<p>The size of the RAM (in MB) that the application uses for storing update files.</p> <p>The default RAM size is 512 MB</p>	<p><b>Connection settings window</b></p> <p>► <i>To open the <b>Connection settings</b> window,</i></p> <p>click the <b>Connection settings</b> button in the <b>Update source</b> section.</p>	<p>In the <b>Update source connection settings</b> section you can specify if connection to Kaspersky Lab update servers or any other server should be established via proxy server.</p>

	<b>Schedule</b>	You can configure the settings of scheduled start of the task.
Software Modules Update	<b>Update source</b>	<p>You can specify Kaspersky Security Center Administration Server or Kaspersky Lab update servers as application update source. You can also create a customized list of update sources: by adding custom HTTP and FTP servers or network folders manually and setting them as update sources.</p> <p>You can specify the usage of Kaspersky Lab update servers, if manually customized servers are not available.</p>
	<b>Connection settings window</b>  ► <i>To open the <b>Connection settings</b> window,</i>  click the <b>Connection settings</b> button in the <b>Update source</b> section.	In the <b>Update source connection settings</b> section you can specify if connection to Kaspersky Lab update servers or any other server should be established via proxy server.
	<b>Settings for application software module updates</b>	You can specify which actions should Kaspersky Security 10.1 for Windows Server perform when critical software module updates are available or have already been installed, and also if Kaspersky Security 10.1 for Windows Server should receive information regarding scheduled updates.
	<b>Schedule</b>	You can configure the settings of scheduled startup of the task.
On-Demand Scan	<b>Settings</b>	You can specify a Scan scope for On-Demand Scan task and configure security level settings.

	<p><b>On-Demand Scan settings window</b></p> <p>► <i>To open <b>On-Demand Scan settings</b> window,</i></p> <p>click <b>Configure</b> button in the <b>Scan scope</b> section.</p>	<p>You can choose one of predefined security levels, or customize security level manually.</p>
	<p><b>Options</b></p>	<p>You can activate or deactivate heuristic analyzer usage for On-Demand Scan task, and set analysis level using a slider In the <b>Heuristic analyzer</b> block.</p> <p>In the <b>Advanced settings</b> section, you can configure the following settings:</p> <ul style="list-style-type: none"> <li>• Apply Trusted Zone for On-Demand Scan tasks</li> <li>• Apply KSN usage for On-Demand Scan tasks</li> <li>• Set a priority for On-Demand Scan task: perform task in background mode (low priority) or consider task a Critical Areas Scan.</li> </ul>
	<p><b>Schedule</b></p>	<p>You can configure the settings of scheduled startup of the task.</p>
<p>Software Modules Integrity Check</p>	<p><b>Schedule</b></p>	<p>You can configure the settings of scheduled startup of the task.</p>

For the tasks, such as Rollback of Database Update, you can configure only standard task settings in the **Notifications** and **Exclusions from task scope** sections, controlled by Kaspersky Security Center. For detailed information regarding settings configuration of these sections, see the *Kaspersky Security Center Help*.

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## Rule Generator for Applications Launch Control and Rule Generator for Device Control tasks

► To configure the Rule Generator for Device Control task or the Rule Generator for Applications Launch Control task, do the following:

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node. Expand the administration group for whose computers you want to configure application tasks settings.
2. On the details pane of a chosen administration group, open **Tasks** tab.
3. In the list of previously created group tasks, choose a task you want to configure. Open the task's context menu and select **Properties**.

The **Properties: <Task name>** window opens.

4. In the **Notifications** section, configure the task event notification settings.
5. For detailed information regarding configuring settings in this section, see the *Kaspersky Security Center Help*.
6. In the **Settings** section, you can configure the following settings:
  - Change the protection scope by adding or removing the paths to folders and specifying file types for which launch is allowed by automatically generated rules.
  - Take into account currently running applications.
7. In the **Settings** section, you can specify actions to perform while creating allowing rules for applications launch control:

- **Use digital certificate**

If this option is selected, the presence of a digital certificate is specified as the rule-triggering criterion in the settings of the newly generated allowing rules for Applications Launch Control. The application will now allow start of programs launched using files with a digital certificate. This option is recommended if you want to allow the start of any applications that are trusted in the operating system.

- **Use digital certificate subject and thumbprint**

The check box enables or disables the use of the subject and thumbprint of the file's digital certificate as the criterion for triggering the allowing rules for Applications Launch Control. Selecting this check box lets you specify stricter digital certificate verification conditions.

If this check box is selected, the subject and thumbprint values of the digital certificate of files for which the rules are generated are set as the criterion for triggering the allowing rules for Applications Launch Control. Kaspersky Security 10.1 for Windows Server will allow applications that are launched using files with a thumbprint and a digital certificate specified.

Selecting this check box strongly restricts the triggering of allowing rules based on a digital certificate because a thumbprint is a unique identifier of a digital certificate and cannot be forged.

If this check box is cleared, the existence of any digital certificate that is trusted in the operating system is set as the criterion for triggering the allowing rules for Applications Launch Control.

This check box is active if the **Use digital certificate** option is selected.

The check box is selected by default.

- **If the certificate is missing, use**

Drop down list that allows you to select the criterion for triggering the allowing rules for Applications Launch Control if the file, which is used to generate the rule, has no digital certificate.

- **SHA256 hash.** The checksum value of the file, which is used to generate the rule, is set as the criterion for triggering the allowing rule for Applications Launch Control. The application will allow start of programs launched using files with the specified checksum.
- **Path to file.** The path to the file, which is used to generate the rule, is set as the criterion for triggering the allowing rule for Applications Launch Control. The application will now allow start of programs launched using files located in the folders specified tab in the Create allowing rules for applications from the folders table.

- **Use SHA256 hash**

If this option is selected, the checksum value of the file, which is used to generate the rule, is specified as the rule-triggering criterion in the settings of the newly generated allowing rules for Applications Launch Control. The application will allow start of programs launched using files with the specified checksum value.

This option is recommended for cases when the generated rules are required to meet ultimate security level: SHA256 checksum may be applied as a unique file ID. The usage of SHA256 checksum as a rule triggering criterion constricts the rule usage scope up to one file.

This option is selected by default.

- **Generate rules for user or group of users.**

Field that displays a user and / or group of users. The application will monitor any applications run by the specified user and / or group of users.

The default selection is **Everyone**.

You can configure settings for configuration files with allowing rules lists that Kaspersky Security 10.1 for Windows Server creates upon the task completion.

8. Configure the task schedule in the **Schedule** section (you can configure a schedule for all task types except Rollback of Database Update).
9. In the **Account** section specify the account which rights will be used for the task execution.
10. If required, specify the objects to exclude from the task scope in the **Exclusions** from task scope section.

For detailed information regarding configuring settings in these sections, see the [Kaspersky Security Center Help](#).

11. In the **Properties: <Task name>** window, click **OK**.

The newly configured group tasks settings are saved.

## Activation of the Application task

► To configure an Activation of the Application task, take the following steps:

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node. Expand the administration group for whose computers you want to configure application tasks settings.
2. On the details pane of a chosen administration group, open **Tasks** tab.
3. In the list of previously created group tasks, choose a task you want to configure. Open the task's context menu and select **Properties**.  
The **Properties: <Task name>** window opens.
4. In the **Notifications** section, configure the task event notification settings.
5. For detailed information regarding configuring settings in this section, see the *Kaspersky Security Center Help*.
6. In the **Activation Settings** section, apply the key file that you want to use to activate the application. Select the **Use as additional key** check box if you want to add a key to extend the license.
7. Configure the task schedule in the **Schedule** section (you can configure a schedule for all task types except Rollback of Database Update).
8. In the **Account** section specify the account which rights will be used for the task execution.
9. If required, specify the objects to exclude from the task scope in the **Exclusions** from task scope section.

For detailed information regarding configuring settings in these sections, see the *Kaspersky Security Center Help*.

10. In the **Properties: <Task name>** window, click **OK**.

The newly configured group tasks settings are saved.

## Update tasks

To configure the Copying Updates, Database Update, or Software Modules Update tasks, do the following:

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node. Expand the administration group for whose computers you want to configure application tasks settings.
2. On the details pane of a chosen administration group, open **Tasks** tab.
3. In the list of previously created group tasks, choose a task you want to configure. Open the task's context menu and select **Properties**.  
The **Properties: <Task name>** window opens.
4. In the **Notifications** section, configure the task event notification settings.

For detailed information regarding configuring settings in this section, see the *Kaspersky Security Center Help*.

5. Depending on the type of configured task, do one of the following actions:

- In the **Update source** section, configure update source settings and disk subsystem usage optimization.
  - a. You can specify Kaspersky Security Center Administration Server or Kaspersky Lab update servers as application update source in the **Update source** section. You can also create a customized list of update sources: by adding custom HTTP and FTP servers or network folders manually and setting them as update sources.  
  
You can specify the usage of Kaspersky Lab update servers, if manually customized servers are not available.
  - b. In the **Disk I/O usage optimization** section for the Database Update task, you can configure the feature that reduces the workload on the disk subsystem:
    - **Lower the load on the disk I/O**  
  
This check box enables or disables the feature of the disk subsystem optimization through storing update files on a virtual drive in the RAM.  
  
If the check box is selected, this function is enabled.  
  
The check box is cleared by default.
    - **RAM used for optimization (MB)**  
  
The size of the RAM (in MB) that the application uses for storing update files. The default RAM size is 512 MB.
  - c. Click the **Connection settings** button, and in the **Connection settings** window that opens, configure the use of a proxy server for connecting to Kaspersky Lab update servers and other servers.
- In the **Settings for application software module updates** section for the Software Modules Update task, you can specify which actions Kaspersky Security 10.1 for Windows Server should perform when critical software module updates are available or information about planned updates is available, and you can also specify which actions Kaspersky Security 10.1 for Windows Server should perform when critical updates are installed.
- Specify the set of updates and the destination folder in the **Copying Updates settings** section for the **Copying Updates** task.

6. Configure the task schedule in the **Schedule** section (you can configure a schedule for all task types except Rollback of Database Update).

7. In the **Account** section specify the account which rights will be used for the task execution.

8. If required, specify the objects to exclude from the task scope in the **Exclusions** from task scope section.

For detailed information regarding configuring settings in these sections, see the [Kaspersky Security Center Help](#).

9. In the **Properties: <Task name>** window, click **OK**.

The newly configured group tasks settings are saved.

For the Rollback of Database Update task, you can configure only standard task settings controlled by Kaspersky Security Center in the **Notifications** and **Exclusions** from task scope sections. For detailed information regarding configuring the settings in these sections, see the [Kaspersky Security Center Help](#).



## Software Modules Integrity Check

► *To configure the Software Modules Update group task:*

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node. Expand the administration group for whose computers you want to configure application tasks settings.
2. On the details pane of a chosen administration group, open **Tasks** tab.
3. In the list of previously created group tasks, choose a task you want to configure. Open the task's context menu and select **Properties**.

The **Properties: <Task name>** window opens.

4. In the **Notifications** section, configure the task event notification settings.

For detailed information regarding configuring settings in this section, see the [Kaspersky Security Center Help](#).

5. In the **Devices** section, select the devices for which you want to configure the Software Modules Integrity Check task.
6. Configure the task schedule in the **Schedule** section (you can configure a schedule for all task types except Rollback of Database Update).
7. In the **Account** section specify the account which rights will be used for the task execution.
8. If required, specify the objects to exclude from the task scope in the **Exclusions** from task scope section.

For detailed information regarding configuring settings in these sections, see the [Kaspersky Security Center Help](#).

9. In the **Properties: <Task name>** window, click **OK**.

The newly configured group tasks settings are saved.

## Creating an On-Demand Scan task

► *To create a new task in the Administration Console of Kaspersky Security Center:*

1. Start the task wizard in one of the following ways:
  - To create a local task:
    - a. Expand the **Managed devices** node in the tree of the Administration Server of Kaspersky Security Center and select the group that the protected server belongs to.
    - b. In the details pane, on the **Devices** tab open the context menu on the line with information about the protected server and select **Properties**.
    - c. In the window that opens, click the **Add** button in the **Tasks** section.
  - To create a group task:
    - a. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree

and select the group for which you want to create a policy.

- b. In the details pane, open the context menu on the **Tasks** tab and select **New** → **Task**.
- To create a task for a custom set of computers, in the **Device selections** node in the Kaspersky Security Center Administration Console tree select **New task**.

The task wizard window opens.

2. In the **Specify task name** window, enter the task name (no longer than 100 characters) not containing the symbols `! * < > ? \ / | : .`. It is recommended that the task type is added to its name (for example, "On-demand scan of shared folders").
3. In the **Task type** window under the heading **Kaspersky Security 10.1 for Windows Server**, select the **On-Demand Scan** task and click **Next**.
4. Create a scan scope in the **Scan scope** window:

By default, scan scope includes critical areas of the server. Scan scopes are marked in the table with the icon . Excluded scan scopes are marked with the  icon in the table. You can change the scan scope: add specific preset scan scopes, disks, folders, network objects and files and assign specific security settings for each scope added.

- To exclude all critical areas from the scan, open the context menu on each of the lines and select the **Remove scope** option.
- To include a predefined scan scope, disk, folder, network object, or file in the scan scope:
  - a. Right-click the **Scan scope** table and select **Add scope**.
  - b. In the **Add objects to the scan scope** window, select the predefined scope in the **Predefined scope** list, specify the computer drive, folder, network object, or file on the server or on another network computer, and click the **OK** button.
- To exclude subfolders or files from the scan, select the added folder (disk) in the **Scan scope** window of the wizard:
  - a. Open the context menu and select the **Configure** option.
  - b. Click the **Settings** button in the **Security level** window,
  - c. On the **General** tab in the **On-demand scan** settings window clear the **Subfolders** and **Subfiles** check boxes.
- To change scan scope security settings:
  - a. Open the context menu on the scope whose settings you wish to configure, and select **Configure**.
  - b. In the **On-demand scan** settings window, select one of the predefined security levels, or click the **Settings** button to configure security settings manually.  
Security settings configuration is performed in the same way as in Kaspersky Security 10.1 Console.
- To skip embedded objects in the added scan scope:
  - a. Open the context menu on the **Scan scope** table, select **Add** exclusion.
  - b. Specify the objects to exclude: select predefined scope in the **Predefined scope** list, specify the computer disk, folder, network object, or file on the server or on another network computer.
  - c. Click the **OK** button.

5. In the **Options** window, configure the heuristic analyzer and integration with other components:

- Configure the usage of heuristic analyzer (see Section "Using Heuristic Analyzer" on page [169](#)).
- Select the **Apply Trusted Zone** check box, if you want to exclude objects described in the Kaspersky Security 10.1 for Windows Server Trusted Zone from the scan scope of the task.

This check box enables / disables use of the trusted zone for a task.

If the check box is selected, Kaspersky Security 10.1 for Windows Server adds file operations of trusted processes to the scan exclusions configured in the task settings.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server disregards the file operations of trusted processes when forming the protection scope for the Real-Time File Protection task.

The check box is selected by default.

- Select the **Use KSN for scanning** check box, if you want to use Kaspersky Security Network cloud services for the task.

This check box enables / disables the use of Kaspersky Security Network (KSN) cloud services in the task.

If the check box is selected, the application uses data received from KSN services to ensure a faster response time by the application to new threats and reduce the likelihood of false positives.

If the check box is cleared, the On-Demand Scan task does not use KSN service.

The check box is selected by default.

- To assign the base priority **Low** to the working process in which the task will be executed, select the **Perform task in background mode** check box in the **Options** window.

The check box modifies the priority of the task.

If the check box is selected, the task priority in the operating system is reduced. The operating system provides resources for performing the task depending on the load on the CPU and the computer file system from other Kaspersky Security 10.1 for Windows Server tasks and applications. As a result, task performance will slow down during increased loads and will speed up at lower loads.

If the check box is cleared, the task will start and run with the same priority as the other Kaspersky Security 10.1 for Windows Server tasks and other applications. In this case, the speed of task execution increases.

The check box is cleared by default.

By default, the working processes in which Kaspersky Security 10.1 for Windows Server tasks are run have the **Medium (Normal)** priority.

- To use the created task as a Critical Areas Scan task, select the **Consider task as critical areas scan** check box in the **Options** window.

The check box changes the task priority: enables or disables logging of the *Critical Areas Scan* event and refreshing of the server protection status. Kaspersky Security Center evaluates the security rating of the server (servers) by the performance results of tasks with the *Critical Areas Scan* status. The check box is not available in the properties of local system and custom tasks of Kaspersky Security 10.1 for Windows Server. You can

edit this setting only on the side of Kaspersky Security Center.

If this check box is selected, Administration Server logs the Critical Areas Scan completed event and refreshes the server protection status on the basis of the task execution results. The scan task has a high priority.

If the check box is cleared, the task is run with a low priority.

The check box is selected by default for the Critical Areas Scan task.

6. Click **Next**.
7. In the **Schedule** window, setup a schedule (see Section "Configuring the task start schedule settings" on page [138](#)) for the task.
8. Specify a user account under which you want to run the task and define the task name.
9. Click **Finish**.

The new On-Demand Scan task will be created for a selected server or a group of servers.

## Configuring the On-Demand Scan task

► *To configure an existing On-Demand Scan task, take the following steps:*

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node. Expand the administration group for whose computers you want to configure application tasks settings.
2. On the details pane of a chosen administration group, open **Tasks** tab.
3. In the list of previously created group tasks, choose a task you want to configure. Open the task's context menu and select **Properties**.

The **Properties: <Task name>** window opens.

4. In the **Notifications** section, configure the task event notification settings.

For detailed information regarding configuring settings in this section, see the *Kaspersky Security Center Help*.

5. In the **Settings** section, you can perform the following actions:
  - a. In the **Scan scope** section, select the check boxes next to those file resources that you want to included in the scan scope.
  - b. Click the **Configure** button and select the security level.
 

You can select one of predefined security levels, or customize security level manually. To configure the security level manually, in the **On-Demand Scan settings** window click the **Settings** button.
6. In the **Options** section, you can perform the following actions:
  - a. Enable or disable use of the **Heuristic Analyzer** and set the analysis level using the slider in the **Heuristic analyzer** block.
  - b. Configure the **Advanced settings** (see Section "Creating an On-Demand Scan task" on page [131](#)).
7. Configure the task schedule in the **Schedule** section (you can configure a schedule for all task types except Rollback of Database Update).

8. In the **Account** section specify the account which rights will be used for the task execution.
9. If required, specify the objects to exclude from the task scope in the **Exclusions** from task scope section.

For detailed information regarding configuring settings in these sections, see the *Kaspersky Security Center Help*.

10. In the **Properties: <Task name>** window, click **OK**.

The newly configured group tasks settings are saved.

## Assigning the Critical Areas Scan task status to an On-Demand Scan task

By default, Kaspersky Security Center assigns the *Warning* status to the server if the Critical Areas Scan task is performed less often than specified by the **Critical areas scan has not been performed for a long time** event generation threshold setting of Kaspersky Security 10.1 for Windows Server.

► *To configure scanning of all servers in a single administration group, take the following steps:*

1. Create a group On-Demand Scan task.
2. In the **Options** window of the task wizard, select the **Consider task as Critical Areas Scan** check box. The task settings specified (the scan scope and security settings) will be applied to all computers in the group. Configure the task schedule.

You can select the **Consider task as Critical Areas Scan** check box both when creating the On-Demand Scan task for a group of computers or a set of computers and later in the **Properties: <task name>** window.

3. Using a new or existing policy disable the scheduled start of system scan tasks (see Section "Configuring scheduled start of local system tasks" on page [112](#)) on the group servers.

Kaspersky Security Center Administration Server will then evaluate the security status of the protected server and will notify you about it based on the results of the last run of the task with the Critical Areas Scan task status, rather than based on the results of the *Critical Areas Scan* system task.

You can assign the *Critical Areas Scan* task status both to group On-Demand Scan tasks and to tasks for sets of computers.

The Kaspersky Security 10.1 Console can be used to view whether the On-Demand Scan task is a Critical Areas Scan task.

In the Kaspersky Security 10.1 Console, the **Consider task as Critical Areas Scan** check box is displayed in task properties but cannot be edited.

## Configuring crash diagnostics settings in Kaspersky Security Center

If a problem occurs during Kaspersky Security 10.1 for Windows Server operation (for example, Kaspersky Security 10.1 for Windows Server crashes) and you want to diagnose it, you can enable the creation of trace files and the dump file of Kaspersky Security 10.1 for Windows Server process and send these files for analysis to Kaspersky Lab Technical Support.

Kaspersky Security 10.1 for Windows Server does not send any trace or dump files automatically. Diagnostics data can only be sent by the user with the corresponding permissions.

Kaspersky Security 10.1 for Windows Server writes information to trace files and the dump file in unencrypted form. The folder where files are saved is selected by the user and managed by the operating system configuration and Kaspersky Security 10.1 for Windows Server settings. You can configure access permissions (see Section "About access permissions for Kaspersky Security 10.1 for Windows Server functions" on page 96) and allow access to logs, trace and dump files only for required users.

► *To configure crash diagnostics settings in Kaspersky Security Center:*

1. In the Administration Console of Kaspersky Security Center, open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.
2. Open the **Malfunction diagnosis** section and do the following:
  - If you want the application to write debug information to file, select the **Write debug information to trace file** check box.
  - In the field below specify the folder in which Kaspersky Security 10.1 for Windows Server will save trace files.
  - Configure the level of detail of debug information.

This drop-down list lets you select the level of detail of debug information that Kaspersky Security 10.1 for Windows Server saves to the trace file.

You can select one of the following detail levels:

- **Critical events** – Kaspersky Security 10.1 for Windows Server saves information only about critical events to the trace file.
- **Errors** – Kaspersky Security 10.1 for Windows Server saves information about critical events and errors to the trace file.
- **Important events** – Kaspersky Security 10.1 for Windows Server saves information about critical events, errors, and important events to the trace file.
- **Informational events** – Kaspersky Security 10.1 for Windows Server saves information about critical events, errors, important events, and informational events to the trace file.
- **All debug information** – Kaspersky Security 10.1 for Windows Server saves all debug information to the trace file.

A Technical Support representative determines the detail level that needs to be set in order to resolve the issue that arose.

The default level of detail is set to **All debug information**.

The drop-down list is available if the **Write debug information to trace file** check box is selected.

- Specify the maximum size of trace files.
- Specify the components to be debugged. Component codes must be separated with a semicolon. The codes are case sensitive (see table below).

Table 28. Kaspersky Security 10.1 for Windows Server subsystem codes

Component Code	Name of component
*	All components.
gui	User interface subsystem, Kaspersky Security 10.1 for Windows Server snap-in in Microsoft Management Console.
ak_conn	Subsystem for integrating Network Agent and Kaspersky Security Center.
bl	Control process, implements Kaspersky Security 10.1 for Windows Server control tasks.
wp	Work process, handles anti-virus protection tasks.
blgate	Kaspersky Security 10.1 for Windows Server remote management process.
ods	On-Demand Scan subsystem.
oas	Real-Time File Protection subsystem.
qb	Quarantine and Backup subsystem.
scandll	Auxiliary module for anti-virus scans.
core	Subsystem for basic anti-virus functionality.
avscan	Anti-virus processing subsystem.
avserv	Subsystem for controlling the anti-virus kernel.
prague	Subsystem for basic functionality.
updater	Subsystem for updating databases and software modules.
snmp	SNMP protocol support subsystem.

perfcoun	Performance counter subsystem.
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The trace settings of the Kaspersky Security 10.1 for Windows Server snap-in (gui) and the Kaspersky Security 10.1 for Windows Server plug-in for Kaspersky Security Center (ak\_conn) are applied after these components are restarted. The trace settings of the SNMP protocol support subsystem (snmp) are applied after the SNMP service is restarted. The trace settings of the performance counters subsystem (perfcoun) are applied after all processes that use performance counters are restarted. Trace settings for other Kaspersky Security 10.1 for Windows Server subsystems are applied as soon as the crash diagnostics settings are saved.

By default, Kaspersky Security 10.1 for Windows Server logs debug information for all Kaspersky Security 10.1 for Windows Server components.

The entry field is available if the **Write debug information to trace file** check box is selected.

- If you want the application to create a dump file, select the **Create dump file** check box.
  - In the field below specify the folder in which Kaspersky Security 10.1 for Windows Server will save the memory dump file.

3. Click **OK**.

The configured application settings are applied on the protected server.

## Managing task schedules

You can configure the start schedule for Kaspersky Security 10.1 for Windows Server tasks, and configure settings for running tasks by schedule.

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## Configuring the task start schedule settings

You can configure the start schedule for local system and custom tasks in the Kaspersky Security 10.1 Console. You cannot configure the start schedule for group tasks.

► *To configure task start schedule settings, do the following:*

1. In the Kaspersky Security Center Console tree, expand the **Managed devices** node and do the following:
  - If you want to configure policy settings, in the computer group select **Policy > <Policy name> > <Section> > Configure > Task Management**.
  - If you want to configure application settings for a single computer using Kaspersky Security Center, open the **Task Settings** (see Section "**Configuring local tasks in Application settings window of Kaspersky Security Center**" on page [118](#)) window in Kaspersky Security Center.

The **Settings** window opens.



- In the window that opens, on the **Schedule** tab, select the **Run by schedule** check box.

Fields with the schedule settings for the On-Demand Scan and Update tasks are unavailable if their scheduled start is blocked by a policy of Kaspersky Security Center.

- Configure schedule settings in accordance with your requirements. To do this, perform the following actions:
  - In the **Frequency** list, select one of the following values:
    - Hourly**, if you want the task to run at intervals of a specified number of hours; specify the number of hours in the **Every <number> hour(s)** field.
    - Daily**, if you want the task to run at intervals of a specified number of days; specify the number of days in the **Every <number> day(s)** field.
    - Weekly**, if you want the task to run at intervals of a specified number of weeks; specify the number of weeks in the **Every <number> week(s)** field. Specify the days of the week on which the task will be started (by default the task runs on Mondays).
    - At application launch**, if you want the task to run every time Kaspersky Security 10.1 for Windows Server starts.
    - After application database update**, if you want the task to run after every update of the application databases.
  - Specify the time for the first task start in the **Start time** field.
  - In the **Start date** field, specify the date from which the schedule applies.

After you have specified the task start frequency, the time of the first task start, and the date from which the schedule applies, information about the estimated time for the next task start will appear in the top part of the window in the **Next start** field. Updated information about the estimated time of the next task start will be displayed each time you open the **Task** settings window of the **Schedule** tab.

The **Blocked by policy** value is displayed in the **Next start** field if the active policy settings of Kaspersky Security Center prohibit start of scheduled system tasks (see Section "Configuring scheduled start of local system tasks" on page [112](#)).

- Use the **Advanced** tab to configure the following schedule settings in accordance with your requirements.
  - In the **Task stop settings** section:
    - Select the **Duration** check box and enter the required number of hours and minutes in the fields to the right to specify the maximum duration of the task execution.
    - Select the **Pause from** check box and enter the start and end values of the time interval in the fields to the right to specify a time interval under 24 hours during which task execution will be paused.
  - In the **Advanced settings** section:
    - Select the **Cancel schedule from** check box and specify the date from which the schedule will cease to operate.
    - Select the **Run skipped tasks** check box to enable the start of skipped tasks.
    - Select the **Randomize the task start within interval** of check box and specify a value in minutes.

5. Click the **Apply** button to save the task start settings.

## Enabling and disabling scheduled tasks

You can enable and disable scheduled tasks either before or after configuring the schedule settings.

► *To enable or disable the task start schedule, take the following steps:*

1. In the Kaspersky Security 10.1 Console tree open the context menu on the task name for which you wish to configure the start schedule.
2. Select **Properties**.  
The **Task settings** window opens.
3. In the window that opens on the **Schedule** tab, do one of the following:
  - Select the **Run by schedule** check box if you want to enable scheduled task start.
  - Clear the **Run by schedule** check box if you want to disable scheduled task start.

The configured task start schedule settings are not deleted and will be applied at the next scheduled start of the task.

4. Click the **Apply** button.

The configured task start schedule settings are saved.

# Managing application settings

This section contains information about configuring Kaspersky Security 10.1 for Windows Server general settings in Kaspersky Security Center.

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## About ways to manage Kaspersky Security 10.1 for Windows Server from Kaspersky Security Center

You can centrally manage several servers with Kaspersky Security 10.1 for Windows Server installed and included in an administration group by means of the Kaspersky Security Center plug-in. Kaspersky Security Center also lets you separately configure the operation settings of each server included in the administration group.

*The administration group* is created on the side of Kaspersky Security Center manually and includes several servers with Kaspersky Security 10.1 for Windows Server installed, for which you want to configure the same control and protection settings. For details on using administration groups, see the *Kaspersky Security Center Help*.

Application settings for one computer are unavailable if the operation of Kaspersky Security 10.1 for Windows Server on that server is controlled by an active Kaspersky Security Center policy.

Kaspersky Security 10.1 for Windows Server can be managed from Kaspersky Security Center in the following ways:

- Using Kaspersky Security Center policies.** Kaspersky Security Center policies can be used to remotely configure the same protection settings for a group of servers. Task settings specified in the active policy have priority over task settings configured locally in Kaspersky Security 10.1 Console or remotely in the **Properties: <Computer name>** window of Kaspersky Security Center.

You can use policies to configure general application settings, Real-Time Protection task settings, Local Activity Control tasks settings, Network Attached Storage Protection task settings, scheduled system task start settings, and profile usage settings.
- Using Kaspersky Security Center group tasks.** Kaspersky Security Center group tasks allow remote configuration of common settings of tasks with an expiration period for a group of servers.

You can use group tasks to activate the application, configure On-Demand Scan task settings, update task settings, and Rule Generator for Applications Launch Control task settings.
- Using tasks for a set of devices.** Tasks for a set of devices allow remote configuration of common task settings with a limited execution period for servers that do not belong to any one of the

administration groups.

- **Using the properties window of a single computer.** In the **Properties: <Computer name>** window, you can remotely configure the task settings for a single server included in the administration group. You can configure both general application settings and settings of all Kaspersky Security 10.1 for Windows Server tasks if the selected server is not controlled by an active Kaspersky Security Center policy.

Kaspersky Security Center makes it possible to configure application settings, advanced features, and lets you work with logs and notifications. You can configure these settings for a group of servers as well as for an individual server.

## Configuring general application settings in Kaspersky Security Center

You can configure general Kaspersky Security 10.1 for Windows Server settings from Kaspersky Security Center for a group of servers or for one server.

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## Configuring scalability and the interface in Kaspersky Security Center

The process of configuring the settings of Kaspersky Security 10.1 for Windows Server functional components in Kaspersky Security Center is similar to local configuration of the settings of these components in Kaspersky Security 10.1 Console. Detailed instructions on how to configure task settings and application functions are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

► *To configure scalability settings and the application interface, take the following steps:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Application settings** section, in the **Scalability and interface** block, click **Settings**.
4. In the **Scalability and interface** window on the **General** tab, configure the following settings:
  - In the **Scalability settings** section, configure the settings that define the number of processes used by Kaspersky Security 10.1 for Windows Server:
    - **Automatically detect scalability settings.**

Kaspersky Security 10.1 for Windows Server automatically regulates the number of processes used.

This is the default value.
    - **Set the number of working processes manually.**

Kaspersky Security 10.1 for Windows Server regulates the number of active working processes according to the values specified.

      - **Maximum number of active processes.**

Maximum number of processes that Kaspersky Security 10.1 for Windows Server uses. The entry field is available if the **Set the number of working processes manually** option is selected.
      - **Number of processes for Real-Time Protection.**

Maximum number of processes that are used by the Real-Time Protection task components. The entry field is available if the **Set the number of working processes manually** option is selected.
      - **Number of processes for background On-Demand Scan tasks.**

Maximum number of processes used by the On-Demand Scan component when running On-Demand Scan tasks in background mode. The entry field is available if the **Set the number of working processes manually** option is selected.
  - In the **Interaction with user** section, configure the display of the Kaspersky Security 10.1 for Windows Server Taskbar Icon in the taskbar notification area: clear or select the **Display application icon in the taskbar** check box.
5. On the **Hierarchical storage** tab, select one of the following options for access to hierarchical storage:
  - **Non-HSM system**

Kaspersky Security 10.1 for Windows Server does not use HSM system settings while running On-Demand Scan tasks.

This option is selected by default.
  - **HSM system uses reparse points**

Kaspersky Security 10.1 for Windows Server uses reparse points for scanning files in a remote storage during On-Demand Scan tasks.
  - **HSM system uses extended file attributes**

Path to the folder for restoring objects, in UNC (Universal Naming Convention) format.

The default path is C:\ProgramData\Kaspersky Lab\Kaspersky Security for Windows Server\10.0\Restored\.

- **Unknown HSM system**

Kaspersky Security 10.1 for Windows Server scans all files as files located in a remote storage during On-Demand Scan tasks.

This option is not recommended.

If you do not use HSM systems, leave unchanged the default value of the HSM system settings setting (Non-HSM system).

6. Click **OK**.

The configured application settings are saved.

## Configuring security settings in Kaspersky Security Center

The process of configuring the settings of Kaspersky Security 10.1 for Windows Server functional components in Kaspersky Security Center is similar to local configuration of the settings of these components in Kaspersky Security 10.1 Console. Detailed instructions on how to configure task settings and application functions are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

► To configure security settings manually, take the following steps:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Application settings** section, click the **Settings** button under the **Security and reliability** settings.
4. In the **Security settings** window, configure the following settings:
  - In the **Reliability settings** section, configure the settings for recovery of Kaspersky Security 10.1 for Windows Server tasks when the application returns an error or terminates.
    - **Perform task recovery**

This check box enables or disables the recovery of Kaspersky Security 10.1 for Windows

Server tasks when the application returns an error or terminates.

If the check box is selected, Kaspersky Security 10.1 for Windows Server automatically recovers Kaspersky Security 10.1 for Windows Server tasks when the application returns an error or terminates.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server does not recover Kaspersky Security 10.1 for Windows Server tasks when the application returns an error or terminates.

The check box is selected by default.

- **Recover On-Demand Scan tasks no more than (times)**

The number of attempts to recover an On-Demand Scan task after Kaspersky Security 10.1 for Windows Server returns an error. The entry field is available if the **Perform task recovery** check box is selected.

- In the **Actions when switching to UPS backup power** section, specify limitations on server load created by Kaspersky Security 10.1 for Windows Server after switching to UPS power:

- **Do not start scheduled scan tasks**

This check box enables or disables the start of a scheduled scan task after the computer switches to a UPS source until the standard power supply mode is restored.

If the check box is selected, Kaspersky Security 10.1 for Windows Server does not start scheduled scan tasks after the computer switches to a UPS source until the standard power supply mode is restored.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server starts scheduled scan tasks regardless of the power supply mode.

The check box is selected by default.

- **Stop current scan tasks**

The check box enables or disables the execution of running scan tasks after the computer switches to a UPS source.

If the check box is selected, Kaspersky Security 10.1 for Windows Server pauses running scan tasks after the computer switches to a UPS source.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server continues running scan tasks after the computer switches to a UPS source.

The check box is selected by default.

- In the **Password protection settings** section, set a password to protect access to Kaspersky Security 10.1 for Windows Server functions.

1. Click **OK**.

The scalability and reliability settings are saved.

## Configuring connection settings using Kaspersky Security Center

The process of configuring the settings of Kaspersky Security 10.1 for Windows Server functional components in Kaspersky Security Center is similar to local configuration of the settings of these components in Kaspersky Security 10.1 Console. Detailed instructions on how to configure task settings and application functions are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

The configured connection settings are used to connect Kaspersky Security 10.1 for Windows Server to update and activation servers and during integration of applications with KSN services.

► *To configure the connection settings take the following steps:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Application settings** section click the **Settings** button in the **Proxy server** block.

The **Connection settings** window opens.

4. In the **Connection settings** window, configure the following settings:
  - In the **Proxy server settings** section, select the proxy server usage settings:
    - **Do not use proxy server.**  
If this option is selected, Kaspersky Security 10.1 for Windows Server connects to KSN services directly, without using any proxy server.
    - **Automatically detect proxy server settings.**  
If this option is selected, Kaspersky Security 10.1 for Windows Server automatically defines the settings for connection to KSN services using Web Proxy Auto-Discovery Protocol (WPAD).  
This option is selected by default.
    - **Use specified proxy server settings.**  
If this option is selected, Kaspersky Security 10.1 for Windows Server connects to KSN using proxy server settings specified manually.
  - IP address or the symbol name of the proxy server and the port number.



- **Do not use proxy server for local addresses.**

The check box enables or disables the use of a proxy server when accessing computers located in the same network as the computer with Kaspersky Security 10.1 for Windows Server installed.

If this check box is selected, computers are accessed directly from the network, which hosts the computer with Kaspersky Security 10.1 for Windows Server installed. No proxy server is used.

If the check box is cleared, the proxy server is applied to connect to local computers.

The check box is selected by default.

- In the **Proxy server authentication settings** section, specify the authentication settings:
  - Select the authentication settings in the drop-down list.
    - **Do not use authentication** – authentication is not performed. This mode is selected by default.
    - **Use NTLM authentication** – authentication is performed using the NTLM network authentication protocol developed by Microsoft.
    - **Use NTLM authentication with user name and password** – authentication is performed using the name and password through the NTLM network authentication protocol developed by Microsoft.
    - **Apply user name and password** – authentication is performed using the user name and password.
  - Enter user name and password, if needed.
- In the **Licensing** block clear or select the **Use Kaspersky Security Center as a proxy server when activating the application**.

5. Click **OK**.

The configured connection settings are saved.

## Configuring advanced features

You can configure Kaspersky Security 10.1 for Windows Server advanced features from Kaspersky Security Center for a group of computers or for a single computer.

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## Configuring Trusted Zone settings in Kaspersky Security Center

By default, Trusted Zone is applied in newly created policies and tasks.

► *To configure the Trusted Zone settings:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Supplementary** section, click the **Settings** button in the **Trusted zone** block.  
The **Trusted Zone** window opens.
4. On the **Exclusions** tab, specify the objects to be skipped by Kaspersky Security 10.1 for Windows Server during scanning:
  - To create recommended exclusions, click the **Add recommended exclusions** button.  
Clicking this button allows you to extend the list of exclusions by adding exclusions recommended by Microsoft, exclusions recommended by Kaspersky Lab.
  - To import exclusions, click the **Import** button and in the window that opens select the files that Kaspersky Security 10.1 for Windows Server will consider trusted.
  - To manually specify the conditions under which a file will be considered trusted, click the **Add** button. In the window that opens, specify the following settings:
    - **Object to scan**  
File name, filename mask, local or removable computer drive, local or network folder, predefined scope, etc.
    - **Objects to detect**  
The list of names of detectable objects is available on the Virus Encyclopedia website.  
If this check box is selected, Kaspersky Security 10.1 for Windows Server skips specified detectable objects during scanning.  
If the check box is cleared, Kaspersky Security 10.1 for Windows Server detects all objects specified in the application by default.  
The check box is cleared by default.
    - **Exclusion usage scope**  
Name of the Kaspersky Security 10.1 for Windows Server task in which the rule is used.

- If necessary, specify additional information explaining the exclusion in the **Comment** field.
5. In the **Trusted Zone** window on the **Trusted processes** tab specify the processes to be skipped by Kaspersky Security 10.1 for Windows Server during scanning:
    - **Do not check file backup operations**

The check box enables or disables the scanning of file read operations if such operations are performed by Backup tools installed on the server.

If the check box is selected, Kaspersky Security 10.1 for Windows Server skips file read operations performed by Backup tools installed on the server.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server scans file read operations performed by Backup tools installed on the server.

The check box is selected by default.
    - **Do not check file activity of the specified processes**

The check box enables or disables the scanning of file activity of trusted processes.

If the check box is selected, Kaspersky Security 10.1 for Windows Server skips operations of trusted processes during scanning.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server scans file operations of trusted processes.

The check box is cleared by default.
  6. If necessary, add processes whose file activity you do not want to scan (see Section "Adding trusted processes" on page [149](#)) by clicking the **Add** button.
  7. Click **OK** in the **Trusted Zone** window to save changes.

## Adding trusted processes

► *To add one or a number of processes to the list of trusted processes:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Supplementary** section, click the **Settings** button in the **Trusted zone** block.  
The **Trusted Zone** window opens.
4. On the **Trusted processes** tab, select the **Do not check file activity of the specified processes** check

box.

5. Click the **Add** button.
6. From the button context menu select one of the options:

- **Multiple processes.**

In the **Trusted processes adding** window that opens, configure the following:

- a. **Use full process path on disk to consider it trusted.**

If the check box is selected, Kaspersky Security 10.1 for Windows Server will use the full path to the file to determine the process trust status.

If the check box is cleared, the path to the file is not considered as a criterion for determining the process trust status.

The check box is selected by default.

- b. **Use process file hash to consider it trusted.**

If the check box is selected, Kaspersky Security 10.1 for Windows Server uses the selected file's hash to determine the process trust status.

If the check box is cleared, the file's hash will not be considered as a criterion for determining the process trust status.

The check box is selected by default.

- c. Click the **Browse** button to add data based on executable processes.
- d. Select an executable file in the window that opens.

You can only add one executable file at a time. Repeat steps c-d to add other executable files.

- e. Click the **Processes** button to add data based on running processes.
- f. Select processes in the window that opens. To select multiple processes, press and hold **CTRL** button while selecting.
- g. Click **OK**.

It is required that the account under which the Real-Time File Protection task is run has the administrator rights on the server with Kaspersky Security 10.1 for Windows Server installed in order to allow viewing the list of active processes. You can sort processes in the list of active processes by file name, PID, or path to the executable file of the process on the local server. Note, that you can select running processes by clicking the **Processes** button only using the Kaspersky Security 10.1 Console on a local server or in the specified host settings via the Kaspersky Security Center.

- **One process based on the name and path.**

In the **Add trusted process manually** window that opens, configure the following:

- a. Enter a path to executable file (including the file name).
- b. Click **OK**.

- **One process based on the properties of the object.**

In the **Add trusted process** window that opens, configure the following:

a. Click the **Browse** button and select a process.

b. **Use full process path on disk to consider it trusted.**

If the check box is selected, Kaspersky Security 10.1 for Windows Server will use the full path to the file to determine the process trust status.

If the check box is cleared, the path to the file is not considered as a criterion for determining the process trust status.

The check box is selected by default.

c. **Use process file hash to consider it trusted.**

If the check box is selected, Kaspersky Security 10.1 for Windows Server uses the selected file's hash to determine the process trust status.

If the check box is cleared, the file's hash will not be considered as a criterion for determining the process trust status.

The check box is selected by default.

d. Click **OK**.

To add the selected process to the list of trusted processes, at least one trust criterion must be selected.

7. In the **Add trusted process** window, click the **OK** button.

The selected file or process will be added to the list of trusted processes in the **Trusted Zone** window.

## Applying the not-a-virus mask

The not-a-virus mask allows to skip legitimate software files and web resources, which can be considered harmful, during the scanning. The mask affects the following tasks:

- Real-Time File Protection.
- On-Demand scan.
- Script Monitoring.
- RPC-Network Storage Protection.
- Traffic Security.

If the mask is not added to exclusions list, Kaspersky Security 10.1 for Windows Server will apply the actions set in the task settings for the software or web resources which fall under this category.

► *To apply the not-a-virus mask:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the

**Properties:** <Policy name> (see Section "Configuring policy" on page 107) window.

- If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Supplementary** section, click the **Settings** button in the **Trusted zone** block.  
The **Trusted Zone** window opens.
4. On the **Exclusions** tab, scroll the list and select the line with **not-a-virus:\*** value, if the check box is cleared.
5. Click **OK**.

New configuration is applied.

## Removable Drives Scan

You can configure scanning of removable drives connected to the protected server via the USB port.

Kaspersky Security 10.1 for Windows Server scans a removable drive using the On-Demand Scan task. The application automatically creates a new On-Demand Scan task when the removable drive is connected and deletes the task after the scanning is completed. The created task is performed with the predefined security level defined for removable drive scanning. You cannot configure the settings of the temporary On-Demand Scan task.

If you installed Kaspersky Security 10.1 for Windows Server without anti-virus databases, the removable drives scan will be unavailable.

Kaspersky Security 10.1 for Windows Server scans connected removable USB drives when they are registered as USB mass storage devices in the operating system. The application does not scan a removable drive if the connection is blocked by the Device Control task. The application does not scan MTP-connected mobile devices.

Kaspersky Security 10.1 for Windows Server allows access to removable drives during scanning.

Scan results for each removable drive are available in the log for the On-Demand Scan task created upon connection of the removable drive.

You can change the settings of the Removable Drives Scan component (see the table below).

Table 29. Removable Drives Scan settings

Setting	Default Value	Description
---------	---------------	-------------

<b>Scan removable drives on connection via USB</b>	Check box is cleared	You can turn on or turn off scanning of removable drive upon connection to the protected server via USB.
<b>Scan removable drives if its stored data volume does not exceed (MB):</b>	1024 MB	<p>You can reduce the component's scope by setting the maximum volume of data on the scanned drive.</p> <p>Kaspersky Security 10.1 for Windows Server does not perform removable drive scanning if the volume of stored data exceeds the specified value.</p>
<b>Scan with security level</b>	Maximum protection	<p>You can configure the created On-Demand Scan tasks by selecting one of three security levels:</p> <ul style="list-style-type: none"> <li>• Maximum protection</li> <li>• Recommended</li> <li>• Maximum performance</li> </ul> <p>The algorithm used when infected, probably infected, and other objects are detected, as well as the other scan settings for each security level, correspond to the predefined security levels in the On-Demand Scan tasks.</p>

To configure scanning of removable drives on connection, perform the following actions:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Supplementary** section click **Settings** in the **Removable Drives Scan** block.  
The **Removable Drives Scan** window opens.
4. In the **Scan on connection** section do the following:
  - Select the **Scan removable drives on connection via USB** check box, if you want Kaspersky

Security 10.1 for Windows Server to automatically scan removable drives when they are connected.

- If required, select the **Scan removable drives if its stored data volume does not exceed (MB)** and specify the maximum value in the field on the right.
- In the **Scan with security level** drop-down list specify the security level with the settings that are required for removable drives scanning.

5. Click **OK**.

The specified settings are saved and applied.

## Configuring access permissions in Kaspersky Security Center

You can configure access permissions for managing the application and Kaspersky Security Service in Kaspersky Security Center for a group of computers or for a separate computer.

The process of configuring the settings of Kaspersky Security 10.1 for Windows Server functional components in Kaspersky Security Center is similar to local configuration of the settings of these components in Kaspersky Security 10.1 Console. Detailed instructions on how to configure task settings and application functions are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

► *To access permissions for managing the application and Kaspersky Security Service:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name> (see Section "Configuring policy" on page 107)** window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118)** window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. Open the **Supplementary** section and do the following:
  - To configure access permissions for managing Kaspersky Security 10.1 for Windows Server for a user or group of users, in the **User access permissions for application management** section click the **Settings** button.
  - To configure access permissions for managing Kaspersky Security Service for a user or group of users, in the **User access permissions for Security Service management** section click the **Settings** button.
4. In the window that opens, configure the access privileges (see Section "About access permissions for Kaspersky Security 10.1 for Windows Server functions" on page 96) according to your needs.



The specified settings are saved.

## Configuring Quarantine and Backup settings in Kaspersky Security Center

The process of configuring the settings of Kaspersky Security 10.1 for Windows Server functional components in Kaspersky Security Center is similar to local configuration of the settings of these components in Kaspersky Security 10.1 Console. Detailed instructions on how to configure task settings and application functions are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

► To configure general Backup settings in Kaspersky Security Center:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Supplementary** section, click the **Settings** button in the **Storages** block.
4. Use the **Backup** tab of the **Storages** settings window to configure the following **Backup** settings:
  - To specify the **Backup folder**, use the **Backup folder** field to select the required folder on the local drive of the protected server, or enter its full path.
  - To set the maximum size of **Backup**, select the **Maximum Backup size (MB)** check box and specify the relevant value in megabytes in the entry field.
  - To set the threshold of free space in Backup, define the value of the **Maximum Backup size (MB)** setting, select the **Threshold value for space available (MB)** check box, and specify the minimum value of free space in the **Backup** folder in megabytes.
  - To specify a folder for restored objects, select the relevant folder on a local drive of the protected server in the Restoration settings section, or enter the name of the folder and the full path to it in the **Target folder for restoring objects** field.
5. In the **Storages** settings window on the **Quarantine** tab, configure the following **Quarantine** settings:
  - To change the **Quarantine** folder, in the **Quarantine** folder entry field specify the complete path to the folder on the local drive of the protected server.
  - To set the maximum **Quarantine** size, select the **Maximum Quarantine size (MB)** check box and

specify the value of this parameter in megabytes in the entry field.

- To set the minimum amount of free space in **Quarantine**, select the **Maximum Quarantine size (MB)** check box and the **Threshold value for space available (MB)** check box, and then specify the value of this parameter in megabytes in the entry field.
- To change the folder to which objects are restored from Quarantine, in the **Target folder for restoring objects** entry field specify the complete path to the folder on the local drive of the protected server.

6. Click **OK**.

The configured Quarantine and Backup settings are saved.

## Untrusted hosts blocking. Blocked Hosts

This section describes how to block the untrusted computers and configure the Blocked Hosts storage settings.

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### About untrusted hosts blocking

The Blocked Hosts storage is installed by default if any of the following components is installed: Real-Time Protection, Anti-Cryptor for NetApp, Anti-Cryptor. The components monitor remote hosts' attempts to access the protected server or network attached storage shared network folders in accordance with the list of untrusted hosts. Information about blocked hosts from all protected servers is sent to the Kaspersky Security Center. Kaspersky Security 10.1 for Windows Server blocks access to server's shared network folders or network attached storage folders for all remote hosts in the list of blocked hosts.

The Blocked Hosts storage is populated, when at least one of the following tasks is started in an active mode and specified conditions are met:

- If, while the Real-Time File Protection task is running, malicious activity by a computer accessing network file resources is detected and in the Real-Time File Protection task settings the **List hosts showing malicious activity as untrusted** check box is selected.
- If, while the Anti-Cryptor task is running, malicious encryption by a computer accessing network file resources is detected.
- If, while Anti-Cryptor for NetApp task is running, the ransomware attack on the network attached storage is detected.

After the malicious activity or encryption attempt is detected, the task sends information about the attacking host to the Blocked Hosts storage and the application creates a critical event for the host blocking. Any attempts to access the protected shared network folders performed from this host will be blocked.

By default Kaspersky Security 10.1 for Windows Server removes untrusted hosts from the list in 30 minutes since they were added to the list. Computers' access to network file resources is restored automatically after they are deleted from the list of untrusted hosts. You can specify the period of time after which blocked hosts are

automatically unblocked.

## Enabling untrusted hosts blocking

To add hosts showing any malicious or encrypting activity to the **Blocked Hosts** storage and block access to network file resources for those hosts, at least one of the following tasks must run in the active mode:

- Real-Time File Protection
- Anti-Cryptor
- Anti-Cryptor for NetApp

### ► *Configure the Real-Time File Protection task:*

1. In the Kaspersky Security Center Administration Console tree, expand the **Managed devices** node.
2. Select the **Policies** tab and open **<Policy name> > Real-Time Server Protection > Settings** in the **Real-Time File Protection** block.

The **Real-Time Server Protection** window opens.

3. In the **Integration with other components** section, select the **List hosts showing malicious activity as untrusted** check box if you want Kaspersky Security 10.1 for Windows Server to block access to network file resources for hosts on which malicious activity is detected while the Real-Time File Protection task is running.
4. If the task has not been started, open the **Task management** tab:
  - a. Select the **Run by schedule** check box.
  - b. Select the **At application launch** frequency in the drop-down list.
5. In the **Real-Time Server Protection** window, click **OK**.

The newly configured settings are saved.

### ► *Configure the Anti-Cryptor task:*

1. In the Kaspersky Security Center Administration Console tree, expand the **Managed devices** node.
2. Select the **Policies** tab and open **<Policy name> > Network Activity Control > Settings** in the **Anti-Cryptor** block.

The **Anti-Cryptor** window opens.

3. If the task has not been started, open the **Task management** tab:
  - a. Select the **Run by schedule** check box.
  - b. Select the **At application launch** frequency in the drop-down list.
4. In the **Anti-Cryptor** window, click **OK**.

The newly configured settings are saved.

### ► *Configure the Anti-Cryptor for NetApp task:*

1. In the Kaspersky Security Center Administration Console tree, expand the **Managed devices** node.
2. Select the **Policies** tab and open **<Policy name> > Network Attached Storage Protection > Settings** in the **Anti-Cryptor for NetApp** block.

The **Anti-Cryptor for NetApp** window opens.

3. If the task has not been started, open the **Task management** tab:
  - a. Select the **Run by schedule** check box.
  - b. Select the **At application launch** frequency in the drop-down list.
4. In the **Anti-Cryptor for NetApp** window, click **OK**.

Kaspersky Security 10.1 for Windows Server blocks access to network file resources for the hosts showing malicious or encrypting activity.

## Configuring Blocked Hosts settings

► *To configure the Blocked Hosts storage:*

1. In the Administration Console of Kaspersky Security Center, open the Application settings window (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)).
2. In the **Supplementary** section, click the **Settings** button in the **Storages** block.

The **Storages settings** window opens.

You can configure host blocking term for the group of managed servers via the policy settings. To configure host blocking term, open **<Policy name> > Advanced** and click the **Settings** button. On the **Blocked Hosts** tab adjust the host blocking term. The blocked hosts list is unavailable in the policy settings.

3. Open the **Blocked Hosts** tab.
4. In the **Host blocking term** section, specify the number of days, hours and minutes after which blocked hosts regain access to network file resources after being blocked.
5. Click the **Blocked host list** button.
6. Perform one of the following steps:
  - In the **List of untrusted hosts** window that opens, select the hosts for which you want to restore access, and click the **Remove from the list** button.
  - Click the **Clear entire list** to remove hosts from the list of untrusted hosts and restore access for all blocked hosts.
7. Click **OK**.  
Selected computers are unblocked and deleted from the list of blocked hosts.
8. Click **OK** in the **Storages settings** window .

The newly configured blocked hosts settings are saved.

## Configuring logs and notifications

The Kaspersky Security Center Administration Console can be used to configure notifications for administrator and users about the following events related to Kaspersky Security 10.1 for Windows Server and the status of Anti-Virus protection on the protected server:

- The administrator can receive information about events of selected types;
- LAN users who access the protected server and terminal server users can receive information about events of the *Object detected* type.

Notifications about Kaspersky Security 10.1 for Windows Server events can be configured either for a single computer using the **Properties: <Computer name>** window of the selected computer, or for a group of computers in the **Properties: <Policy name>** window of the selected administration group.

On the **Events** tab or in the **Notification settings** window, you can configure the following types of notifications:

- Administrator notifications about events of selected types can be configured using the **Events** tab (the standard tab of the Kaspersky Security Center application). For details on notification methods, see the *Kaspersky Security Center Help*.
- Both administrator and user notifications can be configured in the **Notification settings** window.

The process of configuring the settings of Kaspersky Security 10.1 for Windows Server functional components in Kaspersky Security Center is similar to local configuration of the settings of these components in Kaspersky Security 10.1 Console. Detailed instructions on how to configure task settings and application functions are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

You can configure notifications for some events types in the window or on the tab only; you can use both the window and the tab for configuring notifications for other events types.

If you configure notifications about events of the same type using the same mode on the **Events** tab and in the **Notification settings** window, the system administrator will receive notifications of those events twice but in the same mode.

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## Configuring log settings

The process of configuring the settings of Kaspersky Security 10.1 for Windows Server functional components in Kaspersky Security Center is similar to local configuration of the settings of these components in Kaspersky Security 10.1 Console. Detailed instructions on how to configure task settings and application functions are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

► To configure Kaspersky Security 10.1 for Windows Server logs, perform the following steps:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Logs and notifications** section, click the **Settings** button in the **Task logs** block.
4. In the **Logs settings** window define the following settings of Kaspersky Security 10.1 for Windows Server according to your requirements:
  - Configure the level of detail of events in logs. To do this, perform the following actions:
    - a. In the **Component** list select the component of Kaspersky Security 10.1 for Windows Server for which you want to set the detail level.
    - b. To define level of detail in the task logs and system audit log for the selected component, choose the level you need from **Importance level**.
  - To change the default location for logs, specify full path to the folder or click the **Browse** button to select it.
  - Specify how many days task logs will be stored.
  - Specify how many days information displayed in the **System audit log** node will be stored.
5. Click **OK**.

The configured log settings are saved.

## Security event log

Kaspersky Security 10.1 for Windows Server maintains a log of events associated with security breaches or attempted security breaches on the protected server. The following events are recorded in this log:

- Exploit Protection events.
- Critical Log Inspection events.
- Critical events that indicate an attempted security breach (for the Real-Time Protection, On-Demand Scan, File Integrity Monitor, Applications Launch Control, and Device Control tasks).

You can clear the Security log as well as the System Audit Log. Moreover, Kaspersky Security 10.1 for Windows Server records system audit events regarding clearing the Security log.

## Configuring SIEM integration settings

To reduce the load on low-performance devices and to reduce the risk of system degradation as a result of increased volumes of application logs, you can configure the publication of audit events and task performance events to the *syslog server* via the Syslog protocol.

A syslog server is an external server for aggregating events (SIEM). It collects and analyzes received events and also performs other actions for managing logs.

You can use SIEM integration in two modes:

- Duplicate events on the syslog server: this mode prescribes that all task performance events whose publication is configured in the settings of logs as well as all system audit events continue to be stored on the local computer even after they are sent to SIEM.

It is recommended to use this mode to maximally reduce the load on the protected server.

- Delete local copies of events: this mode prescribes that all events that are registered during application operation and published to SIEM will be deleted from the local computer.

The application never deletes local versions of the security log.

Kaspersky Security 10.1 for Windows Server can convert events in application logs into formats supported by the syslog server so that those events can be transmitted and successfully recognized by SIEM. The application supports conversion into structured data format and into JSON format.

To reduce the risk of unsuccessful transmission of events to SIEM, you can define the settings for connecting to the mirror syslog server.

A mirror syslog server is an additional syslog server to which the application switches automatically if the connection to the main syslog server is unavailable or if the main server cannot be used.

By default, SIEM integration is not used. You can enable and disable SIEM integration, and configure functionality settings (see the table below).

Table 30. SIEM integration settings

Setting	Default Value	Description
<b>Send events to a remote syslog server via syslog protocol</b>	Not applied	You can enable or disable SIEM integration by selecting or clearing the check box, respectively.

Setting	Default Value	Description
<b>Remove local copies for events that have been sent to a remote syslog server</b>	Not applied	You can configure the settings for storing local copies of logs after they are sent to SIEM by selecting or clearing the check box.
Events format	Structured data	You can select one of two formats to which the application converts its events prior to sending them to the syslog server for better recognition of these events by SIEM.
Connection protocol	TCP	You can use the drop-down list to configure the connection to the main syslog server via the UDP or TCP protocols; to the mirror syslog server via the TCP protocol.
Main syslog server connection settings	IP address: 127.0.0.1  Port: 514	You can use the appropriate fields to configure the IP address and port used to connect to the main syslog server.  You can specify the IP address only in IPv4 format.
<b>Use mirror syslog server if the main server is not accessible</b>	Not applied	You can use the check box to enable or disable the use of a mirror syslog server.
Mirror syslog server connection settings	IP address: 127.0.0.1  Port: 514	You can use the appropriate fields to configure the IP address and port used to connect to the main syslog server.  You can specify the IP address only in IPv4 format.

► *To configure SIEM integration settings:*

- Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
- Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

- In the **Logs and notifications** section click the **Settings** button in the **Task logs** block.  
The **Logs and notifications settings** window opens.
- Select the **SIEM integration** tab.



5. In the **Integration settings** section, select the **Send events to a remote syslog server via syslog protocol** check box.

The check box enables or disables the functionality for sending published events to an external syslog server.

If the check box is selected, the application sends published events to SIEM according to the configured SIEM integration settings.

If the check box is cleared, the application does not perform SIEM integration. You cannot configure SIEM integration settings if the check box is cleared.

The check box is cleared by default.

6. If necessary, in the **Integration settings** section, select the **Remove local copies for events that have been sent to a remote syslog server** check box.

The check box enables or disables deletion of local copies of logs when they are sent to SIEM.

If the check box is selected, the application deletes the local copies of events after they have been successfully published to SIEM. This mode is recommended on low-performance computers.

If the check box is cleared, the application only sends events to SIEM. Copies of logs continue to be stored locally.

The check box is cleared by default.

The status of the **Remove local copies for events that have been sent to a remote syslog server** check box does not affect the settings for storing events of the security log: the application never automatically deletes security log events.

7. In the **Events format** section, specify the format to which you want to convert application operation events so that they can be sent to SIEM.

By default, the application converts them into structured data format.

8. In the **Connection settings** section:

- Specify the SIEM connection protocol.
- Specify the settings for connecting to the main syslog server.

You can specify an IP address in IPv4 format only.

- If necessary, select the **Use mirror syslog server if the main server is not accessible** check box if you want the application to use other connection settings when unable to send events to the main syslog server.

- Specify the following settings for connecting to the mirror syslog server: **IP address** and **Port**.

The **IP address** and **Port** fields for the mirror syslog server cannot be edited if the **Use mirror syslog server if the main server is not accessible** check box is cleared.

You can specify an IP address in IPv4 format only.

9. Click **OK**.

The configured SIEM integration settings will be applied.

## Configuring notification settings

► To configure Kaspersky Security 10.1 for Windows Server notifications, perform the following steps:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Logs and notifications** section, click the **Settings** button in the **Event notifications** block.
4. In the **Notification settings** window, define the following settings of Kaspersky Security 10.1 for Windows Server according to your requirements:
  - In the **Notification settings** list select the type of notification whose settings you want to configure.
  - In the **Notify users** section configure the user notification method. If necessary, enter the text of the notification message.
  - In the **Notify administrators** section configure the administrator notification method. If necessary, enter the text of the notification message. If necessary, configure additional notification settings by clicking the **Settings** button.
  - In the **Event generation thresholds** section, specify the time intervals after which Kaspersky Security 10.1 for Windows Server logs the events *Application database is out of date*, *Application database is extremely out of date* and *Critical Areas Scan has not been performed for a long time*.
    - **Application database is out of date (days)**  
The number of days that have passed since the last Database Update.  
The default value is 7 days.
    - **Application database is extremely out of date (days)**  
The number of days that have passed since the last Database Update.  
The default value is 14 days.
    - **Critical Areas Scan has not been performed for a long time (days)**  
The number of days after the last successful Critical Areas Scan.  
The default value is 30 days.
5. Click **OK**.

The configured notification settings are saved.

## Configuring interaction with the Administration Server

► To choose the types of objects about which Kaspersky Security 10.1 for Windows Server sends information to the Kaspersky Security Center Administration Server, do the following:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Logs and notifications** section, click the **Settings** button in the **Interaction with Administration Server** block.

The **Administration Server Networks lists** window opens.

4. In the opened window choose the types of objects about which Kaspersky Security 10.1 for Windows Server will send information to the Kaspersky Security Center Administration Server:
  - Information about Quarantine objects.
  - Information about Backup objects.
  - Information about blocked hosts.
5. Click **OK**.

Kaspersky Security 10.1 for Windows Server will send information about the selected object types to the Administration Server.

# Real-Time Server Protection

This section provides information about Real-Time Protection tasks: Real-Time File Protection, Script Monitoring, KSN Usage and Exploit Protection. It also provides instructions on how to configure Real-Time Protection tasks and manage the security settings of a protected server.

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## Real-Time File Protection

This section contains information about the Real-Time File Protection task and how to configure it.

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## About Real-Time File Protection task

When the Real-Time File Protection task is running, Kaspersky Security 10.1 for Windows Server scans the following protected server objects when they are accessed:

- Files.
- Alternate file system threads (NTFS threads).
- Master boot record and boot sectors on the local hard drives and external devices.
- Windows Server 2016 container files.

When any application writes a file to a server or reads a file from it, Kaspersky Security 10.1 for Windows Server intercepts this file, scans it for threats, and, if a threat is detected, performs a default action or an action you have specified: tries to disinfect it, places it in Quarantine, or deletes it. Kaspersky Security 10.1 for Windows Server returns the file to the application if it is not infected or if it has been successfully disinfecting.

Kaspersky Security 10.1 for Windows Server intercepts file operations, executed in Windows Server 2016 containers.

A *container* is an isolated environment, which allows applications to run without affecting the operating system or being affected by it. If container is located in task the task protection scope, Kaspersky Security 10.1 for Windows Server scans container files, which are being accessed, for computer threats. When a threat is detected, the application attempts to disinfect the container. If the attempt is successful, the container continues to work; if disinfection fails, the container is shut down.

Kaspersky Security 10.1 for Windows Server also detects malware for processes running under Windows Subsystem for Linux®. For such processes, the Real-Time File Protection task applies action defined by the current configuration.

## Configuring the Real-Time File Protection task

By default, the Real-Time File Protection system task uses the settings described in the table below. You can change the values of these settings.

Table 31. Default Real-Time File Protection task settings

Setting	Default Value	Description
Protection scope	The entire computer, excluding virtual drives.	You can limit the protection scope.
Security level	Common settings for the entire protection scope; corresponds to the <b>Recommended</b> security level.	For nodes selected in the computer file resources tree, you can: <ul style="list-style-type: none"> <li>Apply another predefined security level.</li> <li>Edit the security level manually.</li> <li>Save security settings of the selected node as a template for later application to a different node.</li> </ul>
<b>Objects protection mode</b>	On access and modification	You can select protection mode, i.e. define type of access at which Kaspersky Security 10.1 for Windows Server will scan objects.
<b>Heuristic Analyzer</b>	The <b>Medium</b> security level is applied.	The Heuristic Analyzer can be enabled or disabled and the analysis level configured.
<b>Apply Trusted Zone</b>	Applied.	General list of exclusions which can be used in selected tasks.
KSN Usage services	Used	You can improve your computer's protection using the Kaspersky Security Network infrastructure of cloud services.
Task start schedule	At application start	You can configure the settings of scheduled startup of the task.
<b>List hosts showing malicious activity as untrusted</b>	Not applied	You can have computers exhibiting malicious activity be added to the list of untrusted hosts.

► To configure the Real-Time File Protection task settings, take the following steps:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time File Protection** section click the **Settings** button in the **Real-Time File Protection** block. The **Real-Time File Protection** window opens.
4. Configure the following task settings:
  - On the **General** tab:
    - Protection mode (see Section "Selecting protection mode" on page [169](#))
    - Using Heuristic Analyzer (on page [169](#))
    - Settings of integration with other Kaspersky Security 10.1 for Windows Server components.
  - On the **Task Management** tab:
    - Scheduled task start settings (see Section "Configuring the task start schedule settings" on page [138](#)).
5. Select the **Protection scope** tab and do the following:
  - Click the **Add** or **Edit** button to edit the protection scope (see Section "Protection scope in Real-Time File Protection task" on page [170](#)).
    - In the window that opens, choose what you want to include in the task's protection scope:
      - **Predefined scope**
      - **Disk, folder, or network location**
      - **File**
    - Select one of the predefined security levels (see Section "Selecting predefined security levels" on page [171](#)) or manually configure the protection (see Section "Configuring security settings manually" on page [174](#)) settings.

To apply the new protection scope settings to the task, the Real-Time File Protection task must be restarted.

6. Click **OK** in the **Real-Time File Protection** window.

Kaspersky Security 10.1 for Windows Server immediately applies the new settings to the running task.

Information about the date and time when the settings were modified, and the values of task settings before and after modification, are saved in the task log.

## Using Heuristic Analyzer

You can use the Heuristic Analyzer and configure the level of analysis for Kaspersky Security 10.1 for Windows Server tasks.

### ► *To configure the Heuristic Analyzer:*

1. Open the application settings (see Section "About ways to manage Kaspersky Security 10.1 for Windows Server from Kaspersky Security Center" on page [141](#)) or policy settings (see Section "Configuring policy" on page [107](#)), for which you want to configure the Heuristic Analyzer.

2. Clear or select the **Use Heuristic Analyzer** check box.

This check box enables / disables Heuristic Analyzer during object scanning.

If the check box is selected, Heuristic Analyzer is enabled.

If the check box is cleared, Heuristic Analyzer is disabled.

The check box is selected by default.

3. If necessary, adjust the level of analysis using the slider.

The slider allows you to adjust the heuristic analysis level. The scanning intensity level sets the balance between the thoroughness of searches for threats, the load on the operating system's resources and the time required for scanning.

The following scanning intensity levels are available:

- **Light.** Heuristic analyzer performs fewer operations found inside executable files. The probability of threat detection in this mode is somewhat lower. Scanning is faster and less resource-intensive.
- **Medium.** Heuristic Analyzer performs the number of instructions found within executable files recommended by the experts of Kaspersky Lab.

This level is selected by default.

- **Deep.** Heuristic analyzer performs more operations found in executable files. The probability of threat detection in this mode is higher. The scan uses up more system resources, takes more time, and can cause a higher number of false alarms.

The slider is available if the **Use Heuristic Analyzer** check box is selected.

4. Click **OK**.

Configured task settings are applied immediately to the running task. If the task is not running, the modified settings are applied at next start.

## Selecting protection mode

In the Real-Time File Protection task, the protection mode can be selected. The **Objects protection mode** section lets you specify the type of access to objects upon which Kaspersky Security 10.1 for Windows Server should scan the objects.

The **Objects protection mode** setting has the common value for the entire protection scope specified in the task.

You cannot specify different values for the setting for individual nodes within the protection scope.

► *To select protection mode, take the following steps:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time File Protection** section click the **Settings** button in the **Real-Time File Protection** block. The **Real-Time File Protection** window opens.
4. In the window that opens, open the **General** tab and select the protection mode that you want to set:
  - **Smart mode**

Kaspersky Security 10.1 for Windows Server selects objects to be scanned on its own. The object is scanned on being opened and then again after being saved if the object has been modified. If multiple calls to the object were made by the process while it was running and if the process modified it, Kaspersky Security 10.1 for Windows Server rescans the object only after the object was saved by the process for the last time.
  - **On access and modification**

Kaspersky Security 10.1 for Windows Server scans the object when it is opened and rescans after it is saved if the object was modified.

This option is selected by default.
  - **On access**

Kaspersky Security 10.1 for Windows Server scans all objects when they are opened for reading or for execution or modification.
  - **When run**

Kaspersky Security 10.1 for Windows Server scans the file only when it is accessed to be executed.
5. Click **OK**.

The selected protection mode will take effect.

## Protection scope in Real-Time File Protection task

This section provides instructions on creating and managing a protection scope in the Real-Time File Protection



task.

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## Predefined protection scopes

The protected server's file resources are displayed in the **Real-Time File Protection** task settings on the **Protection scope** tab.

The file resources tree or list displays the nodes to which you have read-access based on the configured security settings of Microsoft Windows.

Kaspersky Security 10.1 for Windows Server covers the following predefined protection scopes:

- **Local hard drives.** Kaspersky Security 10.1 for Windows Server protects files on the server hard drives.
- **Removable drives.** Kaspersky Security 10.1 for Windows Server protects files on external devices, such as CDs or USB drives. All removable disks, individual disks, folders or files can be included in or excluded from the protection scope.
- **Network.** Kaspersky Security 10.1 for Windows Server protects files that are written to network folders or read from them by applications running on the server. Kaspersky Security 10.1 for Windows Server does not protect files when such files are accessed by applications from other computers.
- **Virtual drives.** Dynamic folders and files and drives that are temporarily connected to the server can be included in the protection scope, for example, common cluster drives.

By default, you can view and configure predefined protection scopes in the network file resources tree; you can also add predefined scopes to the network file resources list during its formation in the protection scope settings.

By default, the protection scope includes all predefined areas except virtual drives.

Virtual drives created using a SUBST command are not displayed in the server file resource tree in the Kaspersky Security 10.1 Console. To include objects on the virtual drive in the protection scope, include the server folder with which this virtual drive is associated in the protection scope. Connected network drives will also not be displayed in the server file resources tree. To include objects on network drives in the protection scope, specify the path to the folder which corresponds to this network drive in UNC format.

## Selecting predefined security levels

One of the following predefined security levels for the nodes selected in the computer file resources list can be applied: **Maximum performance**, **Recommended**, and **Maximum protection**. Each of these levels contains its

own predefined set of security settings (see the table below).

#### Maximum performance

The **Maximum performance** security level is recommended if, beyond using Kaspersky Security 10.1 for Windows Server on servers and work stations, there are additional server security measures inside your network, for example, firewalls and existing security policies.

#### Recommended

The **Recommended** security level ensures an optimum combination of protection and performance impact on protected servers. This level is recommended by Kaspersky Lab experts as sufficient to protect servers on most corporate networks. The **Recommended** security level is set by default.

#### Maximum protection

The **Maximum protection** security level is recommended if your organization's network has elevated computer security requirements.

Table 32. Preset security levels and corresponding setting values

Options	Security level		
	Maximum performance	Recommended	Maximum protection
<b>Objects protection</b>	By extension	By format	By format
<b>Protect only new and modified files</b>	Enabled	Enabled	Disabled
<b>Action to perform on infected and other objects</b>	Block access and disinfect. Remove if disinfection fails	Block access and perform recommended action	Block access and disinfect. Remove if disinfection fails
<b>Action to perform on probably infected objects</b>	Block access and quarantine	Block access and quarantine	Block access and quarantine
<b>Exclude files</b>	No	No	No
<b>Do not detect</b>	No	No	No
<b>Stop scanning if it takes longer than (sec.)</b>	60 sec.	60 sec.	60 sec.
<b>Do not scan compound objects larger than (MB)</b>	8 MB	8 MB	Not set
<b>Scan alternate NTFS streams</b>	Yes	Yes	Yes
<b>Scan disk boot sectors and MBR</b>	Yes	Yes	Yes
<b>Compound objects protection</b>	<ul style="list-style-type: none"> <li>• Packed objects* *New and modified objects only</li> </ul>	<ul style="list-style-type: none"> <li>• SFX archives*</li> <li>• Packed objects*</li> <li>• Embedded OLE objects* *New and modified objects only</li> </ul>	<ul style="list-style-type: none"> <li>• SFX archives*</li> <li>• Packed objects*</li> <li>• Embedded OLE objects* *All objects</li> </ul>

The **Objects protection**, **Use iChecker technology**, **Use iSwift technology**, and **Use Heuristic Analyzer** settings are not included in the settings of the predefined security levels. If you edit the **Objects protection**, **Use iChecker technology**, **Use iSwift technology**, or **Use heuristic analyzer** security settings after selecting one of the predefined security levels, the security level that you have selected will not change.

► To select one of the predefined security levels, take the following steps:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of

Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time File Protection** section click the **Settings** button in the **Real-Time File Protection** block. The **Real-Time File Protection** window opens.
4. On the **Protection scope** tab, select the node whose securities settings you want to configure, and click **Configure**.  
The **Real-Time File Protection settings** window opens.
5. Select the desired security level in the drop-down list:
  - **Maximum protection**
  - **Recommended**
  - **Maximum performance**
6. Click **OK**.

Your newly configured settings have been saved.

Kaspersky Security 10.1 for Windows Server immediately applies the new settings to the running task. Information about the date and time when the settings were modified, and the values of task settings before and after modification, are saved in the task log.

## Configuring security settings manually

By default, the Real-Time File Protection task uses common security settings for the entire protection scope. These settings correspond to the Recommended predefined security level (see Section "Selecting predefined security levels" on page [171](#)).

The default values of security settings can be modified by configuring them as common settings for the entire protection scope or as different settings for different nodes in the server file resource list or tree.

On working with the server file resources tree, security settings configured for the selected parental node are automatically applied to all subnodes when working with the network file resources tree. The security settings of the parent node are not applied to subnodes that are configured separately.

► *To configure the security settings of the selected node manually, take the following steps:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time File Protection** section click the **Settings** button in the **Real-Time File Protection** block. The **Real-Time File Protection** window opens.
4. On the **Protection scope** tab, select the node whose securities settings you want to configure, and click **Configure**.
5. Click the **Configure** button to edit the selected node's security settings according to your needs. To do this, perform the following actions:

- On the **General** tab, configure the following settings, if necessary:

In the **Objects protection** section, specify the objects that you want to include in the protection scope:

- **All objects**

Kaspersky Security 10.1 for Windows Server scans all objects.

- **Objects scanned by format**

Kaspersky Security 10.1 for Windows Server scans only infectable objects based on file format.

Kaspersky Lab compiles the list of formats. It is included in the Kaspersky Security 10.1 for Windows Server databases.

- **Objects scanned according to list of extensions specified in anti-virus database**

Kaspersky Security 10.1 for Windows Server scans only infectable objects based on file extension.

Kaspersky Lab compiles the list of extensions. It is included in the Kaspersky Security 10.1 for Windows Server databases.

- **Objects scanned by specified list of extensions**

Kaspersky Security 10.1 for Windows Server scans files based on file extension. List of file extensions can be manually customized in the **List of extensions** window, which can be opened by clicking the **Edit** button.

- **Scan disk boot sectors and MBR**

Enables protection of boot sectors and master boot records.

If the check box is selected, Kaspersky Security 10.1 for Windows Server scans boot sectors and master boot records on hard drives and removable drives of the server.

The check box is selected by default.

- **Scan alternate NTFS streams**

Scanning of alternative file and folder threads on the NTFS file system drives.

If the check box is selected, Kaspersky Security 10.1 for Windows Server scans additional file and folder threads.

The check box is selected by default.

In the **Performance** section, select or clear the check box:

- **Protect only new and modified files**

This check box enables / disables scanning and protection of files that have been recognized by Kaspersky Security 10.1 for Windows Server as new or modified since the last scan.

If the check box is selected, Kaspersky Security 10.1 for Windows Server scans and protects only the files that it has recognized as new or modified since the last scan.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server scans and protects all files.

By default, the check box is selected for the **Maximum performance** security level. If the **Recommended** or **Maximum protection** security level is set, the check box is cleared.

In the **Compound objects protection** section, specify the compound objects that you want to include in the protection scope:

- **All / Only new archives**

Scanning of ZIP, CAB, RAR, ARJ archives and other archive formats.

If this check box is selected, Kaspersky Security 10.1 for Windows Server scans archives.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server skips archives during scanning.

The default value depends on the selected security level.

- **All / Only new SFX archives**

Scanning of self-extracting archives.

If this check box is selected, Kaspersky Security 10.1 for Windows Server scans SFX archives.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server skips SFX archives during scanning.

The default value depends on the selected security level.

This option is active when the **Archives** check box is cleared.

- **All / Only new email databases**

Scanning of Microsoft Outlook and Microsoft Outlook Express mail database files.

If this check box is selected, Kaspersky Security 10.1 for Windows Server scans mail database files.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server skips mail database files during scanning.

The default value depends on the selected security level.

- **All / Only new packed objects**

Scanning of executable files packed by binary code packers, such as UPX or ASPack.

If this check box is selected, Kaspersky Security 10.1 for Windows Server scans executable files packed by packers.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server skips executable files packed by packers during scanning.

The default value depends on the selected security level.

- **All / Only new plain mail**

Scanning of files of mail formats, such as Microsoft Outlook and Microsoft Outlook Express messages.

If this check box is selected, Kaspersky Security 10.1 for Windows Server scans files of mail formats.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server skips files of mail formats during scanning.

The default value depends on the selected security level.

- **All / Only new embedded OLE objects**

Scanning of objects embedded into files (such as Microsoft Word macros, or email message attachments).

If this check box is selected, Kaspersky Security 10.1 for Windows Server scans objects embedded into files.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server skips objects embedded into files during scanning.

The default value depends on the selected security level.

You can choose to protect all or only new compound objects if the **Protect only new and modified files** check box is selected. If the **Protect only new and modified files** check box is cleared, Kaspersky Security 10.1 for Windows Server protects all of the specified compound objects.

- On the **Actions** tab, configure the following settings, if necessary:
  - Select the action to be performed on infected and other detected objects.
  - Select the action to be performed on probably infected objects.
  - Configure actions to be performed on objects depending on the type of object detected.
  - Select the actions to perform on incurable compound objects: select or clear the **Entirely remove incurable compound object in case of embedded infected or other object detection** check box.

This check box enables or disables forced removal of the parent object when a malicious child or other object is detected.

If the check box is selected and the action selected to perform on infected and probably infected objects is **Block access and Remove**, Kaspersky Security 10.1 for Windows Server forcibly deletes the entire parent compound object when a malicious child or other object is detected. Forceful removal of a parent object along with all of its contents happens if the application cannot remove only the detected child object (for example, if the parent object is immutable).

If this check box is cleared and the action selected to perform on infected and probably infected objects is **Block access and Remove**, Kaspersky Security 10.1 for Windows Server does not perform the selected action for the parent object when a malicious child or other object is detected if the parent object is immutable.

By default, the check box is selected for the **Maximum protection** security level. By default, the check box is cleared for the **Recommended** and **Maximum performance**

security levels.

- On the **Performance** tab, configure the following settings, if necessary:

In the **Exclusions** section:

- **Exclude files**

Excluding files from scanning by file name or file name mask.

If this check box is selected, Kaspersky Security 10.1 for Windows Server skips specified objects during scanning.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server scans all objects.

The check box is cleared by default.

- **Do not detect**

Objects are excluded from scanning by the name or name mask of the detectable object. The list of names of detectable objects is available on the Virus Encyclopedia website <https://www.securelist.com/>.

If this check box is selected, Kaspersky Security 10.1 for Windows Server skips specified detectable objects during scanning.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server detects all objects specified in the application by default.

The check box is cleared by default.

In the **Advanced settings** section:

- **Stop scanning if it takes longer than (sec.)**

Limits the duration of object scanning. The default value is 60 seconds.

If the check box is cleared, scan duration is limited to the specified value.

If the check box is cleared, scan duration is unlimited.

The check box is selected by default.

- **Do not scan compound objects larger than (MB)**

Excludes objects larger than the specified size from the scanning.

If the check box is selected, Kaspersky Security 10.1 for Windows Server skips compound objects whose size exceeds the specified limit during virus scan.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server scans compound objects of any size.

By default, the check box is selected for the **Recommended** and **Maximum performance** security levels.

- **Use iChecker technology**

Scanning of only new files and those modified since the last scan.

If the check box is selected, Kaspersky Security 10.1 for Windows Server scans only new files or those modified since the last scan.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server scans files without regard for the date of file creation or modification.



The check box is selected by default.

- **Use iSwift technology**

Scanning of only new files and those modified since the last scan of NTFS system objects.

If the check box is selected, Kaspersky Security 10.1 for Windows Server scans only new files or those modified since the last scan of NTFS system objects.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server scans NTFS system files without regard for the date of file creation or modification.

The check box is selected by default.

6. Click **OK**.

Your newly configured settings have been saved.

## KSN Usage

This section contains information about the KSN Usage task and how to configure it.

### In this section

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Configuring the KSN Usage task .....	<a href="#">180</a>
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## About the KSN Usage task

*Kaspersky Security Network* (KSN) is an infrastructure of online services providing access to Kaspersky Lab's operative knowledge base on the reputation of files, web resources and programs. Kaspersky Security Network allows Kaspersky Security 10.1 for Windows Server to react very promptly to new threats, improves the performance of several protection components, and reduces the likelihood of false positives.

To start the KSN Usage task, you must accept the Kaspersky Security Network Statement.

Information received by Kaspersky Security 10.1 for Windows Server from Kaspersky Security Network pertains only to the reputation of programs.

Participation in KSN allows Kaspersky Lab to receive real-time information about types and sources of new threats, develop ways to neutralize them, and reduce the number of false positives in application components.

More detailed information about the transferring, processing, storage, and destruction of information about application usage is available in the Data processing window of the KSN Usage task, and in the Privacy Policy on the Kaspersky Lab's website.

Participation in Kaspersky Security Network is voluntary. The decision regarding participation in Kaspersky Security Network is made after installation of Kaspersky Security 10.1 for Windows Server. You can change your decision about participation in Kaspersky Security Network at any time.

Kaspersky Security Network can be used in the following Kaspersky Security 10.1 for Windows Server tasks:

- Real-Time File Protection.
- On-Demand Scan.
- Applications Launch Control.
- Traffic Security.
- RPC Network Storage Protection.
- ICAP Network Storage Protection.

#### Kaspersky Private Security Network

See details about how to configure Kaspersky Private Security Network (hereinafter referred to "KPSN") in the *Kaspersky Security Center Help*.

If you use Kaspersky Private Security Network on the protected computer, in the **Data Processing** window (see Section "Configuring Data Processing" on page [183](#)) of the KSN Usage task you can read the KPSN Statement and enable the task at any moment by selecting the **I accept the terms of participation in Kaspersky Private Security Network**. By accepting the terms you agree to send all types of data mentioned in KPSN Statement (security requests, statistical data) to KSN services.

After accepting the KPSN terms, the check boxes that adjust the Global KSN usage are not available.

If you disable KPSN when the KSN Usage task is running, the *License violation* error occurs and the task stops. To continue protecting the computer you need to accept the Global KSN Statement in the **Data processing** window and restart the task.

## Configuring the KSN Usage task

The KSN Usage task cannot be started if you do not accept the KSN Statement.

You can change the default settings of the KSN Usage task (see the table below).

Table 33. KSN Usage task default settings

Setting	Default Value	Description
Action to perform on KSN untrusted objects	Remove	You can specify actions that Kaspersky Security 10.1 for Windows Server will take on objects identified by KSN as infected.
Data transfer	The file checksum (MD5 hash) is calculated for files that do not exceed 2 MB in size.	You can specify the maximum size of files for which a checksum is calculated using the MD5 algorithm for delivery to KSN. If the check box is cleared, Kaspersky Security 10.1 for Windows Server calculates the MD5 hash for files of any size.
Accept the terms of the Kaspersky Security Network Statement	Not accepted	Decide whether you want to participate in KSN after the installation. You can change your decision at any moment.
Agree to process data as a part of the Kaspersky Security Network statistics	Not accepted	If the KSN Statement is accepted, the KSN Statistics will be sent automatically, unless you clear the check box.
Accept the terms of the Kaspersky Managed Protection Statement	Not accepted	You can enable or disable the KMP service. The service available only if the separate Agreement has been signed during the application purchase process.
Task start	First run is not scheduled.	You can start the task manually or configure a scheduled start.

To configure the KSN Usage task, take the following steps:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time Server Protection** section, click the **Settings** button in the **KSN Usage** block.  
The **Task Settings** window opens.
4. On the **General** tab, configure the following task settings:
  - In the **Action to perform on KSN untrusted objects** section, specify the action that Kaspersky Security 10.1 for Windows Server is to perform if it detects an object identified by KSN as untrusted:
    - **Remove**  
Kaspersky Security 10.1 for Windows Server deletes the object with KSN infected status and places a copy of it in Backup.  
This option is selected by default.
    - **Log information**  
Kaspersky Security 10.1 for Windows Server records information about the object with KSN infected status in the task log. Kaspersky Security 10.1 for Windows Server does not delete the infected object.
  - In the **Data transfer** section, restrict the size of files for which the checksum is calculated:
    - Clear or select the **Do not calculate checksum before sending to KSN if file size exceeds (MB)** check box.  
This check box enables or disables calculation of the checksum for files of the specified size for delivery of this information to the KSN service.  
The duration of the checksum calculation depends on the file size.  
If this check box is selected, Kaspersky Security 10.1 for Windows Server does not calculate the checksum for files that exceed the specified size (in MB).  
If the check box is cleared, Kaspersky Security 10.1 for Windows Server calculates the checksum for files of any size.  
The check box is selected by default.
  - a. If required, in the field to the right, specify the maximum size of files for which Kaspersky Security 10.1 for Windows Server calculates the checksum.
  - b. Clear or select the **Use Kaspersky Security Center as KSN Proxy** check box.  
The check box allows to manage the data transfer from the protected servers to KSN.  
If the check box is cleared the data from the Administration Server and protected servers is not sent to KSN. However, depending on the settings, the server can send data to KSN directly (not via the Kaspersky Security Center). The active policy defines which type of data can be sent to KSN directly.  
If the check box is selected, all data is sent to KSN via the Kaspersky Security Center.  
The check box is selected by default.

To enable KSN Proxy the KSN Statement must be accepted and Kaspersky Security Center properly configured. See *Kaspersky Security Center Help* for more details.

5. If needed, configure the task start schedule on the **Task management** tab. For example, you can start the task by schedule and specify the **At application launch** frequency, if you want the task to run automatically when the server is restarted.

The application will automatically start the KSN Usage task by schedule.

6. Configure the Data processing (see Section "Configuring Data Processing" on page [183](#)) before starting the task.
7. Click **OK**.

The modified settings are applied. The date and time of modifying the settings, as well as information about the task settings before and after modification, are saved in the task log.

## Configuring Data Processing

► *To configure what data will be processed by the KSN services and accept the KSN Statement:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time Server Protection** section click the **Data processing** button in the **KSN Usage** block. The **Data processing** window opens.
4. On the **Services** tab, read the Statement and select the **Accept the terms of the Kaspersky Security Network Statement** check box.
5. To increase the protection level, the following check boxes are automatically selected:
  - **Send data about scanned files.**

If the check box is selected, Kaspersky Security 10.1 for Windows Server sends the checksum of scanned files to the Kaspersky Lab. Conclusion about each file security is based on the reputation received from KSN.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server does not send checksum of files to KSN.

The check box is selected by default.

- **Send data about the requested URLs.**

If the check box is selected, Kaspersky Security 10.1 for Windows Server sends the data about requested web resources, including web addresses, to the Kaspersky Lab. Conclusion about the requested web resource security is based on the reputation received from KSN.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server does not check URLs reputation in KSN.

The check box is selected by default.

The check box influences the Traffic Security task configuration.

You can clear these check boxes and stop sending additional data at any moment.

6. Open the **Statistics** tab. The **Agree to process data as a part of the Kaspersky Security Network statistics** check box is selected by default. You can clear the check box at any time, if you don't want Kaspersky Security 10.1 for Windows Server to send additional statistics to Kaspersky Lab.

If the check box is selected the Kaspersky Security 10.1 for Windows Server sends statistics, including personal data specified in the License Agreement and KSN Statement. The data received by Kaspersky Lab is used to improve the quality of applications and level of threat detection rates.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server does not send additional statistics.

The check box is selected by default.

7. On the **Kaspersky Managed Protection** tab, read the Statement and select the **Accept the terms of the Kaspersky Managed Protection Statement** check box.

If the check box is selected, you agree to send statistics on the protected server activity to the Kaspersky Lab specialists. Received data is used for around-the-clock analysis and reporting, required to prevent security breach incidents.

The check box is cleared by default.

The changes of **Accept the terms of the Kaspersky Managed Protection Statement** check box state do not start or stop the processing of data immediately. To apply the changes you must restart Kaspersky Security 10.1 for Windows Server.

To use the KMP service you need to sign the services agreement and execute configuration files on a protected server.

To use the KMP service the data processing terms of KSN Statement on the Services and Statistics tabs must be accepted.

8. Click **OK**.

The data processing configuration will be saved.

# Exploit Prevention

This section contains instructions on how to configure process memory protection settings.

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## About Exploit Prevention

Kaspersky Security 10.1 for Windows Server provides the ability to protect process memory from exploits. This feature is implemented in the Exploit Prevention component. You can change the component's activity status and configure process memory protection settings.

The component protects process memory from exploits by inserting an external Process Protection Agent (“Agent”) in the protected process.

A Process Protection Agent is a dynamically loaded Kaspersky Security 10.1 for Windows Server module that is inserted in protected processes to monitor their integrity and reduce the risk of being exploited.

The Agent's operation within the protected process requires starting and stopping the process: the initial loading of the Agent into a process added to the protected process list is only possible if the process is restarted. Additionally, after a process has been removed from the protected process list, the Agent can be unloaded only after the process has been restarted.

The Agent must be stopped to unload it from protected processes: if the Exploit Prevention component is uninstalled, the application freezes the environment and forces the Agent to be unloaded from protected processes. If during the component uninstallation the Agent is inserted in any of the protected processes, you must terminate the affected process. Server restart may be required (for example, if system process is being protected).

If evidence of an exploit attack in a protected process is detected, Kaspersky Security 10.1 for Windows Server performs one of the following actions:

- Terminates the process if an exploit attempt is made.
- Reports the fact that the process has been compromised.

You can stop process protection using one of the following methods:

- Uninstalling the component.
- Removing the process from the list of protected processes and restarting the process.

### Kaspersky Security Broker Host Service

Kaspersky Security Broker Host Service is required on the protected server in order for the Exploit Prevention

component to be most effective. This service and the Exploit Prevention component are part of the recommended installation. During installation of the service on the protected server, the kavfsw process is created and started. This communicates information about protected processes from the component to the Security Agent.

After the Kaspersky Security Broker Host Service is stopped, Kaspersky Security 10.1 for Windows Server continues to protect processes added to the protected process list, is also loaded in newly-added processes, and applies all available impact reduction techniques to protect process memory.

If the Kaspersky Security Broker Host Service is stopped, the application will not receive information about events occurring with protected processes (including information about exploit attacks and the termination of processes). Furthermore, the Agent will not be able to receive information about new protection settings and the addition of new processes to the protected process list.

### Exploit Prevention mode

You can select one of the following modes to configure actions to reduce risks that vulnerabilities will be exploited in protected processes:

- **Terminate on exploit:** apply this mode to terminate a process when an exploit attempt is made.

Upon detecting an attempt to exploit a vulnerability in a protected critical operating system process, Kaspersky Security 10.1 for Windows Server does not terminate the process, regardless of the mode indicated in the Exploit Prevention component settings.

- **Only inform about abused process:** apply this mode to receive information about instances of exploits in protected processes using events in the Filtered Security Audit.

If this mode is selected, Kaspersky Security 10.1 for Windows Server logs all attempts to exploit vulnerabilities by creating events.

## Configuring process memory protection settings

► *To configure settings to protect the memory of processes added to the list of protected processes, perform the following actions:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time Server Protection** section click the **Settings** button in the **Exploit Prevention** block.



The **Exploit Prevention** window opens.

4. In the **Exploit prevention mode** section, configure the following settings:

- **Prevent vulnerable processes exploit.**

If this check box is selected, Kaspersky Security 10.1 for Windows Server reduces the risks that vulnerabilities will be exploited in processes for the list of protected processes.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server does not protect server processes from exploits.

The check box is cleared by default.

- **Terminate on exploit.**

If this mode is selected, Kaspersky Security 10.1 for Windows Server terminates a protected process upon detecting an exploit attempt if an active impact reduction technique has been applied to the process.

- **Only inform about abused process.**

If this mode is selected, Kaspersky Security 10.1 for Windows Server reports exploits by displaying a terminal window. The compromised process continues to run.

If Kaspersky Security 10.1 for Windows Server detects an exploit in a critical process while the application is running in **Terminate on exploit** mode, the component forcibly switches to **Only inform about abused process** mode.

5. In the **Preventing actions** section, configure the following settings:

- **Inform about abused processes via Terminal Service.**

If this check box is selected, Kaspersky Security 10.1 for Windows Server displays a terminal window with a description explaining why protection was activated and an indication of the process in which an exploit attempt was detected.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server displays a terminal window when an exploit attempt or termination of a compromised process is detected. A terminal window is displayed regardless of the status of the Kaspersky Security Broker Host Service. The check box is selected by default.

- **Prevent vulnerable processes exploit even if Kaspersky Security service disabled.**

If this check box is selected, Kaspersky Security 10.1 for Windows Server will reduce risk of vulnerabilities being exploited in processes that have already been started, regardless of whether the Kaspersky Security service is running. Kaspersky Security 10.1 for Windows Server will not protect processes added after the Kaspersky Security service is stopped. After the service is started, exploit impact reduction will be stopped for all processes.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server does not protect processes from exploits when the Kaspersky Security service is stopped.

The check box is selected by default.

If this check box is selected, Kaspersky Security 10.1 for Windows Server reduces the risks that vulnerabilities will be exploited in processes for the list of protected processes.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server does not protect server processes from exploits.

The check box is cleared by default.

6. Click **OK**.

Kaspersky Security 10.1 for Windows Server saves and applies the configured process memory protection settings.

## Adding a process for protection

Exploit Prevention component protects a number of processes by default. You can uncheck the processes, that you don't want to protect in the list of protected processes.

► *To add a process to the list of protected processes:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In **Real-Time Server Protection** section, click the **Settings** button in the **Exploit Prevention** block.  
The **Exploit Prevention** window opens.
4. On the **Protected processes** tab, click the **Browse** button.  
The standard Microsoft Windows **Open** window opens.
5. Select the process you want to add to the list.
6. Click the **Open** button.
7. Click the **Add** button.  
The process will be added to the list of protected processes.
8. Select the added process and click **Set exploit prevention techniques**.  
The **Exploit prevention techniques** window opens.
9. Select one of the options for applying impact reduction techniques:
  - **Apply all available exploit prevention techniques.**  
If this option is selected, the list cannot be edited. All techniques are applied by default.
  - **Apply listed exploit prevention techniques for the process.**  
If this option is selected, you can edit the list of impact reduction techniques applied:
    - a. Select the check boxes next to the techniques that you want to apply to protect the selected process.

b. Select or clear the **Apply Attack Surface Reduction technique** check box.

10. Configure settings for impact reduction technique Attack Surface Reduction:

- Enter the names of the modules whose launch will be blocked from the protected process in the **Disallow modules** field.
- In the **Do not prohibit modules if launched in the Internet Zone** field, select the check boxes next to the options under which you want to allow modules to be launched:
  - Internet
  - Local Intranet
  - Trusted websites
  - Restricted sites
  - Computer

These settings are only applicable to Internet Explorer®.

11. Click **OK**.

The process is added to the task protection scope.

## Impact reduction techniques

Table 34. Impact reduction techniques

Impact reduction technique	Description
Data Execution Prevention (DEP)	Data execution prevention blocks execution of arbitrary code in protected areas of memory.
Address Space Layout Randomization (ASLR)	Changes to the layout of data structures in the address space of the process.
Structured Exception Handler Overwrite Protection (SEHOP)	Replacement of exception records or replacement of the exception handler.
Null Page Allocation	Prevention of redirecting the null pointer.
LoadLibrary Network Call Check (Anti ROP)	Protection against loading DLLs from network paths.
Executable Stack (Anti ROP)	Blocking of unauthorized execution of areas of the stack.
Anti RET Check (Anti ROP)	Check that the CALL instruction is invoked safely.
Anti Stack Pivoting (Anti ROP)	Protection against relocation of the ESP stack pointer to an executable address.
Export Address Table Access Monitor (EAT Access Monitor & EAT Access Monitor via Debug Register)	Protection of read access to the export address table for kernel32.dll, kernelbase.dll, and ntdll.dll
Heap Spray Allocation	Protection against allocating memory to execute malicious code.

Impact reduction technique	Description
Execution Flow Simulation (Anti Return Oriented Programming)	Detection of suspicious chains of instructions (potential ROP gadget) in the Windows API component.
IntervalProfile Calling Monitor (Ancillary Function Driver Protection (AFDP))	Protection against escalation of privileges through a vulnerability in the AFD driver (execution of arbitrary code in ring 0 through a QueryIntervalProfile call).
Attack Surface Reduction	Blocking the start of vulnerable add-ins via the protected process.

## Script Monitoring

This section contains information about the Script Monitoring task and how to configure it.

### In this section

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## About the Script Monitoring task

When the Script Monitoring task is running, Kaspersky Security 10.1 for Windows Server controls the execution of scripts created using Microsoft Windows Script Technologies (or Active Scripting) such as VBScript or JScript®. Kaspersky Security 10.1 for Windows Server allows script execution only if this script has been found to be safe. Kaspersky Security 10.1 for Windows Server blocks the execution of a script that has been found to be dangerous. If Kaspersky Security 10.1 for Windows Server identifies the script as potentially dangerous, it blocks or allows the execution of the script, in accordance with your selected action.

By default, the Script Monitoring task is automatically started at Kaspersky Security 10.1 for Windows Server startup.

By default, the Script Monitoring component is not installed on the server as part of the application.

Use of this component may be incompatible with some of the third-party applications installed on the protected server. In this case monitoring of third-party scripts can lead to scripts' operational errors. It is recommended either not to use such third-party applications, or to disable the Script Monitoring task. If the task is disabled, the risks associated with scripts execution security are increasing.

If you want to use the Script Monitoring component, you must manually select it in the list of installed components during installation of Kaspersky Security 10.1 for Windows Server.

Detailed information about selecting application components during installation is provided in the *Kaspersky*

Security 10.1 for Windows Server Administration Guide installation sections.

You can configure the Script Monitoring task settings.

## Configuring Script Monitoring task settings

The Script Monitoring system task uses the default settings described in the table below. You can change the values of these settings.

Table 35. Default Script Monitoring task settings

Setting	Default value	Description
Execution of dangerous scripts	Blocked	Kaspersky Security 10.1 for Windows Server always blocks the execution of scripts that have been recognized as dangerous.
Execution of probably dangerous scripts	Blocked	You can specify the action to be performed on detection of probably dangerous scripts: block or allow their execution.
Heuristic Analyzer	The <b>Medium</b> security level is applied.	The Heuristic Analyzer can be enabled or disabled and the analysis level configured.
Trusted zone	Used	General list of exclusions which can be used in selected tasks.

► *To configure a Script Monitoring task:*

- Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
- Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

The **Properties: Script Monitoring** window opens.

- In the **Action to perform on probably dangerous scripts** section, do one of the following:
  - To allow execution of probably dangerous scripts, select **Allow**.

Kaspersky Security 10.1 for Windows Server allows execution of a probably dangerous

script.

- To prohibit execution of probably dangerous scripts, select **Block**.

Kaspersky Security 10.1 for Windows Server blocks execution of a probably dangerous script.

This option is selected by default.

4. In the **Heuristic Analyzer** section, do one of the following:

- Clear or select the **Use Heuristic Analyzer** check box.

This check box enables / disables Heuristic Analyzer during object scanning.

If the check box is selected, Heuristic Analyzer is enabled.

If the check box is cleared, Heuristic Analyzer is disabled.

The check box is selected by default.

- If necessary, adjust the level of analysis using the slider.

The slider allows you to adjust the heuristic analysis level. The scanning intensity level sets the balance between the thoroughness of searches for threats, the load on the operating system's resources and the time required for scanning.

The following scanning intensity levels are available:

- **Light.** Heuristic analyzer performs fewer operations found inside executable files. The probability of threat detection in this mode is somewhat lower. Scanning is faster and less resource-intensive.
- **Medium.** Heuristic Analyzer performs the number of instructions found within executable files recommended by the experts of Kaspersky Lab.

This level is selected by default.

- **Deep.** Heuristic analyzer performs more operations found in executable files. The probability of threat detection in this mode is higher. The scan uses up more system resources, takes more time, and can cause a higher number of false alarms.

The slider is available if the **Use Heuristic Analyzer** check box is selected.

5. In the **Trusted zone** section, select or clear the **Apply trusted zone** check box.

This check box enables / disables use of the trusted zone for a task.

If the check box is selected, Kaspersky Security 10.1 for Windows Server adds file operations of trusted processes to the scan exclusions configured in the task settings.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server disregards the file operations of trusted processes when forming the protection scope for the Real-Time File Protection task.

The check box is selected by default.

6. Click **OK**.

The newly configured settings are applied.

## Traffic Security

This section contains information about the Traffic Security task and how to configure it.

## In this section

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## About the Traffic Security task

The Traffic Security component processes web traffic (including traffic received via the mail services) and intercepts and scans objects transferred through web traffic to detect known computer and other threats on the protected server. The ICAP service scans incoming traffic for threats and blocks or allows traffic depending on the scan results and configured scan settings.

Kaspersky Security 10.1 for Windows Server also detects and intercepts traffic which is requested by any processes running under Windows Subsystem for Linux. For such processes, the Traffic Security task applies action defined by the current task configuration.

Traffic Security is installed by default. When the installation is complete, the following services are registered and started:

- Kaspersky Security Broker Host (KAVFSWH)
- Kaspersky Traffic Security (KAVFSPROXY)

The component provides the following types of protection:

- Mail threat protection:
  - Anti-phishing
  - Protection against mail-transferred malware
- Web threat protection:
  - Anti-phishing
  - Malicious URLs scan
  - Protection against web-based malware
  - Web Control:
    - URL control
    - Certificate control
    - Category-based web control

It is highly recommended to use KSN services when starting the Traffic Security task to enhance threat detection. KSN cloud databases contain more actual data about web threats, than local anti-virus databases. Analysis of a number of web control categories is purely based on conclusions received from KSN services.

### Traffic Security modes

Traffic Security can operate in the following modes:

- **Driver Interceptor:** The application intercepts traffic with a network driver. It uses a network kernel driver to intercept and analyze all incoming traffic for the specified ports.
- **Redirector:** The application redirects traffic by configuring browsers. Incoming traffic is redirected from browsers to an internal proxy in opened terminal session. Kaspersky Security 10.1 for Windows Server is specified as the internal proxy.
- **External Proxy:** The application processes traffic from an external proxy server. The traffic is transferred from the external proxy server to Kaspersky Security 10.1 for Windows Server. The application analyzes the traffic and recommends an action to the external proxy. Kaspersky Security 10.1 for Windows Server is only compatible with proxies that transfer traffic throughout the ICAP protocol.

## About Traffic Security Rules

Kaspersky Security 10.1 for Windows Server lets you add and configure allowing or denying rules for certificates and web addresses, and use preset rules for categories to block unwanted content. Rules for certificates can be applied if the task is running in the **Driver Interceptor** or **Redirector** mode.

### Web control

This type of control is carried out by applying allowing and denying rules for web addresses and certificates. Allowing rules have a higher priority than conclusions from KSN and signature analysis.

A URL or certificate can be allowed or blocked based on prioritized conclusions (from highest to lowest):

1. Allowing or denying rules.
2. Anti-phishing and anti-virus databases.
3. KSN.
4. Categories.

### Category-based web control

Kaspersky Security 10.1 for Windows Server lets you block web addresses based on categories. You can set the level of heuristic analysis used for categorization. Category-based web control uses the preset list of categories for analysis. While the itself list cannot be modified, you can select categories of web resources to allow or block, or turn off category-based control. The Other category includes all web resources that do not fall under any other category in the list. If this check box is selected, Kaspersky Security 10.1 for Windows Server allows all web resources that are not categorized. If the check box is cleared, all web resources are blocked.



Categorization has the lowest priority.

By default Kaspersky Security 10.1 for Windows Server applies only one rule: the denying rule for TOR certificates. You can uncheck the rule in the rule settings to allow TOR connections. If the rule is applied, all incoming or outgoing TOR connections will be blocked.

Traffic Security also considers the conclusions for a `not-a-virus` mask, which are the resources or objects that are not viruses themselves, but can be used to harm the protected server. By default Kaspersky Security 10.1 for Windows Server does not apply the `not-a-virus` mask to categories (see Section "Configuring category-based web control" on page [211](#)).

## Mail threat protection

The Traffic Security component scans mail in Microsoft Outlook (2010, 2013 and 2016 32-bit and 64-bit). Mail threat protection is provided through Kaspersky Security 10.1 Microsoft Outlook Add-in that is installed separately from Kaspersky Security 10.1 for Windows Server components.

You can install the Kaspersky Security 10.1 Microsoft Outlook Add-in on the protected server, only if Kaspersky Security 10.1 for Windows Server and Microsoft Outlook mail client are installed.

► To install the add-in, run the `kmail_x86(x64).msi` package from the `\email_plugin` folder.

Mail threat protection includes:

- Incoming email scanning.
- Anti-virus email scanning.
- Anti-virus scanning of attachments (including packed objects).
- Anti-phishing email scanning.
- Anti-phishing scanning of attachments (including packed objects).

If a threat is detected, Kaspersky Security 10.1 for Windows Server:

- Deletes attachments.
- Modifies the infected email body.
- Logs a *Mail threat detected* event.

Kaspersky Security 10.1 for Windows Server scans emails when they are opened, not when they are received by the server. The scan is performed only once at a first opening. The scanned emails and attachments are stored in cache until the Outlook restart. After the restart all emails are scanned upon opening again.

► The add-in is loaded to Microsoft Outlook mail client on startup. If you install Kaspersky Security 10.1 Microsoft Outlook Add-in while the Outlook is running:

1. Open the **File > Options > Add-ins**.
2. Make sure, that the Kaspersky Security 10.1 Microsoft Outlook Add-in has been added to one of the lists

(Active or Inactive).

3. Restart Microsoft Outlook.
4. Check the status of the Kaspersky Security 10.1 Microsoft Outlook Add-in (should become *Active*).

## Configuring the Traffic Security task

You can change the default settings of the Traffic Security task (see the table below).

Table 36. Default Traffic Security task settings  
Table 37.

Setting	Default Value	Description
Task mode	<b>External Proxy</b>	ICAP service processes traffic from the external proxy server.
<b>Network port number</b>	1345	The default port number for the ICAP service.
<b>Service ID</b>	webscan	ICAP service identifier for the address of installed anti-virus server.
<b>Use malicious URLs database to scan web links</b>	Applied	Enable or disable signature analysis of each URL.
<b>Use anti-phishing database to scan web pages</b>	Applied	Enable or disable URL anti-phishing scan based on heuristic analysis.
<b>Use KSN for protection</b>	Applied	You can use KSN application reputation data for protection when running the task.
<b>Use Trusted Zone</b>	Applied	You can apply the Trusted Zone if required.
Security level	Recommended	Select and configure security level for anti-virus protection.
Task start schedule	First run is not scheduled.	The Traffic Security task is not started automatically. You can start the task manually or configure a scheduled start.

► *To configure the Traffic Security task:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time Server Protection** section in the **Traffic Security** block, click the **Settings** button.  
The **Traffic Security** window opens.
  4. On the **Task mode** tab select and configure the task operation mode (see Section "Selecting the task operation mode" on page [197](#)).
  5. On the **URL and web processing** tab, configure the anti-phishing and anti-virus scanning of URLs (see Section "Configuring URL and web processing" on page [206](#)).
  6. On the **Malware protection** tab, configure the heuristic analyzer and security level (see Section "Configuring protection against web-based malware" on page [202](#)).
  7. On the **Task Management** tab, start the task based on a schedule (see Section "Managing task schedules" on page [138](#)).
  8. Click **OK**.
- The task configuration is saved.

## Selecting the task operation mode

► *To configure the task operation mode:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time Server Protection** section in the **Traffic Security** block, click the **Settings** button.  
The **Traffic Security** window opens.
4. On the **General** tab, select one of the available modes from the **Task mode** drop-down list:
  - **Driver Interceptor** (see Section "Configuring the Driver Interceptor mode" on page [198](#))
  - **Redirector** (see Section "Configuring the Redirector mode" on page [200](#))
  - **External Proxy**

5. Specify the ICAP service connection settings (required for all three modes):

- **Network port number**

The port number of the ICAP service for Kaspersky Security 10.1 for Windows Server.

- **Service ID**

An ID that makes part of the RESPMOD URI parameter of ICAP (see document RFC 3507). RESPMOD URI designates the address of an anti-virus ICAP server installed for the network storage area.

For example, if the IP address of the protected server is 192.168.10.10, the port number is 1345, and the ICAP service ID is webscan, the corresponding RESPMOD URI address is `icap://192.168.10.10/webscan:1345`

6. Configure the selected task mode.

No additional configuration is required for the **External Proxy** mode. Configuration is performed on the external proxy server.

7. Click **OK**.

The configuration is saved.

## Configuring the Driver Interceptor mode

► *In the **Traffic Security** window:*

1. Select the **General** tab.
2. Select the **Driver Interceptor** task mode.
3. In the **Task mode settings** block, configure the following settings:

- **Scan HTTPS traffic.**

If the check box is selected, intercepted encrypted HTTPS traffic is decompressed and scanned for threats.

If the check box is cleared, the encrypted HTTPS traffic is not decompressed.

The check box is selected by default.

Scanning is available only if the HTTPS port is open.

- Select the version of a cryptographic protocol that you want to use:
  - **TLS 1.0**
  - **TLS 1.1**
  - **TLS 1.2**

The **TLS 1.0** check box is selected by default and cannot be modified.

- **Do not trust web-servers with invalid certificate.**

The check box can be selected if the **Scan HTTPS traffic** check box is selected.

If this check box is selected a web page with invalid certificate is blocked (certificate has expired, signature verification error, certificate is withdrawn, etc.)

- **Security port.**

Specify the port number which is used to redirect traffic from the browser or network driver to inner port created by Kaspersky Security 10.1 for Windows Server to detect web-based threats. It is not recommended to modify the default port. The port number must not coincide with any ports that are open for the ICAP service. If you use the **Redirector** task mode, ports that are already being used are listed in the **Scan HTTPS traffic** field.

4. To add or exclude ports from the interception area, click the **Configure interception area** button.

The **Interception area** window opens.

5. Select one of the following options on the **Intercept ports** tab:

- **Intercept all**

- **Intercept specified ports:**

- a. Enter the port number in the text field. You can add several ports by using a semicolon delimiter between port numbers.
- b. Click **Add**.

Port is included in the interception area.

By default Kaspersky Security 10.1 for Windows Server intercepts traffic that is transferred via the following ports: 80, 8080, 3128, 443.

6. To specify ports you want to exclude from the interception area on the **Exclude ports** tab:

- a. Enter the port number in the text field. You can add several ports by using a semicolon delimiter between port numbers.
- b. Click **Add**.

Port is excluded from the area.

By default Kaspersky Security 10.1 for Windows Server excludes ports which are used by other applications and might cause issues when attempting to read data transferred via encrypted connection: 3389, 1723, 13291.

7. To exclude IP addresses from the interception area on the **Exclude IP-addresses** tab:

- a. Enter IP addresses using IPv4 format or a mask.
- b. Click **Add**.
- c. Click **OK** to save the changes.

8. To exclude process or executable file which requires traffic exchange on the **Exclude processes** tab:

- a. Select the **Apply exclusions for processes** check box.

- b. To exclude a file:
  1. Click the **Executable files** button.  
The standard **Open** windows is displayed.
  2. Select the executable file you want to exclude and click **Open**.
- c. To exclude a process running on a local computer:
  1. Click the **Running processes** button.  
The **Active processes** window is displayed.
  2. Select a currently running process and click **OK**.

You cannot select processes in the Kaspersky Security Center.

9. In the **Traffic Security** window click the **OK** button.

The task mode configuration is saved.

## Configuring the Redirector mode

► *In the **Traffic Security** window:*

1. Select the **General** tab.
2. Select the **Redirector** task mode.
3. In the **Task mode settings** block, configure the following settings:

- **Scan HTTPS traffic.**

If the check box is selected, intercepted encrypted HTTPS traffic is decompressed and scanned for threats.

If the check box is cleared, the encrypted HTTPS traffic is not decompressed.

The check box is selected by default.

Scanning is available only if the HTTPS port is open.

- Select the version of a cryptographic protocol that you want to use:
  - **TLS 1.0**
  - **TLS 1.1**
  - **TLS 1.2**

The **TLS 1.0** check box is selected by default and cannot be modified.

- **Redirect traffic to an external proxy after checking.**

If the check box is selected, Kaspersky Security 10.1 for Windows Server redirects traffic that has already been scanned to an external proxy, for example, a corporate proxy server that is used within the corporate network.

If the check box is cleared, traffic is sent directly to an internal proxy.

- **Proxy server address.**  
The address of the internal terminal proxy server used for redirection. Enter the address in IPv4 format.
- **Port.**  
The port number for the internal proxy.
- **Security port.**  
Specify the port number which is used to redirect traffic from the browser or network driver to inner port created by Kaspersky Security 10.1 for Windows Server to detect web-based threats. It is not recommended to modify the default port. The port number must not coincide with any ports that are open for the ICAP service. If you use the **Redirector** task mode, ports that are already being used are listed in the **Scan HTTPS traffic** field.

For the **Redirector** mode, the operating system must be configured to transfer encrypted traffic via the port specified by Kaspersky Security 10.1 for Windows Server.

4. Click **OK**.

The task mode configuration is saved.

## Predefined security level settings

One of three predefined security levels for a node selected in the server file resources tree can be applied: Maximum performance, Recommended, and Maximum protection. Each of these levels contains its own predefined set of security settings (see the table below).

### Maximum performance

The **Maximum performance** security level is recommended if, beyond using Kaspersky Security 10.1 for Windows Server on servers and work stations, there are additional server security measures inside your network, for example, firewalls and existing security policies.

### Recommended

The **Recommended** security level ensures an optimum combination of protection and performance impact on protected servers. This level is recommended by Kaspersky Lab experts as sufficient to protect servers on most corporate networks. The **Recommended** security level is set by default.

### Maximum protection

The **Maximum protection** security level is recommended if your organization's network has elevated computer security requirements.

Table 38. Predefined security levels and corresponding security settings

Options	Security level		
	Maximum performance	Recommended	Maximum protection

Options	Security level		
	Maximum performance	Recommended	Maximum protection
Scan objects	According to the list of extensions in the database	By format	All objects
Action to perform on infected and other objects	Block	Block	Block
Do not detect	No	No	No
Stop scanning if it takes longer than (sec.)	60 sec.	60 sec.	60 sec.
Do not scan objects larger than (MB)	20 MB	20 MB	No
Scan of compound objects	<ul style="list-style-type: none"> <li>Packed objects*</li> </ul> <p>* New and modified objects only</p>	<ul style="list-style-type: none"> <li>Archives*</li> <li>SFX archives*</li> <li>Packed objects*</li> <li>Embedded OLE objects*</li> </ul> <p>* New and modified objects only</p>	<ul style="list-style-type: none"> <li>Archives*</li> <li>SFX archives*</li> <li>Packed objects*</li> <li>Embedded OLE objects*</li> </ul> <p>* All objects</p>

## Configuring protection against web-based malware

The following protection settings also affect incoming mail traffic. However, the selected actions on infected and other detected objects are performed only for mail attachments.

- ▶ To configure heuristic analysis to detect viruses and other computer security threats that are transferred via web traffic:
  1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
  2. Perform one of the following actions in the details pane of the selected administration group:
    - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
    - If you want to configure the application for a single server, select the **Devices** tab and open the



**Application settings** (see Section "**Configuring local tasks in Application settings window of Kaspersky Security Center**" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time Server Protection** section in the **Traffic Security** block, click the **Settings** button.  
The **Traffic Security** window opens.
4. On the **Malware protection** tab:
  - Select the **Use heuristic analyzer** check box.
  - Set the required level of heuristic analysis for malware scanning.
  - Select the security level (see Section "Predefined security level settings" on page [201](#)) from the drop-down list:
    - **Recommended**
    - **Maximum protection**
    - **Maximum performance**
    - **Custom**
5. On the **Description** tab below you can review the settings of the selected security level.
6. Open the **General** tab and in the **Object protection** section, specify the objects that you want to include in the scan scope:
  - **All objects**  
Kaspersky Security 10.1 for Windows Server scans all objects.
  - **Objects scanned by format**  
Kaspersky Security 10.1 for Windows Server scans only infectable objects based on file format.  
Kaspersky Lab compiles the list of formats. It is included in the Kaspersky Security 10.1 for Windows Server databases.
  - **Objects scanned according to list of extensions specified in anti-virus database**  
Kaspersky Security 10.1 for Windows Server scans only infectable objects based on file extension.  
Kaspersky Lab compiles the list of extensions. It is included in the Kaspersky Security 10.1 for Windows Server databases.
  - **Objects scanned by specified list of extensions**  
Kaspersky Security 10.1 for Windows Server scans files based on file extension. List of file extensions can be manually customized in the **List of extensions** window, which can be opened by clicking the **Edit** button.
    - a. Click the **Modify** button to edit list of extensions.
    - b. In the widow that opens, specify an extension.
    - c. Click **Add**.

Click the **By default** button to populate the list with the preset list of excluded extensions.

7. In the **Compound object protection** section, specify the compound objects that you want to include in the scan scope:

- **Archives**

Scanning of ZIP, CAB, RAR, ARJ archives and other archive formats.

If this check box is selected, Kaspersky Security 10.1 for Windows Server scans archives.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server skips archives during scanning.

The default value depends on the selected security level.

- **SFX archives**

Scanning of self-extracting archives.

If this check box is selected, Kaspersky Security 10.1 for Windows Server scans SFX archives.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server skips SFX archives during scanning.

The default value depends on the selected security level.

This option is active when the **Archives** check box is cleared.

- **Packed objects**

Scanning of executable files packed by binary code packers, such as UPX or ASPack.

If this check box is selected, Kaspersky Security 10.1 for Windows Server scans executable files packed by packers.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server skips executable files packed by packers during scanning.

The default value depends on the selected security level.

- **Embedded OLE objects**

Scanning of objects embedded into files (such as Microsoft Word macros, or email message attachments).

If this check box is selected, Kaspersky Security 10.1 for Windows Server scans objects embedded into files.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server skips objects embedded into files during scanning.

The default value depends on the selected security level.

8. On the **Actions** tab, select an action to be performed on infected and other detected objects:

- **Block**

Kaspersky Security 10.1 for Windows Server blocks loading of a web page if malicious content is detected. The reason for blocking the requested web page is displayed instead of the web page.

- **Allow**

Kaspersky Security 10.1 for Windows Server does not block the requested web page, but logs the event about the detection of malicious content.

9. On the **Performance** tab, configure the following settings:

- In the **Exclusions** section select or clear the **Do not detect** check box. To configure the list of objects to exclude:

Objects are excluded from scanning by the name or name mask of the detectable object. The list of names of detectable objects is available on the Virus Encyclopedia website <https://www.securelist.com/>.

If this check box is selected, Kaspersky Security 10.1 for Windows Server skips specified detectable objects during scanning.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server detects all objects specified in the application by default.

The check box is cleared by default.

- a. Click the **Modify** button.
  - b. In the widow that opens, specify object name or mask.
  - c. Click **Add**.
- In the **Advanced settings** section, restrict the scanning time interval and object size:

- **Stop scanning if it takes longer than (sec.)**

Limits the duration of object scanning. The default value is 60 seconds.

If the check box is cleared, scan duration is limited to the specified value.

If the check box is cleared, scan duration is unlimited.

The check box is selected by default.

- **Do not scan objects larger than (MB)**

Excludes objects larger than the specified size from the scanning.

If the check box is selected, Kaspersky Security 10.1 for Windows Server skips objects whose size exceeds the specified limit during virus scan.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server scans objects of any size.

By default, the check box is selected for the **Recommended** and **Maximum performance** security levels.

10. Click **OK** in the **Malware protection settings** window.

The security level configuration is saved.

## Configuring mail threat protection

To use mail threat protection, the Kaspersky Security 10.1 Microsoft Outlook Add-in must be installed and the protected server configured (see Section "Mail threat protection" on page 195) correctly.

► *To enable mail threat protection:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time Server Protection** section in the **Traffic Security** block, click the **Settings** button.  
The **Traffic Security** window opens.
4. On the **Mail threat protection** tab, select the **Enable mail threat protection check box**.

If this check box is selected, Kaspersky Security 10.1 for Windows Server performs anti-virus and anti-phishing scanning of all incoming mail via the Kaspersky Security 10.1 Microsoft Outlook Add-in.

If this check box is cleared, mail is not scanned.

The check box is selected by default.

5. Click **OK**.

The changes are saved.

## Configuring URL and web processing

► *To check web resources for phishing threats and identify web addresses designated as malicious according to the anti-virus database and URL reputation from KSN:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time Server Protection** section in the **Traffic Security** block, click the **Settings** button.

The **Traffic Security** window opens.

4. On the **Task mode** tab select and configure the task operation mode (see Section "Selecting the task operation mode" on page [197](#)).

5. On the **URL and web processing** tab:

- Clear or select the **Use malicious URL database to scan web links** check box.

If the check box is selected, Kaspersky Security 10.1 for Windows Server performs signature analysis on each URL.

If the check box is cleared, the anti-virus database is not used to scan URLs.

The check box is selected by default.

- Clear or select the **Use anti-phishing database to scan web pages** check box.

If the check box is selected, Kaspersky Security 10.1 for Windows Server checks each URL against the anti-phishing database. Anti-phishing scanning is based on heuristic analysis.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server does not detect phishing attacks.

The check box is selected by default.

Note that when you configure anti-phishing scanning of URLs, anti-phishing is automatically applied to emails.

- Clear or select the **Use Trusted Zone** check box.

This check box enables / disables use of the trusted zone for a task.

If the check box is selected, Kaspersky Security 10.1 for Windows Server adds file operations of trusted processes to the scan exclusions configured in the task settings.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server disregards the file operations of trusted processes when forming the protection scope for the Real-Time File Protection task.

The check box is selected by default.

- Clear or select the **Use KSN for protection** check box.

This check box enables or disables the use of KSN services.

If the check box is selected, the application uses Kaspersky Security Network data to ensure that the application responds more quickly to new threats and to reduce the likelihood of false positives.

If the check box is cleared, the task does not use KSN services.

The check box is selected by default.

The KSN reputation for URL is available only if all of the following conditions are met:  
 a. The **Use KSN for protection** check box is selected in Traffic Security settings.

- b. The KSN Statement is accepted.
- c. The **Send data about the requested URLs** (see Section "**Configuring the KSN Usage task**" on page 180) check box is selected.
- d. The KSN Usage task is started.

6. Click **OK**.

The URL and web processing configuration is saved.

## Adding URL-based rules

You can add a URL-based rule to deny or allow a specific URL. These rules have higher priority than any other conclusions.

► *To create a new URL-based rule:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "**Configuring policy**" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "**Configuring local tasks in Application settings window of Kaspersky Security Center**" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Traffic Security** block, click the **Rules** button.

The **Web Control rules** window opens.

4. On the **Web Control** tab, select the **Apply URL-based rules** check box to apply rules.

If the check box is selected, Kaspersky Security 10.1 for Windows Server blocks HTTPS certificates by applying custom denying rules for certificates.

If the check box is cleared, the rules are not applied.

The check box is cleared by default.

The check box is available only if the **Scan HTTPS traffic** check box is selected.

5. Click the **Add** button to add a new rule.

6. In the context menu of the **Add** button select the **URL-based rule** option.

7. In the **URL-based rule** window that opens:

- a. Enter the name of the rule.
- b. Select the **Type** of rule: **Denying** or **Allowing**.

- c. Select the **Apply rule** check box.
  - d. Specify the **URL** in the field below.
  - e. Click **OK**.
8. To edit a rule, select one rule in the list and click **Modify**.
  9. Click **OK** in the **Web Control rules** window.

The new rules are applied.

## Configuring Web control

Configure the rules usage, manage the settings of certificates scanning and category-based web control.

### In this section

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Configuring category-based web control .....	<a href="#">211</a>
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## Configuring certificate scanning

Kaspersky Security 10.1 for Windows Server lets you scan and block web resources with invalid and expired certificates. In order to configure the scanning of certificates, the following steps must be performed:

- a. Select the **Driver Interceptor** or **Redirector** mode.
- b. Configure the Traffic Security task (see Section "Selecting and configuring the task mode" on page [209](#)).
- c. Apply web control rules.
- d. Add and apply Rules for certificates (see Section "Adding rules for certificates" on page [210](#)).

The rules for certificates can only be used in **Driver Interceptor** or **Redirector** mode. By default, Kaspersky Security 10.1 for Windows Server creates only denying rules for certificates.

### Selecting and configuring the task mode

► *To select and configure the mode for working with certificates:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Real-Time Server Protection** section in the **Traffic Security** block, click the **Settings** button.  
The **Traffic Security** window opens.
4. On the **General** tab, select a mode that supports certificate scanning from the **Task mode** drop-down list:
  - **Driver Interceptor** (see Section "**Configuring the Driver Interceptor mode**" on page [198](#))
  - **Redirector** (see Section "Configuring the Redirector mode" on page [200](#))
5. In the **Task mode settings** block, configure the following settings:
  - **Scan HTTPS traffic.**

If the check box is selected, intercepted encrypted HTTPS traffic is decompressed and scanned for threats.

If the check box is cleared, the encrypted HTTPS traffic is not decompressed.

The check box is selected by default.

Scanning is available only if the HTTPS port is open.

- Select the version of a cryptographic protocol that you want to use:
  - **TLS 1.0**
  - **TLS 1.1**
  - **TLS 1.2**

The **TLS 1.0** check box is selected by default and cannot be modified.

6. Click **OK**.  
The task configuration is saved.

## Adding rules for certificates

Rules for certificates can only be used in **Driver Interceptor** or **Redirector** mode. By default, Kaspersky Security 10.1 for Windows Server creates only denying rules for certificates.

► *To add or configure a certificate rule:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "**Configuring policy**" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the



**Application settings** (see Section "**Configuring local tasks in Application settings window of Kaspersky Security Center**" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Traffic Security** block, click the **Rules** button.  
The **Web Control rules** window opens.
4. On the **Web Control rules** tab, select the **Apply certificate-based rules** check box to apply rules.  
If the check box is selected, Kaspersky Security 10.1 for Windows Server blocks HTTPS certificates by applying custom denying rules for certificates.  
If the check box is cleared, certificates are not scanned by the application.  
The check box is cleared by default.  
The check box is available only if the **Scan HTTPS traffic** check box is selected.
5. Click the **Add** button to add a new rule.
6. In the context menu of the **Add** button select the **Certificate-based rule** option.
7. In the **Certificate-based rule** window that opens:
  - a. Enter the name of the rule.
  - b. Select the **Apply rule** check box.
  - c. Select the **Operator type: Mask** or **Regular expression**.
  - d. Specify the mask or expression in the **Operator** field.
  - e. Click **OK**.
8. To edit a rule, select one rule in the list and click **Modify**.
9. Click **OK** in the **Web Control rules** window.  
The new rules are applied.

## Configuring category-based web control

► *To add or modify a traffic security category-based rule:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "**Configuring policy**" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "**Configuring local tasks in Application settings window of Kaspersky Security Center**" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Traffic Security** block, click the **Rules** button.

The **Web Control rules** window opens.

4. Open the **Categorization** tab.

5. Select the **Apply rules for web traffic category control** check box.

If the check box is selected, Kaspersky Security 10.1 for Windows Server categorizes and blocks web resources, that fall under the selected categories.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server does not perform categorization.

The check box is cleared by default.

Category control settings become available.

6. Select or clear the following check boxes:

- **Allow access if the web page can not be categorized.**
- **Allow access to legitimate web resources that can be used to damage your server.**
- **Allow access to legitimate advertisement.**

7. In the list of available categories (see Section "List of categories" on page [213](#)):

- Select the corresponding check box to allow a category.

The **Type** column changes to **Allowing**.

- Clear the corresponding check box to block a category.

The **Type** column changes to **Denying**.

The list of categories is predefined and cannot be modified (you cannot add or remove categories).

8. Click **OK**.

The rules configuration is saved.

### Using the not-a-virus mask

#### ► To use the *not-a-virus* mask for category analysis:

1. In the Kaspersky Security Center Administration Console, open the KSN Usage task settings (see Section "Configuring the KSN Usage task" on page [180](#)).
2. Select the **Send data about the requested URLs** check box.
3. Start the KSN Usage task.
4. In the Traffic Security settings window (see Section "Configuring the Traffic Security task" on page [196](#)), select the **Use KSN for protection** check box.
5. In the **Web control rules** window, on the **Categorization** tab, select the **Apply rules for web traffic**

**category control** check box.

- In the list of categories, select the categories for which you want to apply the `not-a-virus` mask.

Objects from the selected categories, that correspond to the mask, will not be detected by the Traffic Security task.

The `not-a-virus` mask usage is configured in the **Trusted Zone** settings (see Section "Applying the not-a-virus mask" on page 151).

## List of categories

Web resources are analyzed and categorized according to the tags. Tag can be applied to a number of categories (see table below).

Table 39. Tags for web resource categories

Tag	Description	List of categories
18+ (adult)	These categories may include web resources that potentially contain content for adults (18+), e.g. descriptions of violence, pornography, or obscene language.	Abortion, Adult dating, Anorexia, Discontent, Discrimination, Erotic, Illegal drugs, Illegal software, LGBT, Lingerie, Non-adult dating, Nudism, Policy decision, Porn, Restricted by global legislation, Restricted by RF legislation, Restricted by Roskomnadzor (RF), Sex education, Sex shops, Social networks, Suicide, Obscene vocabulary, Violence, Weapons.
children	These categories may include web resources that potentially contain content for children. For example, educational websites, children's entertainment websites, forums and blogs about child-rearing.	For children, Restricted by Federal Law 436 (RF), Schools and universities pages.
drug	These categories may include web resources that potentially contain information about narcotics and other legal and illegal substances. For example, information about the distribution of prohibited drugs or alcohol, or the websites of registered pharmaceutical companies.	Abortion, Alcohol, Anorexia, Drugs, Health and beauty, Illegal drugs, Medicine, Pharmacy, Tobacco.

Tag	Description	List of categories
education	<p>These categories may include web resources that potentially contain educational materials or materials about teaching.</p> <p>For example, online encyclopedias, knowledge bases, wikis, and the web pages of educational institutions or web pages about sex education.</p>	<p>Books and writing, Education, For children, Information technologies, Online encyclopedias, Schools and universities pages, Search engines, Sex education.</p>
hobby&entertainment	<p>These categories may include web resources potentially related to entertainment, hobbies, recreational activities.</p> <p>For example, various types of online games, including gambling and social networks, web pages about books or hunting, blogs about health and beauty, and news feeds.</p>	<p>Adult dating, Hobby and entertainment, All communication media, Astrology and esoterica, Audio, video and software, Betting, Blogging, Casinos, card games, Casual games, Chats and forums, Computer games, Culture and society, Erotic, Fashion, File sharing, Fishing and hunting, For children, Gambling, Health and beauty, Hobby and entertainment, Home and family, Humor, LGBT, Lingerie, Lotteries, Media hosting and streaming, Medicine, Music, News, Non-adult dating, Nudism, Online shopping, Online shopping (self-payded), Pets and animals, Porn, Restaurants, cafe and food, Sex shops, Social networks, Sport, Torrents, Traveling, TV and radio, Wargaming.</p>
gaming	<p>These categories may include web resources potentially related to various types of games. For example, games of chance and betting, lotteries, online or casual games, as well as websites and forums about gaming.</p>	<p>Casual games, Computer games, Sport, Wargaming.</p>
hazard	<p>This category refers to web pages that contain:</p> <ul style="list-style-type: none"> <li>• Games of chance that are “pay to play”.</li> <li>• Betting pools.</li> <li>• Lotteries that involve purchase of lottery tickets/numbers.</li> </ul>	<p>Bets, Casinos, card games, Gambling, Gambling (expanded), Lotteries.</p>
health&medicine	<p>Web pages on healthy lifestyles. May include sites dedicated to fitness, healthy eating, and alternative practices and methods of treatment; web pages about medicine, pharmacies, pharmaceutical companies, and medications and supplements.</p>	<p>Abortion, Anorexia, Drugs (legal and illegal), Health and beauty, Medicine, Pharmacy, Sport.</p>

Tag	Description	List of categories
illegal	These categories may include potentially illegal web resources. For example, illegal sharing of media files or installation packages, or web pages prohibited by the official laws of various countries.	Alcohol, Audio, video and software, Drugs, File sharing, Illegal drugs, Illegal software, Lotteries, Restricted by global legislation, Restricted by RF legislation, Restricted by Roskomnadzor (RF), Tobacco.
IT	Broadly speaking, web pages that allow users (with or without requiring an account) to send personal messages to other users (including e-mail services, social networks, blogs, etc.)	Anonymous proxy servers, Hosting and domain services, Illegal software, Information technologies, Search engines, Web Mail.
forbidden by law	These categories may include web resources potentially controlled by federal law or related to the government or politics.	Law and policy, Mentioned in Federal list of extremists (RF), Restricted by Federal Law 436 (RF), Restricted by global legislation, Restricted by RF legislation, Restricted by Roskomnadzor (RF).
legal	These categories may include potentially legal web resources.	Alcohol, Audio, video and software, Drugs, File sharing, Legal advertisement, Lotteries, Military, Pharmacy, Religion, Sex education, Teasers and ads services, Tobacco, Wargaming.
media sharing	These categories may include web resources that may enable file sharing.  For example, torrents, file sharing websites, music and video hosting, both legal and illegal.	Audio, video and software, Books and writing, File sharing, For children, Internet services, Media hosting and streaming, Music, Search engines, Torrents, TV and radio.
money&paying	These categories may include web resources potentially related to finance and financial transactions.  For example, the official websites of banks, online banks, online stores, and web pages to perform money transfers.	Banking, Books and writing, Casual games, E-commerce, Online shopping (self-payd), Payment by credit cards, Payment systems, Restaurants, cafe and food, Traveling.
online collaboration	These categories may include web resources potentially related to online communication.  For example, specialized blogs and forums, private chat rooms, social networks and dating websites.	Adult dating, Blogging, Chats and forums, For children, Health and beauty, Job search sites, Medicine, Non-adult dating, Social networks, Traveling.

Tag	Description	List of categories
psychotropic&drug	These categories may include web resources related to any type of drugs, psychotropic medicine or tobacco.	Drugs (legal and illegal), Health and beauty, Illegal drugs, Medicine, Pharmacy, Tobacco.
sex&adult	<p>These categories may include web resources that potentially contain sexual or erotic material.</p> <p>For example, pornographic hosting, web pages about sex education, and websites about sexual minorities.</p>	Adult dating, Erotic, LGBT, Lingerie, Nudism, Porn, Sex education, Sex shops.
society&law	This category includes many aspects of society and human life, including religion, religious associations; government, politics, laws; home and family; news media; military and weapons.	Culture and society, Law and politics, Military, Religion, Weapons.
shopping	These categories may include web resources potentially related to online shopping.	Books and writing, Lingerie, Online shopping, Online shopping (self-payd), Payment by credit cards, Restaurants, cafe and food, Sex shops, Traveling.
violence	These categories may include web resources that potentially contain explicit expressions of aggression, descriptions of cruelty, extremist propaganda, or descriptions of suicide.	Discontent, Discrimination, Extremism and racism, Fishing and hunting, Hate and discrimination, Mentioned in Federal list of extremists (RF), Military, Policy Decision (JP), Restricted by global legislation, Restricted by RF legislation, Restricted by Roskomnadzor (RF), Suicide, Violence, Wargaming, Weapons.
web services	These categories may include web resources potentially offering various web services. For example, anonymization, web hosting, or email services.	Anonymous proxy servers, Hosting and domain services, Internet services, Search engines, Teasers and ads services, Web Mail.

# Local Activity Control

This section provides information about Kaspersky Security 10.1 for Windows Server functionality that controls applications launches and connections by external devices via USB.

## In this chapter

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## Managing applications launch from Kaspersky Security Center

You can allow or deny launch of applications on all servers within the corporate network by creating common lists of Applications Launch Control rules on the side of Kaspersky Security Center for groups of servers.

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## About using profile to configure Applications Launch Control tasks in Kaspersky Security Center policy

Applications Launch Control rules configured in the policy are applied to all servers within the administration group. If one administration group includes servers of various types, custom lists of rules may be required for Applications Launch Control on each server. You can use *policy profiles* to apply different policies to servers within a single administration group.

It is recommended to apply policy profiles to set Applications Launch Control rules for different server types within a single administration group governed by a unified policy. This allows to optimize a server protection as far as specified rules cover only those applications launches that are typical for this exact server type.

Policy profiles are applied to servers of the administration group according to the *tags* assigned to them. You can configure a policy profile for all group servers, which have single tag.

Detailed information on tags and policy profiles as well as instructions on using them are provided in the *Kaspersky Security Center Help*.

► *To apply a policy profile in the Applications Launch Control task:*

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node. Expand the administration group for which you want to configure the application of policy profiles.
2. Assign tags to each server within the administration group according to the server type. To do this, perform the following actions:
  - In the details pane of the selected administration group, open the **Devices** tab and select the server for which you want to assign tags. In the **Properties: <Server name>** window of the selected server, select the **Tags** section and create a list of tags. Click **OK**.
3. Create a policy profile and configure its application for protecting servers within the administration group. To do this, perform the following actions:
  - In the details pane of the selected administration group, open the **Policies** tab and select the policy for which you want to configure the application of profiles. In the **Properties: <Policy name>** window of the selected policy, open the **Policy profiles** section and click the **Add** button to create a new profile. The **Properties: <Profile name>** window opens. Do the following:
    - a. In the **Activation rules** section, configure the scope of application of the profile and specify the conditions under which the profile will be activated.
    - b. In the **Applications Launch Control** section, configure the lists of Applications Launch Control rules for the profile you are editing.
    - c. Click **OK**.
4. In the **Properties: <Policy name>** window, click **OK**.

Configured profile will be applied in the policy related to Applications Launch Control task.

## Configuring Applications Launch Control task settings

You can change the default Applications Launch Control task settings (see the table below).

Table 40. Applications Launch Control task settings by default

Setting	Default Value	Description
<b>Task mode</b>	<b>Statistics Only.</b> The task logs application blocking and startup events based on the set rules. Application launch is not actually denied.	You can select <b>Active</b> mode for server protection after the final list of rules is generated.



Setting	Default Value	Description
<b>Rules managing</b>	<b>Replace local rules with policy rules</b>	You can select a mode in which rules specified in a policy are applied jointly with the rules on the local computer.
<b>Rules usage scope</b>	The task controls the launch of executable files, scripts, and MSI packages.	You can specify types of files for which launch is controlled by rules.
<b>KSN Usage</b>	Data on application reputation in the KSN are not used.	You can use KSN application reputation data when running the Applications Launch Control task.
<b>Automatically allow software distribution for applications and packages listed</b>	Not applied.	You can allow software distribution using the installers and applications specified in the settings. By default, software distribution is only allowed using the Windows Installer service.
<b>Always allow software distribution via Windows Installer</b>	Applied.	You can allow any software installation or update, if the operations are performed via Windows Installer.
<b>Deny the command interpreters launch with no command to execute</b>	Not applied.	You can deny launch of command interpreters with no command for execution.
<b>Task start</b>	First run is not scheduled.	The Applications Launch Control task does not start automatically at start of Kaspersky Security 10.1 for Windows Server. You can start the task manually or configure a scheduled start.

► *To configure general Applications Launch Control task settings take the following steps:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the

**Properties:** <Policy name> (see Section "Configuring policy" on page 107) window.

- If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Local Activity Control** section, click the **Settings** button in the **Applications Launch Control** section.

The **Applications Launch Control** window opens.

4. On the **General** tab, select the following settings in the **Mode** section:

- In the **Task mode** drop-down list, specify the task operation mode.

In this drop-down list you can select an Applications Launch Control task mode:

- **Active.** Kaspersky Security 10.1 for Windows Server uses the specified rules to monitor any applications being run.
- **Statistics Only.** Kaspersky Security 10.1 for Windows Server does not use the specified rules to monitor applications launches, but just records information about those launches in the task log instead. Start of all programs is allowed. You can use this mode to generate a list of Applications Launch Control rules on the basis of information recorded in the task log.

By default, the Applications Launch Control task runs in the **Statistics Only** mode.

- Clear or select the **Repeat action taken for the first file launch on all the subsequent launches for this file** check box.

The check box enables or disables launch control for the second and subsequent attempts to start applications basing on the incident information stored in the cache.

If the check box is selected, Kaspersky Security 10.1 for Windows Server allows or denies an application restart basing on the conclusion that the task had submitted on the first start of this application. For example, if the first application launch was allowed by the rules, the information about this action will be stored in the cache, and the second and all subsequent restarts will also be allowed, without any additional recheck.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server analyses an application on its every launch attempt.

The check box is selected by default.

- Clear or select the **Deny the command interpreters launch with no command to execute** check box.

If the check box is selected Kaspersky Security 10.1 for Windows Server denies the launch of the command line interpreter even if the interpreter launch is allowed. The command line with no command can only be launched if both conditions are met:

- The command line interpreter launch is allowed.
- The executed command is allowed.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server only considers the allowing rules for the command line launch. The launch is denied if no allowing rule is

applied or the executable process does not have KSN-trusted status. If the allowing rule is applied or the process has KSN-trusted status, the command line can be launched with or without command for execution.

Kaspersky Security 10.1 for Windows Server recognizes the following command line interpreters:

- cmd.exe
- powershell.exe
- python.exe
- perl.exe

5. In the **Rules** section, configure the settings for applying rules:
  - a. Click the **Rules list** button to add allowing rules for task launch control.

Kaspersky Security 10.1 for Windows Server does not recognize paths that contain slashes "/". Use backslash "\" to enter the path correctly.

- b. Select the mode for applying rules:

- **Replace local rules with policy rules.**

The application applies the rule list specified in the policy for centralized applications launch control on a group of computers. Local rule lists cannot be created, edited, or applied.

- **Add policy rules to the local rules.**

The application applies the rule list specified in a policy together with local rule lists. You can edit the local rule lists using the Rule Generator for Applications Launch Control task.

By default, Kaspersky Security 10.1 for Windows Server applies two preset rules that allow a list of scripts, MSI packages, and startup files based on a certificate.

6. In the **Rules usage scope** section, specify the following settings:

- **Apply rules to executable files.**

The check box enables / disables control over start of program executable files.

If this check box is selected, Kaspersky Security 10.1 for Windows Server allows or blocks start of program executable files using the specified rules whose settings specify Executable files as the scope.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server does not control start of program executable files using specified rules. Startup of program executable files is allowed.

The check box is selected by default.

- **Monitor loading of DLL modules.**

The check box enables / disables monitoring of DLL modules loading

If this check box is selected, Kaspersky Security 10.1 for Windows Server allows or blocks downloads of DLL modules using the specified rules whose settings specify Executable files as the scope.

If this check box is cleared, Kaspersky Security 10.1 for Windows Server does not monitor downloads of DLL modules using the specified rules. Download of DLL modules

is allowed.

The check box is active if the check box Apply rules to executable files is selected.

The check box is cleared by default.

Monitoring download of DLL modules may affect the operating system performance.

- **Apply rules to scripts and MSI packages.**

The check box enables / disables launch of scripts and MSI packages.

If this check box is selected, Kaspersky Security 10.1 for Windows Server allows or blocks runs of scripts and MSI packages using the specified rules whose settings specify Scripts and MSI packages as the scope.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server does not control launch of scripts and MSI packages using specified rules. Startup of scripts and MSI packages is allowed.

The check box is selected by default.

7. In the **KSN Usage** section, configure the following application launch settings:

- **Deny applications untrusted by KSN.**

The check box either enables or disables Applications Launch Control according to their reputation in KSN.

If this check box is selected, Kaspersky Security 10.1 for Windows Server blocks any applications from running if they have the untrusted status in KSN. Applications Launch Control allowing rules that apply to KSN-untrusted applications will not trigger. Selecting the check box provides additional protection from malware.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server does not take into account the reputation of KSN-untrusted programs and allows or blocks start in accordance with the rules that apply to such programs.

The check box is cleared by default.

- **Allow applications trusted by KSN.**

The check box either enables or disables Applications Launch Control according to their reputation in KSN.

If this check box is selected, Kaspersky Security 10.1 for Windows Server allows applications to run if they have KSN-trusted status. Denying application launch control rules that are applied to the KSN-trusted applications have a higher priority: if the application is considered trusted by the KSN services, this application launch will be denied.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server does not take into account the reputation of KSN-trusted programs and allows or blocks start in accordance with the rules that apply to such programs.

The check box is cleared by default.

- Users and / or user groups allowed to launch applications trusted in KSN.

8. On the **Software Distribution Control** tab, configure the settings for software distribution control (see Section "Configuring software distribution control" on page [223](#)).

9. On the **Task management** tab, configure the scheduled task start settings (see Section "Configuring the task start schedule settings" on page [138](#)).
10. Click **OK** in the **Task settings** window.

Kaspersky Security 10.1 for Windows Server immediately applies the new settings to the running task. Information about the date and time when the settings were modified, and the values of task settings before and after modification, are saved in the task log.

## Configuring software distribution control

Software installation and updates may be simplified by using Software Distribution Control. Software Distribution Control allows automatic start of applications, if they are started by the trusted application or trusted distribution package. After a trusted distribution package is started, Kaspersky Security 10.1 for Windows Server automatically calculates a checksum for each child file and thereafter does not apply Default Deny policies to such files. Kaspersky Security 10.1 for Windows Server allows the trusted distribution package to be decompressed and all child files to start, unless these objects are blocked by the Device Control task rules or listed as untrusted in KSN.

The editing or moving of a child file may prevent the file from starting.

► To add a trusted distribution package, do the following:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Local Activity Control** section, click the **Settings** button in the **Applications Launch Control** section.

The **Applications Launch Control** window opens.

4. On the selected tab, select the **Automatically allow software distribution for applications and packages listed** check box.

The check box enables and disables automatic creation of exclusions for all files started using the distribution packages specified in the list.

If the check box is selected, the application automatically allows files in the trusted distribution packages to start. The list of applications and distribution packages allowed for start can be edited.

If the check box is cleared, the application does not apply the exclusions specified in the

list.

The check box is cleared by default.

You can select the **Automatically allow software distribution for applications and packages listed**, if the **Apply rules to executable files** check box is selected in the **Applications Launch Control** task settings.

5. Clear the **Always allow software distribution via Windows Installer** check box if required.

The check box enables and disables automatic creation of exclusions for all files executed via the Windows Installer.

If the check box is selected, the application will always allow files installed via the Windows Installer to start.

If the check box is cleared, the application will not be unconditionally allowed, even if it is started via the Windows Installer.

The check box is selected by default.

The check box is not editable if **Automatically allow software distribution for packages listed** check box is not selected.

Clearing the **Always allow software distribution via Windows Installer** check box is only recommended if it is absolutely necessary. Turning off this function may cause issues updating operating system files and also prevent distribution package child files from starting.

6. If required, select the **Always allow software distribution via SCCM using the Background Intelligent Transfer Service** check box.

The check box turns on or off automatic software distribution using the System Center Configuration Manager.

If the check box is selected, Kaspersky Security 10.1 for Windows Server automatically allows Microsoft Windows deployment using the System Center Configuration Manager. The application allows software distribution only via Background Intelligent Transfer Service.

The application controls start of the objects with the following extensions:

- .exe
- .msi

The check box is cleared by default.

The application controls software distribution cycle on the server from the package delivery to the installation/update. The application does not control processes if any of the distribution stages was performed before the installation of the application on the server.

7. To edit the list of trusted distribution packages, click the **Change packages list** and select one of the following methods in the window that opens:

- **Add one distribution package.**
  - a. Click the **Browse** button and select the application startup file or distribution package.

The **Trust Criteria** section is automatically populated with data about the selected file.

- b. Select one of two available options for criteria to use to determine whether a file or distribution package is trusted:

- **Use digital certificate**

If this option is selected, the presence of a digital certificate is specified as the rule-triggering criterion in the settings of the newly generated allowing rules for Applications Launch Control. The application will now allow start of programs launched using files with a digital certificate. This option is recommended if you want to allow the start of any applications that are trusted in the operating system.

- **Use SHA256 hash**

If this option is selected, the checksum value of the file, which is used to generate the rule, is specified as the rule-triggering criterion in the settings of the newly generated allowing rules for Applications Launch Control. The application will allow start of programs launched using files with the specified checksum value.

This option is recommended for cases when the generated rules are required to meet ultimate security level: SHA256 checksum may be applied as a unique file ID. The usage of SHA256 checksum as a rule triggering criterion constricts the rule usage scope up to one file.

This option is selected by default.

- **Add several packages by hash.**

You can select an unlimited number of startup files and distribution packages, and add them to the list all at the same time. Kaspersky Security 10.1 for Windows Server examines the hash and allows the operating system to launch the specified files.

- **Change selected package.**

Use this option to choose a different startup file or distribution package, or to change the trust criteria.

- **Import distribution packages list from file.**

You can import the list of trusted distribution packages from the configuration file. The file recognized by Kaspersky Security 10.1 for Windows Server must satisfy the following parameters:

- the file has a text extension
- the file contains information structured as a list of lines, where each line includes data for one of the trusted files
- the file must contain a list in one of the following formats:
  - <file name>:<hash SHA256>
  - <hash SHA256>\*<file name>.

In the **Open** window, specify the configuration file containing a list of trusted distribution packages.

8. If you want to remove a previously added application or distribution package for the trusted list, click the **Delete distribution packages** button. Child files will be allowed to run.

To prevent child files from starting, uninstall the application on the protected server or create a denying rule in the Applications Launch Control task settings.

- Click **OK**.

Your newly configured settings have been saved.

## Enabling the Default Allow mode

The Default Allow mode allows all applications to start, if they are not blocked by rules or by KSN untrusted conclusion. Default Allow mode can be enabled by adding specific allowing rules. You can enable Default Allow only for scripts or for all executable files.

► *To add a Default Allow rule:*

- Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
- Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

- In the **Local Activity Control** section, click the **Settings** button in the **Applications Launch Control** block.
- On the **General** tab, click the **Rules list** button.  
The **Applications Launch Control rules** window opens.
- Click the **Add** button and in the context menu of the button select **Add one rule** option.  
The **Rule settings** window opens.
- In the **Name** field, enter the name of the rule.
- In the **Type** drop down list, select the **Allowing** rule type.
- In the **Scope** drop down list, select the type of files whose execution will be controlled by the rule:
  - Executable files** if you want the rule to control launch of applications executable files.
  - Scripts and MSI packages** if you want the rule to control launch of scripts and MSI packages.
- In the **Rule triggering criterion** section, select a **Path to file** option.
- Enter the following mask: `?:\`
- Click **OK** in the **Rule settings** window.

Kaspersky Security 10.1 for Windows Server applies the Default Allow mode.



## About generating Applications Launch Control rules for all computers in Kaspersky Security Center

You can create lists of Applications Launch Control rules using Kaspersky Security Center tasks and policies for all servers and groups of servers on the corporate network at once. This scenario is recommended if the corporate network does not have a reference machine and you are unable to create a common list of rules using a task to automatically generate allowing rules based on applications installed on the reference machine.

You can create lists of Applications Launch Control rules on the side of Kaspersky Security Center in two ways:

- Using a Rule Generator for Applications Launch Control group task for Applications Launch Control.

When this scenario is used, a group task generates its own list of Applications Launch Control rules for each server on the network and saves those lists to an XML file in the specified shared network folder. You can then manually import the created list of rules into the Applications Launch Control task of the Kaspersky Security Center policy. You can configure a Kaspersky Security Center policy to automatically add the created rules to the Applications Launch Control rule list when the Rule Generator for Applications Launch Control group task is completed.

This scenario is recommended when you need to create lists of Applications Launch Control rule on short notice. It is recommended to configure the scheduled launch of the Rule Generator for Applications Launch Control task only if the scope of application of the allowing rules includes folders, containing files you know to be safe.

Before using the Applications Launch Control policy in the network, make sure that all protected servers have access to a shared network folder. If the organization's policy does not provide for the use of a shared network folder in the network, it is recommended to start the Automatic Rules Generators task for server control rules on the test computer group or on a template machine.

- Based on a report on task events generated in Kaspersky Security Center for the operation of the Applications Launch Control task in **Statistics Only** mode.

When this scenario is used, Kaspersky Security 10.1 for Windows Server does not deny applications launches, but while Applications Launch Control run in **Statistics Only** mode, it reports all allowed and denied applications launches across all network servers in the Kaspersky Security Center **Events** section. Kaspersky Security Center generates unified list of denied application launch events, based on the task log.

You need to configure the task execution period so that all possible operation scenarios of protected servers and groups of servers and at least one restart would be performed during the specified time period. Then as rules are added to the Applications Launch Control task you can import data on application launches from the saved Kaspersky Security Center event report file (in TXT format) and generate Applications Launch Control allowing rules for such applications based on this data.

This scenario is recommended if a corporate network includes a large quantity of differently typed servers (see Section "About using profile to configure Applications Launch Control tasks in Kaspersky Security Center policy" on page [217](#)) (with a different set of soft installed).

- Based on denied application launch events received through Kaspersky Security Center, without creating and importing a configuration file.

To use this feature, the Applications Launch Control task on the local computer must be running under an active Kaspersky Security Center policy. In this case, all events on the local computer are sent to the Administration Server.

It is recommended to update the list of rules when the set of applications installed on network servers changes (for example, when updates are installed or operating systems are reinstalled). It is recommended to use the Rule

Generator for Applications Launch Control task or the Applications Launch Control policy in **Statistics Only** mode, run on servers in the test administration group, in order to generate an updated list of rules. The test administration group includes servers required for the test launch of new applications before they are installed on network servers.

Before adding allowing rules, select one of the available rule application modes (see Section "Configuring Applications Launch Control task settings" on page 218). The list of Kaspersky Security Center policy rules displays only those rules that are specified by the policy, regardless of the rule application mode. The list of local rules displays all applied rules - both local rules and rules added through a policy.

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## Creating allowing rules from Kaspersky Security Center events

► *To generate allowing rules using the 'Create allowing rules for applications from Kaspersky Security Center events' option in the Applications Launch Control, do the following:*

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node.
2. Expand the administration group whose policy settings you want to configure and select the **Policies** tab in the details pane.
3. Select **Properties** in the context menu of the policy that you want to configure.  
The **Properties: <Policy name>** window opens.
4. In the **Local Activity Control** section, click the **Settings** button in the **Applications Launch Control** block.
5. On the **General** tab, click the **Rules list** button.  
The **Applications Launch Control rules** window opens.
6. Click the **Add** button and in the context menu of the button select **Create allowing rules for applications from Kaspersky Security Center events**.
7. Select the principle for adding the rules to the list of previously created application launch control rules:
  - **Add to existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are duplicated.
  - **Replace existing rules** if you want to replace the existing rules with the imported ones.
  - **Merge with existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are not added; the rule is added if at least one rule parameter is unique.
 The **Applications launch control rules generation** window opens.
8. Configure the following request settings:

- **Administration Server address**
  - **Port**
  - **User**
  - **Password**
9. Select the types of events that you want to base the generation task on:
    - **Statistics Only mode: application launch denied.**
    - **Application launch denied.**
  10. Select the time period from the **Request events generated within the period** drop-down list.
  11. Click the **Generate rules** button.
  12. Click the **Save** button in the **Applications Launch Control rules** window.

Rules list in the Applications Launch Control policy will be filled up with new rules generated basing on a system data of the server with the Kaspersky Security Center Administration Console installed.

If the list of application launch control rules is already specified in the policy, Kaspersky Security 10.1 for Windows Server adds the selected rules from the blocking events to the already specified rules. The rules with same hash are not added, as all rules in a list must be unique.

## Importing Applications Launch Control rules from XML file

You can import reports generated upon the Rule Generator for Applications Launch Control group task completion and apply them as a list of allowing rules in the policy you are configuring.

When the Rule Generator for Applications Launch Control group task finishes, the application exports the created allowing rules into XML files saved in the specified shared network folder. Each file with the list of rules is created based on analysis of files executed and applications launched on each separate server on the corporate network. Lists contain allowing rules for files and applications whose type matches the type specified in the Rule Generator for Applications Launch Control group task.

The process of configuring the settings of Kaspersky Security 10.1 for Windows Server functional components in Kaspersky Security Center is similar to local configuration of the settings of these components in Kaspersky Security 10.1 Console. Detailed instructions on how to configure task settings and application functions are provided in the relevant sections of the *Kaspersky Security 10.1 for Windows Server User's Guide*.

- ▶ *To specify allowing rules for application launch for a group of servers based on an automatically generated list of allowing rules, take the following steps.*
  1. On the **Tasks** tab in the control panel of the group of servers you are configuring, create a Rule Generator for Applications Launch Control group task or select an existing task.
  2. In the properties of the created Rule Generator for Applications Launch Control group task or in the task wizard, specify the following settings:
    - In the **Notification** section, configure the settings for saving the task execution report.

For detailed instructions on configuring settings in this section, see the *Kaspersky Security Center Help*.

- In the **Settings** section, specify the types of applications whose start will be allowed by the rules that are created. You can edit the content of the folders containing allowed applications: exclude default folders from the task scope or add new folders manually.
- In the **Options** section, specify the task operations while it is running and after it is completed. Specify the criterion based on which the rules will be generated and the name of the file to which these rules will be exported.
- In the **Schedule** section, configure the task start schedule settings.
- In the **Account** section, specify the user account under which the task will be executed.
- In the **Exclusions from task scope** section, specify the groups of servers to be excluded from the task scope.

Kaspersky Security 10.1 for Windows Server does not create allowing rules for applications launched on excluded servers.

3. On the **Tasks** tab on the control panel of the group of servers being configured, in the list of group tasks select the Rule Generator for Applications Launch Control that you have created, and click the **Start** button to start the task.

When the task is completed, automatically generated lists of allowing rules are saved in a shared network folder in XML files.

Before using the Applications Launch Control policy in the network, make sure that all protected servers have access to a shared network folder. If the organization's policy does not provide for the use of a shared network folder in the network, it is recommended to start the Automatic Rules Generators task for server control rules on the test computer group or on a template machine.

4. Add the generated lists of allowing rules to the Applications Launch Control task. To do so, in the properties of the policy being configured, in the Applications Launch Control task settings:
  - a. On the **General** tab, click the **Rules list** button.  
The **Applications Launch Control rules** window opens.
  - b. Click the **Add** button and in the list that opens select **Import rules from XML file**.
  - c. Select the principle for adding the automatically generated allowing rules to the list of previously created Applications Launch Control rules:
    - **Add to existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are duplicated.
    - **Replace existing rules** if you want to replace the existing rules with the imported ones.
    - **Merge with existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are not added; the rule is added if at least one rule parameter is unique.
  - d. In the standard window of Microsoft Windows that opens, select XML files created after completion of the Rule Generator for Applications Launch Control group task.

- e. Click **OK** in the **Applications Launch Control rules** and in the **Task settings** window.
5. If you want to apply the created rules to control the application launch, in the policy in the properties of the Applications Launch Control task select the **Active** task run mode.

Allowing rules automatically generated based on task runs on each separate server are applied to all network servers covered by the policy being configured. On these servers, the application will allow launching only those applications for which allowing rules have been created.

## Importing rules from file of Kaspersky Security Center report on blocked applications

You can import data on blocked application launches from the report generated in Kaspersky Security Center after completion of the Applications Launch Control task in **Statistics Only** mode and use this data to generate a list of Applications Launch Control allowing rules in the policy being configured.

When generating the report on events occurring during an Applications Launch Control task, you can keep track of the applications whose launch is blocked.

When importing data from the report on blocked applications into policy settings, make sure that the list you are using contains only applications whose launch you want to allow.

► *To specify allowing rules for application start for a group of servers based on the blocked applications report from Kaspersky Security Center, take the following steps:*

1. In the policy properties in the settings of the Applications Launch Control task, select the **Statistics Only** operation mode.
2. In the policy properties in the **Events** section, make sure that:
  - The **Critical Events** tab of the application launch denied event shows an event storage time that exceeds the planned time of task operation in **Statistics Only** mode (the default value is 30 days).
  - The **Warning** tab of the *Statistics Only: application launch denied event* shows an event storage time that exceeds the planned time of task operation in **Statistics Only** mode (the default value is 30 days).

When the period specified in the **Storage time** column elapses, information about logged events is deleted and is not reflected in the report file. Before running the Applications Launch Control task in **Statistics Only** mode, make sure that the task run time does not exceed the configured storage time for the specified events.

3. When the task has been completed, export the logged events into a TXT file:
  - a. To do so, in the properties of the Applications Launch Control task, expand the **Logs and notifications** node.
  - b. In the **Events** subnode create a selection of events based on the *Blocked* criterion to view the applications whose start will be blocked by the Applications Launch Control task.
  - c. In the details pane of the selection, click the **Export events** to file list to save the report on blocked application starts to a TXT file.

Before importing and applying the generated report in a policy, make sure that the report contains data only on those applications whose start you want to allow.

4. Import data on blocked application starts into the Applications Launch Control task. To do so, in the policy properties in the Applications Launch Control task settings:
  - a. On the **General** tab, click the **Rules list** button.  
The **Applications Launch Control rules** window opens.
  - b. Click the **Add** button and in the context menu of the button select **Import data of blocked applications from Kaspersky Security Center report**.
  - c. Select the principle for adding rules from the list created on the basis of the Kaspersky Security Center report to the list of previously configured Applications Launch Control rules:
    - **Add to existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are duplicated.
    - **Replace existing rules** if you want to replace the existing rules with the imported ones.
    - **Merge with existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are not added; the rule is added if at least one rule parameter is unique.
  - d. In the standard window of Microsoft Windows that opens, select the TXT file to which events from the blocked application launches report have been exported.
  - e. Click **OK** in the Applications Launch Control rules and in the **Task settings** window.

Rules created on the basis of the Kaspersky Security Center report on blocked applications are added to the list of Applications Launch Control rules.

## Managing devices connections via Kaspersky Security Center

You can allow or restrict connections of flash drives and other mass storages to all servers on the network by generating unified server control lists via the Kaspersky Security Center for the groups of servers.

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## About Device Control task

Kaspersky Security 10.1 for Windows Server controls registration and usage of the mass storages and CD/DVD drives in order to protect server against computer security threats, that may occur in process of file exchange with flash-drives or other type of external device connected via USB. Mass storage is an external device that may be

connected to a server in order to copy or store files.

Kaspersky Security 10.1 for Windows Server controls the following USB external devices connections:

- USB-connected flash-drives
- CD ROM drives
- USB-connected floppy disk drives
- USB-connected MTP-mobile devices

Kaspersky Security 10.1 for Windows Server informs you about all devices connected via USB with the corresponding event in the task and event logs. The event details include device type and connection path. When the Device Control task is started, Kaspersky Security 10.1 for Windows Server checks and lists all devices connected via USB. You can configure the notifications in the Kaspersky Security Center notification settings section.

The Device Control task monitors all the attempts of external devices connections to a protected server via USB and blocks connection, if there are no allowing rules for such devices. After the connection is blocked, the device is not available.

The application prescribes one of the following statuses to each connected mass storage:

- *Trusted*. Device for which you want to allow files exchange. Upon rules list generation, the device instance path value is included into usage scope for at least one rule.
- *Untrusted*. Device for which you want to restrict files exchange. Device instance path is not included into any allowing rule usage scope.

You can create allowing rules for external devices to allow data exchange using the Rule Generator for Device Control task. You can also expand the usage scope for already specified rules. You cannot create allowing rules manually.

Kaspersky Security 10.1 for Windows Server identifies mass storages that are registered in the system, by using the *Device Instance Path* value. Device Instance Path is a default feature uniquely specified for each external device. The Device Instance Path value is specified for each external device in its Windows properties and is automatically determined by Kaspersky Security 10.1 for Windows Server during rule generation.

The Device Control task can operate in two modes:

- **Active**. Kaspersky Security 10.1 for Windows Server applies rules to control the connection of flash-drives and other external devices, and allows or blocks the use of all devices according to the Default Deny principle and specified allowing rules. The use of trusted external devices is allowed. The use of untrusted external devices is blocked by default.

If an external device you consider to be untrusted is connected to a protected server when the Device Control task is run in the **Active** mode, the device is not blocked by the application. We recommend that you disconnect the untrusted device manually or restart the server. Otherwise, the Default Deny principle will not be applied to the device.

- **Statistics Only**. Kaspersky Security 10.1 for Windows Server does not control the connection of flash-drives and other external devices, but only logs information about the connection and registration of external devices on a protected server, and about the Device Control allowing rules triggered by the



connected devices. The use of all external devices is allowed. This mode is set by default.

You can apply this mode for rules generation basing on the information logged during the task running.

## About generating Device Control rules for all computers via Kaspersky Security Center

You can create lists of Device Control rules using Kaspersky Security Center tasks for all servers and groups of servers on the corporate network at once.

You can create lists of Device Control rules on the side of Kaspersky Security Center in two ways:

- Using the Rule Generator for Device Control group task.

According to this scenario the group task generates rules lists basing on each computer system data about all mass storage devices that have ever been connected to protected servers. The task also allows for all mass storage devices that a connected at the moment of task running. Upon the group task completion Kaspersky Security 10.1 for Windows Server generates allowing rules lists for all mass storage devices registered in the network and saves these lists in an XML file in a specified folder. Then you can manually import generated rules in the Device Control policy settings. Unlike a task on a local computer, the policy does not allow configuring the automatic addition of the created rules to the list of Device Control rules when the Rule Generator for Applications Launch Control group task is completed.

This scenario is recommended to generate allowing rules list before the first Device Control policy start in the mode of active rules application.

Before using the Device Control policy in the network, make certain that all protected servers have access to a shared network folder. If the organization's policy does not provide for the use of a shared network folder in the network, it is recommended to start the Automatic Rules Generators task for server control rules on the test computer group or on a template machine.

- Based on a report on task events generated in Kaspersky Security Center for the Device Control task in the **Statistics Only** mode.

According to this scenario Kaspersky Security 10.1 for Windows Server does not restrict mass storage devices connections but logs information about all devices connections and mass storages registration on all network computers during the Device Control task running in the **Statistics Only** mode; information logged may be found in the Kaspersky Security Center **Events** section. Kaspersky Security Center generates unified list of mass storages restricting and allowing events, based on the task log.

You should configure the task running period the way that all the mass storage devices connections would be performed during the set period. Then as rules are added to the Device Control task you can import data on devices connections from the saved Kaspersky Security Center event report file (in TXT format) and generate Device Control allowing rules for such devices basing on this data. The type of events, that an imported log is based on, does not influence the generated rules type; only allowing rules are generated.

This scenario is recommended to add allowing rules for a large number of new mass storages, as well as to generate rules for MTP-connected trusted mobile devices.

- Based on system data about connected mass storage devices (using the Generate rules based on system data option in the Device Control policy settings).

According to this scenario Kaspersky Security 10.1 for Windows Server generates allowing rules for mass storages that have ever been connected or are currently connected to a computer with Kaspersky Security



Center installed.

This scenario is recommended to generate rules for a little number of new mass storage devices that you want to trust on all computers in the network.

- Based on data about the currently connected devices (using the **Generate rules based on connected devices**).

In this scenario, Kaspersky Security 10.1 for Windows Server generates allowing rules only for currently connected devices. You can select one or more devices for which you want to generate allowing rules.

Kaspersky Security 10.1 for Windows Server does not get access to system data about mobile devices connected via MTP. You cannot generate allowing rules for trusted MTP-connected mobile devices using scenarios for rules list filling on the base of system data about all connected devices.

## Rules generation based on system data about external devices connected to network computers

You can generate rules (see Section "About generating Device Control rules for all computers via Kaspersky Security Center" on page [234](#)) basing on Windows data about all mass storages that have ever been connected or are currently connected by three scenarios:

- Using the Rule Generator for Device Control group task. Use this scenario during the rule generation process to take into account all ever connected mass storages that are registered by the systems on all network computers.
- Using the **Generate rules based on system data** option in the Device Control policy settings. Use this scenario during the rule generation process to take into account all ever connected mass storages that are and registered by the system of the computer with a Kaspersky Security Center Administration Console installed.
- Using the **Generate rules based on connected devices** in the Device Control policy settings and the Rule Generator for Device Control task settings. Use this method if you want to consider only data about devices currently connected to the protected server when generating allowing rules.

Kaspersky Security 10.1 for Windows Server does not get access to system data about mobile devices connected via MTP. You cannot generate allowing rules for trusted MTP-connected mobile devices using scenarios for rules list filling on the base of system data about all connected devices.

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## Creating rules using the Rule Generator for Device Control task

- To specify allowing device control rules for a group of servers using the Rule Generator for Device Control task, take the following steps.
1. On the **Tasks** tab in the control panel of the group of servers you are configuring, create a Rule Generator for Device Control group task or select an existing task.
  2. In the properties of the created Rule Generator for Applications Launch Control group task or in the task wizard, specify the following settings:
    - In the **Notifications** section, configure the settings for saving the task execution report.
    - In the **Settings** section, specify the task operations after it is completed. Specify the file name where rules generated will be exported.
    - In the **Schedule** section, configure the task launch schedule settings.
  3. On the **Tasks** tab on the control panel of the group of servers being configured, in the list of group tasks select the Rule Generator for Device Control you have created and click the **Start** button to start the task.
- When the task is completed, automatically generated lists of allowing rules are saved in a shared network folder in XML files.

Before using the Device Control policy in the network, make certain that all protected servers have access to a shared network folder. If the organization's policy does not provide for the use of a shared network folder in the network, it is recommended to start the Automatic Rules Generators task for server control rules on the test computer group or on a template machine.

4. Add the generated lists of allowing rules to the Device Control task. To do so, in the properties of the policy being configured, in the Device Control task settings:
  - a. On the **General** tab, click the **Rules list** button.  
The **Device Control rules** window opens.
  - b. Click the **Add** button and in the list that opens select **Import rules from XML file**.
  - c. Select the principle for adding the automatically generated allowing rules to the list of previously created Device Control rules:
    - **Add to existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are duplicated.
    - **Replace existing rules** if you want to replace the existing rules with the imported ones.
    - **Merge with existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are not added; the rule is added if at least one rule parameter is unique.
  - d. In the standard window of Microsoft Windows that opens, select XML files created after completion of the Rule Generator for Device Control group task.
  - e. Click **OK** in the Device Control rules and in the **Task settings** window.
5. If you want to apply generated device control rules, select the **Active** task mode in the **Device Control** policy settings.

Allowing rules automatically generated based on system data on each separate server are applied to all network servers covered by the policy being configured. On these servers, the application will allow connection of only those devices for which allowing rules have been created.

## Creating allowing rules on the basis of system data in a Kaspersky Security Center policy

► To specify allowing rules using the **Generate rules based on system data** option in the Device Control policy, take the following steps:

1. If necessary, connect a new mass storage that you want to trust to a computer with the Kaspersky Security Center Console installed.
2. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node.
3. Expand the administration group whose policy settings you want to configure and select the **Policies** tab in the details pane.
4. Select **Properties** in the context menu of the policy that you want to configure.
5. The **Properties: <Policy name>** window opens.
6. In the policy settings open the Device Control task settings and take the following steps:
  - a. On the **General** tab, click the **Rules list** button.  
The **Device Control rules** window opens.
  - b. Click the **Add** button and in the context menu that opens select the **Generate rules based on system data** option.
  - c. Select the principle for adding the allowing rules to the list of previously created Device Control rules:
    - **Add to existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are duplicated.
    - **Replace existing rules** if you want to replace the existing rules with the imported ones.
    - **Merge with existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are not added; the rule is added if at least one rule parameter is unique.
7. Click **OK** in the **Device Control rules** and in the **Task settings** window.

Rules list in the Device Control policy will be filled up with new rules generated basing on a system data of the computer with the Kaspersky Security Center Administration Console installed.

## Generating rules for connected devices

► To specify allowing rules using the **Generate rules based on system data** option in the Device Control policy, take the following steps:

1. In the tree of the Administration Console of Kaspersky Security Center, expand the **Managed devices** node.
2. Expand the administration group whose policy settings you want to configure and select the **Policies** tab in the details pane.
3. Select **Properties** in the context menu of the policy that you want to configure.
4. The **Properties: <Policy name>** window opens.
5. In the **Local Activity Control** section, click the **Settings** button in the **Device Control** section.
6. On the **General** tab, click the **Rules list** button.

The **Device Control rules** window opens.

- Click the **Add** button and in the context menu, select **Generate rules based on connected devices**.

The **Generate rules based on system data** window opens.

- In the list of detected devices connected to the protected server, select the devices you want to generate allowing rules for.
- Click the **Add rules for devices selected** button.
- Click the **Save** button in the **Device Control** window.

Rules list in the Device Control policy will be filled up with new rules generated basing on a system data of the computer with the Kaspersky Security Center Administration Console installed.

## Importing rules from file of Kaspersky Security Center report on restricted devices

You can import data on restricted devices connections from the report generated in Kaspersky Security Center after completion of the Device Control task in **Statistics Only** mode and use this data to generate a list of Device Control allowing rules in the policy being configured.

When generating the report on events occurring during the Device Control task, you can keep track of the devices whose connection is restricted.

When importing data from the report on restricted devices into policy settings, make certain that the list you are using contains only devices which connection you want to allow.

► *To specify allowing rules for devices connection for a group of servers based on the Kaspersky Security Center report about restricted devices, take the following steps:*

- In the policy properties in the settings of the Device Control task, select the **Statistics Only** mode.
- In the policy properties in the **Events** section, make sure that:
  - The **Critical Events** tab of the *Mass storage restricted* event shows an event storage time that exceeds the planned time of task operation in **Statistics Only** mode (the default value is 30 days).
  - The **Warning** tab of the *Statistics Only: untrusted mass storage detected* event shows an event storage time that exceeds the planned time of task operation in **Statistics Only** mode (the default value is 30 days).

When the period specified in the **Storage time** column elapses, information about logged events is deleted and is not reflected in the report file. Before running the Device Control task in **Statistics Only** mode, make sure that the task run time does not exceed the configured storage time for the specified events.

- When the task has been completed, export the logged events into a TXT file. To do so, expand the **Logs and notifications** node and in the **Events** subnode create a selection of events based on the *Denied* criterion to view the devices whose connections will be restricted by the Device Control task. In the details pane of the selection, click the **Export events** to file list to save the report on blocked application starts to a TXT file.

Before importing and applying the generated report in a policy, make sure that the report contains data only on those devices whose connection you want to allow.

4. Import data about restricted devices connections into the Device Control policy. To do so, in the properties of the policy being configured, in the Device Control task settings, take the following steps:
  - a. On the **General** tab, click the **Rules list** button.  
The **Device Control rules** window opens.
  - b. Click the **Add** button and in the context menu of the button select **Import data of blocked devices from Kaspersky Security Center report**.
  - c. Select the principle for adding rules from the list created on the basis of the Kaspersky Security Center report to the list of previously configured Device Control rules:
    - **Add to existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are duplicated.
    - **Replace existing rules** if you want to replace the existing rules with the imported ones.
    - **Merge with existing rules** if you want to add the imported rules to the list of existing ones. Rules with identical settings are not added; the rule is added if at least one rule parameter is unique.
  - d. In the standard window of Microsoft Windows that opens, select the TXT file to which events from the report about restricted devices have been exported.
  - e. Click **OK** in the **Device Control rules** and in the **Task settings** window.

Rules created on the basis of the Kaspersky Security Center report on restricted devices are added to the list of Device Control rules.

# Network activity control

This section contains information about the Firewall Management and Anti-Cryptor tasks.

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## Firewall Management

This section contains information about the Firewall Management task and how to configure it.

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## About the Firewall Management task

Kaspersky Security 10.1 for Windows Server provides a reliable and ergonomic solution for protecting network connections using the Firewall Management task.

The Firewall Management task does not perform independent network traffic filtering, but it allows you to manage Windows Firewall through the Kaspersky Security 10.1 for Windows Server graphical interface. During the Firewall Management task Kaspersky Security 10.1 for Windows Server takes over management of the settings and policies of the operation system's firewall and blocks any possibility of external firewall configuration.

During installation of the application, the Firewall Management component reads and copies the Windows Firewall status and all specified rules. After that, the set of rules and the rule parameters may only be changed, and the firewall may only be turned on or off in Kaspersky Security 10.1 for Windows Server.

If Windows Firewall is turned off during installation of Kaspersky Security 10.1 for Windows Server, the Firewall Management task will not be executed after the installation completes. If Windows Firewall is turned on during installation of the application, the Firewall Management task is executed after the installation completes, blocking all network connections that are not allowed by the specified rules.

The Firewall Management component is not installed by default, as it is not included in the set of components for the Recommended Installation.

The Firewall Management task enforces blocking of all incoming and outgoing connections not allowed by the task's specified rules.

The task polls the Windows Firewall regularly and monitors its status. By default, the polling interval is set to 1 minute and cannot be changed. If during polling Kaspersky Security 10.1 for Windows Server detects a mismatch between the Windows Firewall settings and the Firewall Management task settings, the application forcibly applies the task settings on the operating system firewall.

With minute-by-minute polling of the Windows Firewall, Kaspersky Security 10.1 for Windows Server monitors the following:

- Operating status of the Windows Firewall
- Status of rules added after installation of Kaspersky Security 10.1 for Windows Server by other applications or tools (for example, the addition of a new application rule for a port/application using wf.msc).

When applying the new rules to Windows Firewall, Kaspersky Security 10.1 for Windows Server creates a Kaspersky Security Group rule set in the **Windows Firewall** snap-in. This rule set unites all the rules created by Kaspersky Security 10.1 for Windows Server using the Firewall Management task. The rules in the Kaspersky Security Group are not monitored by the application during the polling each minute and are not automatically synchronized with the list of rules specified in the Firewall Management task settings.

► *To update the Kaspersky Security Group rules manually,*

restart the Kaspersky Security 10.1 for Windows Server Firewall Management task.

You can also edit the Kaspersky Security Group rules manually using the **Windows Firewall** snap-in.

If Windows Firewall is managed by the Kaspersky Security Center group policy, the Firewall Management task cannot be started.

## About Firewall rules

The Firewall Management task controls filtration of incoming and outgoing network traffic using allowing rules forcibly applied to the Windows Firewall during task execution.

The first time the task is started Kaspersky Security 10.1 for Windows Server reads and copies all the incoming network traffic rules specified in the Windows Firewall settings to the Firewall Management task settings. Then the application operates according to the following rules:

- If a new rule is created in the Windows Firewall settings (manually or automatically during a new application installation), Kaspersky Security 10.1 for Windows Server deletes the rule.
- If an existing rule is deleted from the Windows Firewall settings, Kaspersky Security 10.1 for Windows Server restores the rule.
- If the parameters of an existing rule are changed in the Windows Firewall settings, Kaspersky Security 10.1 for Windows Server rolls back the changes.

- If a new rule is created in the Firewall Management settings, Kaspersky Security 10.1 for Windows Server forcibly applies the rule to Windows Firewall.
- If an existing rule is deleted from the Firewall Management settings, Kaspersky Security 10.1 for Windows Server forcibly deletes the rule from the Windows Firewall settings.
- If an existing rule is deleted from the Firewall Management settings, Kaspersky Security 10.1 for Windows Server forcibly deletes the rule from the Windows Firewall settings.

Kaspersky Security 10.1 for Windows Server does not work with blocking rules or rules controlling outgoing network traffic. Upon start of the Firewall Management task, Kaspersky Security 10.1 for Windows Server deletes all such rules from the Windows Firewall settings.

You can set, delete and edit filtration rules for incoming network traffic.

You cannot specify a new rule to control outgoing network traffic in the Firewall Management task settings. All Firewall rules specified in Kaspersky Security 10.1 for Windows Server control only incoming network traffic.

You can manage the following types of Firewall rules:

- Application rules
- Port rules.

#### Application rules

This type of rule allows targeted network connections for specified applications. The triggering criterion for these rules is based on a path to an executable file.

You can manage application rules:

- Add new rules.
- Remove existing rules.
- Enable or disable specified rules.
- Edit the parameters of the specified rules: specify the rule name, path to the executable file, and the rule usage scope.

#### Port rules

This type of rule allows network connections for specified ports and protocols (TCP / UDP). The triggering criteria for these rules are based on the port number and protocol type.

You can manage port rules:

- Add new rules.
- Remove existing rules.
- Enable or disable specified rules.
- Edit the parameters of the specified rules: set the rule name, port number, protocol type, and scope for application of the rule.



Port rules imply a broader scope than application rules. By allowing connections based on port rules, you lower the security level of the protected server.

## Enabling and disabling Firewall rules

► To enable or disable an existing rule for filtering incoming network traffic, perform the following actions:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Network Activity Control** section click the **Settings** button in the **Firewall Management** block.
4. Click the **Rules list** button in the window that opens.  
The **Rules list** window opens.
5. Depending on the type of the rule whose status you want to modify, select **Applications** or **Ports**.
6. In the rule list, select the rule whose status you want to modify and perform one of the following actions:
  - If you want to enable a disabled rule, select the check box to the left of the rule name.  
The selected rule is enabled.
  - If you want to disable an enabled rule, clear the check box to the left of the rule name.  
The selected rule is disabled.
7. Click **Save** in the Firewall rules window.

The specified task settings are saved. The new rule parameters will be sent to Windows Firewall.

## Adding Firewall rules manually

You can only add and edit rules for applications and ports. You cannot add new or edit existing group rules.

► To add a new or edit an existing rule for filtering incoming network traffic, do the following:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Network Activity Control** section click the **Settings** button in the **Firewall Management** block.
4. Click the **Rules list** button in the window that opens.  
The **Rules list** window opens.
5. Depending on the type of rule you want to add, select the **Applications** or **Ports** tab and perform one of the following actions:
  - To edit an existing rule, select the rule you want to edit in the rule list and click **Edit**.
  - To add a new rule, click **Add**.

Depending on the type of rule being configured, the **Port rule** window or **Application rule** window opens.

6. In the window that opens, perform the following operations:
  - If you are working with an application rule, do the following:
    - a. Enter the **Rule name** of the edited rule.
    - b. Specify the **Application path** to the executable file of the application for which you are allowing a connection by modifying this rule.  
You can set the path manually or by using the **Browse** button.
    - c. In the **Rule application scope** field, specify the network addresses for which the modified rule will be applied.

You can only use IPv4 IP-addresses.

- If you are working with a port rule, do the following:
  - a. Enter the **Rule name** of the edited rule.
  - b. Specify the **Port number** for which the application will allow connections.
  - c. Select the type of protocol (TCP / UDP) for which the application will allow connections.
  - d. In the **Rule application scope** field, specify the network addresses for which the modified rule will be applied.

You can only use IPv4 IP-addresses.

7. Click **OK** in the **Application rule** or **Port rule** window.
8. Click **Save** in the **Firewall rules** window.

The specified task settings are saved. The new rule parameters will be sent to Windows Firewall.

## Deleting Firewall rules

You can only delete application and port rules. You cannot delete existing group rules.

► To delete an existing rule for filtering incoming network traffic, perform the following actions:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Network Activity Control** section click the **Settings** button in the **Firewall Management** block.
4. Click the **Rules list** button in the window that opens.  
The **Rules list** window opens.
5. Depending on the type of rule whose status you want to modify, select the **Applications** or **Ports** tab.
6. In the rule list, select the rule you want to delete.
7. Click the **Remove** button.  
The selected rule is deleted.
8. Click **Save** in the **Firewall rules** window.

The specified Firewall Management task settings are saved. The new rule parameters will be sent to Windows Firewall.

## Anti-Cryptor

This section contains information about the Anti-Cryptor task and how to configure it.

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## About the Anti-Cryptor task

The Anti-Cryptor task makes it possible to detect malicious encrypting of the network file resources of a protected server from remote computers on the corporate network.

While the Anti-Cryptor task runs, Kaspersky Security 10.1 for Windows Server scans remote computers' calls to access files located in the shared network folders of the protected server. If the application considers a remote computer's actions on network file resources to be malicious encrypting, then the computer is added to a list of untrusted hosts and loses access to the shared network folders.

Kaspersky Security 10.1 for Windows Server does not consider activity to be malicious encrypting if the detected encryption activity takes place in directories excluded from the scope of the Anti-Cryptor task.

By default, the application blocks untrusted hosts' access to network file resources for 30 minutes.

The Anti-Cryptor task does not block access to network file resources until the host's activity is identified as malicious. This can take some time, during which the encryption program can conduct malicious activity.

If the Anti-Cryptor task runs in Statistics only mode, Kaspersky Security 10.1 for Windows Server only logs remote computers' attempts at malicious encrypting in the task log.

## Configuring Anti-Cryptor task settings

The Anti-Cryptor task has the following default settings:

- **Task mode.** The Anti-Cryptor task can be started in **Active** or **Statistics only** mode. The **Active** mode is set by default.
- **Protection scope.** Kaspersky Security 10.1 for Windows Server applies the Anti-Cryptor task to all of the protected server's shared network folders by default. You can change the protection scope by specifying shared folders to which the task will apply.
- **Heuristic analyzer.** Kaspersky Security 10.1 for Windows Server applies **Medium** scanning detail. You can enable or disable Heuristic Analyzer, and regulate the level of scanning detail.
- **Schedule settings.** By default, the first start is not scheduled. The Anti-Cryptor task does not start

automatically when Kaspersky Security 10.1 for Windows Server starts. You can start the task manually or configure a scheduled start.

► *To configure Anti-Cryptor task settings take the following steps:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Network Activity Control** section, click the **Settings** button in the **Anti-Cryptor** block.  
The **Anti-Cryptor** window opens.
4. In the window that opens, configure the following settings:
  - Task mode and heuristic analyzer usage (see Section "General task settings" on page [248](#)) on the **General** tab.
  - Protection scope (see Section "Creating protection scope" on page [250](#)) on the **Protection area** tab.
  - Exclusions (see Section "Adding exclusions" on page [251](#)) on the **Exclusion** tab.
  - Scheduled task start settings (see Section "Managing task schedules" on page [138](#)) on the **Task management** tab.
5. Click **OK**.

Kaspersky Security 10.1 for Windows Server immediately applies the new settings to the running task. Information about the date and time, when the settings were modified, and the values of task settings before and after modification are saved in the task log.

## General task settings

► *To configure the general task settings:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Network Activity Control** section, click the **Settings** button in the **Anti-Cryptor** block.

The **Anti-Cryptor** window opens.

4. In the **Task mode** section select one of the two available modes:

- **Statistics only.**

If this mode is selected, all malicious encryption attempts are written to the Anti-Cryptor task event log and no action is executed. This mode is selected by default.

- **Active.**

If this mode is selected, Kaspersky Security 10.1 for Windows Server blocks access to the shared folders for compromised computers, when the malicious encryption attempt is detected.

5. Clear or select the **Use Heuristic Analyzer** check box.

This check box enables / disables Heuristic Analyzer during object scanning.

If the check box is selected, Heuristic Analyzer is enabled.

If the check box is cleared, Heuristic Analyzer is disabled.

The check box is selected by default.

6. If necessary, adjust the level of analysis using the slider.

The slider allows you to adjust the heuristic analysis level. The scanning intensity level sets the balance between the thoroughness of searches for threats, the load on the operating system's resources and the time required for scanning.

The following scanning intensity levels are available:

- **Light.** Heuristic analyzer performs fewer operations found inside executable files. The probability of threat detection in this mode is somewhat lower. Scanning is faster and less resource-intensive.
- **Medium.** Heuristic Analyzer performs the number of instructions found within executable files recommended by the experts of Kaspersky Lab.  
This level is selected by default.
- **Deep.** Heuristic analyzer performs more operations found in executable files. The probability of threat detection in this mode is higher. The scan uses up more system resources, takes more time, and can cause a higher number of false alarms.  
The slider is available if the **Use Heuristic Analyzer** check box is selected.

7. Click **OK** to apply new configuration.

## Creating protection scope

The following types of protection scope are applied in the Anti-Cryptor task:

- **Predefined.** You can use the protection scope installed by default which includes all shared server network folders in the scan. Applied if the **All shared network folders on the server** setting is selected.
- **User.** You can manually configure the protection scope by selecting the folders that need to be included in the encryption protection scope. Applied if the **Only specified shared folders** setting is selected.

You can use only local path for configuring the protection scope for the Anti-Cryptor task.

► *To configure a protection scope for the Anti-Cryptor task:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Network Activity Control** section, click the **Settings** button in the **Anti-Cryptor** block.  
The **Anti-Cryptor** window opens.
4. On the **Protection area** tab, select the folders that Kaspersky Security 10.1 for Windows Server will scan when executing the Anti-Cryptor task:
  - **All shared network folders on server.**  
If this option is selected, when the Anti-Cryptor task is executed, Kaspersky Security 10.1 for Windows Server scans all of the server's shared network folders.  
This option is selected by default.
  - **Only specified shared folders.**  
If this option is selected, during execution of the Anti-Cryptor task Kaspersky Security 10.1 for Windows Server scans only the shared server network folders that you specified manually.
5. To specify the server's shared folders, that you want to include in the encryption protection scope:
  - a. Click the **Add** button.  
The **Select folder to add** window opens.
  - b. Click the **Browse** button to select a folder, or enter the directory manually.



c. Click **OK**.

6. Click **OK** in the **Anti-Cryptor** window.

The specified settings are saved.

## Adding exclusions

► *To add exclusions from the encryption protection scope take the following steps:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "**Configuring policy**" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "**Configuring local tasks in Application settings window of Kaspersky Security Center**" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **Network Activity Control** section, click the **Settings** button in the **Anti-Cryptor** block.

The **Anti-Cryptor** window opens.

4. On the **Exclusions** tab, select the **Apply exclusion list** check box.

If the check box is selected, Kaspersky Security 10.1 for Windows Server does not detect malicious encryption activity that occur in the specified areas, when the Anti-Cryptor task is run.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server detects encryption activity in all shared network folders.

By default, the check box is cleared and the exclusion list is empty.

5. Click the **Add** button.

The **Select folder to add** window opens.

6. Enter the folder name or click **Browse** to select a folder.

7. Click **OK**.

Excluded area will be added to the list.

# System Inspection

This section contains information about the File Integrity Monitor task and features for inspecting the operating system log.

## In this chapter

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Log Inspection.....	<a href="#">259</a>

## File Integrity Monitor

This section contains information about starting and configuring the File Integrity Monitor task.

## In this section

About the File Integrity Monitor task .....	<a href="#">252</a>
About file operation monitoring rules .....	<a href="#">253</a>
Configuring the File Integrity Monitor task .....	<a href="#">255</a>
Configuring monitoring rules.....	<a href="#">257</a>

## About the File Integrity Monitor task

The File Integrity Monitor task is designed to track actions performed with the specified files and folders in the monitoring scopes specified in the task settings. You can use the task to detect file changes that may indicate a security breach on the protected server. You can also configure file changes to be tracked during periods in which monitoring is interrupted.

A *monitoring interruption* occurs when the monitoring scope temporarily falls outside the scope of the task, e.g. if the task is stopped or if a protected device is not physically present on a protected server. Kaspersky Security 10.1 for Windows Server reports detected file operations in the monitoring scope as soon as a mass storage device is reconnected.

If the tasks stops running in the specified monitoring scope due to a reinstallation of the File Integrity Monitor component, this does not constitute a monitoring interruption. In this case, the File Integrity Monitor task is not run.

## Requirements on the environment

To start the File Integrity Monitor task, the following conditions must be satisfied:

- A storage device that supports the ReFS and NTFS file systems must be installed on the protected server.

- The Windows USN Journal must be enabled. The component queries this journal to receive information about file operations.

If you enable USN Journal after a rule has been created for a volume and the File Integrity Monitor task has been started, the task must be restarted. If not, the rule will not be applied during monitoring.

### Excluded monitoring scopes

You can create exclusions for the monitoring scope (see Section "Configuring monitoring rules" on page [257](#)). Exclusions are specified for each separate rule, and work only for the indicated monitoring scope. You can specify an unlimited number of exclusions for each rule.

Exclusions have higher priority than the monitoring scope and are not monitored by the task, even if an indicated folder or file is in the monitoring scope. If the settings for one of the rules specify a monitoring scope at a lower level than a folder specified in exclusions, the monitoring scope is not considered when the task is run.

To specify exclusions, you can use the same masks that are used to specify monitoring scopes.

## About file operation monitoring rules

The File Integrity Monitor is run based on file operation monitoring rules. You can use rule triggering criteria to configure the conditions that trigger the task, and adjust the importance level of events for detected file operations recorded in the task log.

A file operation monitoring rule is specified for each monitoring scope.

You can configure the following rule triggering criteria:

- Trusted users.
- File operation markers.

### Trusted users

By default, the application treats all user actions as potential security breaches. The trusted user list is empty. You can configure the event importance level by creating a list of trusted users in the file operation monitoring rule settings.

*Untrusted user* – any user not indicated in the trusted user list in the monitoring scope rule settings. If Kaspersky Security 10.1 for Windows Server detects a file operation performed by an untrusted user, the File Integrity Monitor task records a Critical event in the task log.

*Trusted user* – a user or group of users authorized to perform file operations in the specified monitoring scope. If Kaspersky Security 10.1 for Windows Server detects file operations performed by a trusted user, the File Integrity Monitor task records an Informational event in the task log.

Kaspersky Security 10.1 for Windows Server cannot determine the users that initiate operations during monitoring interruption periods. In this case, the user status is determined to be unknown.

*Unknown user* – This status is assigned to a user if Kaspersky Security 10.1 for Windows Server cannot receive information about a user due to a task interruption or a failure of the data synchronization driver or USN Journal. If

Kaspersky Security 10.1 for Windows Server detects a file operation performed by an unknown user, the File Integrity Monitor task records a *Warning* event in the task log.

### File operation markers

When the File Integrity Monitor task runs, Kaspersky Security 10.1 for Windows Server uses file operation markers to determine that an action has been performed on a file.

A file operation marker is a unique descriptor that can characterize a file operation.

Each file operation can be a single action or a chain of actions with files. Each action of this kind is equated to a file operation marker. If the marker you specify as a rule triggering criterion is detected in a file operation chain, the application logs an event indicating that the given file operation was performed.

The importance level of the logged events does not depend on the selected file operation markers or the number of events.

By default, Kaspersky Security 10.1 for Windows Server considers all available file operation marker. You can select file operation markers manually in the task's rule settings.

Table 41. File operation markers

File operation ID	File operation marker	Supported file systems
BASIC_INFO_CHANGE	Attributes or time markers of a file or folder changed	NTFS, ReFS
COMPRESSION_CHANGE	Compression of a file or folder changed	NTFS, ReFS
DATA_EXTEND	Size of file or folder increased	NTFS, ReFS
DATA_OVERWRITE	Data in a file or folder was overwritten	NTFS, ReFS
DATA_TRUNCATION	File or folder truncated	NTFS, ReFS
EA_CHANGE	Extended file or folder attributes changed	Only NTFS
ENCRYPTION_CHANGE	Encryption status of file or folder changed	NTFS, ReFS
FILE_CREATE	File or folder created for the first time	NTFS, ReFS
FILE_DELETE	File or folder permanently deleted using a SHIFT+DEL combination	NTFS, ReFS
HARD_LINK_CHANGE	Hard link created or deleted for file or folder	Only NTFS
INDEXABLE_CHANGE	Index status of file or folder changed	NTFS, ReFS
INTEGRITY_CHANGE	Integrity attribute changed for a named file stream	Only ReFS
NAMED_DATA_EXTEND	Size of a named file stream increased	NTFS, ReFS

File operation ID	File operation marker	Supported file systems
NAMED_DATA_OVERWRITE	Named file stream overwritten	NTFS, ReFS
NAMED_DATA_TRUNCATION	Named file stream truncated	NTFS, ReFS
OBJECT_ID_CHANGE	File or folder identifier changed	NTFS, ReFS
RENAME_NEW_NAME	New name assigned to file or folder	NTFS, ReFS
REPARSE_POINT_CHANGE	New reparse point created or existing reparse point changed for a file or folder	NTFS, ReFS
SECURITY_CHANGE	File or folder access rights changed	NTFS, ReFS
STREAM_CHANGE	New named file stream created or existing named file stream changed	NTFS, ReFS
TRANSACTIONED_CHANGE	Named file stream changed by TxF transaction	Only ReFS

## Configuring the File Integrity Monitor task

You can change the default settings of the File Integrity Monitor task (see the table below).

Table 42. Default File Integrity Monitor task settings

Setting	Value	How to set
Monitoring scope	Not configured	You can specify the folders and files for which actions will be monitored. Monitoring events will be generated for the folders and files in the specified monitoring scope.
Trusted user list	Not configured	You can specify users and/or groups of users, whose actions in the specified directories will be treated as safe by the component.
Monitor file operations when the task is not running	Used	You can enable or disable logging of file operations performed in the indicated monitoring scopes during periods in which the task is not running.
Consider excluded monitoring scopes	Not applied	You can check the use of exclusions for folders in which file operations do not need to be monitored. When the File Integrity Monitor task runs, Kaspersky Security 10.1 for Windows Server will skip monitoring scopes specified as exclusions.

Setting	Value	How to set
Consider file operation markers	All available file operation markers are considered	You can specify the set of file operation markers. If a file operation performed in a monitoring scope is characterized by one of the specified markers, Kaspersky Security 10.1 for Windows Server generates a monitoring event.
Checksum calculation	Not applied	You can configure file checksum calculation after the changes in the file are made.
Consider file operation markers	All available file operation markers are considered	You can specify the set of file operation markers. If a file operation performed in a monitoring scope is characterized by one or more specified markers, Kaspersky Security 10.1 for Windows Server generates an audit event.
Task start schedule	First run is not scheduled	You can configure the settings of scheduled startup of the task.

To configure general File Integrity Monitor task settings, perform the following steps:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **System Inspection** section in the **File Integrity Monitor** block, click the **Settings** button. The **File Integrity Monitor** window opens.
4. In the **File operations monitoring settings** tab in the window that opens, configure the monitoring scope settings:
  - a. Clear or select the **Log information about file operations that appear during the monitoring interruption period** check box.

The check box enables or disables monitoring of the file operations specified in the File Integrity Monitor task settings when the task is not running for any reason (removal of a hard disk, task stopped by user, software error).

If the check box is selected, Kaspersky Security 10.1 for Windows Server will record events in all monitoring scopes when the File Integrity Monitor task is not running.

If the check box is cleared, the application will not log file operations in monitoring scopes when the task is not running.

- The check box is selected by default.
- b. Add the monitoring scopes (see Section "Configuring monitoring rules" on page [257](#)) to be monitored by the task.
  5. On the **Task Management** tab, start the task based on a schedule (see Section "Managing task schedules" on page [138](#)).
  6. Click **OK** to save changes.

## Configuring monitoring rules

By default, a monitoring scope is not specified and the task does not monitor file operations in any directory.

► *To add a monitoring scope, perform the following steps:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **System Inspection** section in the **File Integrity Monitor** block, click the **Settings** button.  
The **Properties: File Integrity Monitor** window opens.
4. In the **Monitoring scope** section, click the **Add** button.  
The **Monitoring scope** window opens.
5. Add a monitoring scope in one of the following ways:
  - If you want to select folders through the standard Microsoft Windows dialog:
    - a. Click the **Browse** button.  
The standard Microsoft Windows Browse for Folder window opens.
    - b. In the window that opens, select the folder for which you want to monitor operations, and click the **OK** button.
  - If you want to specify a monitoring scope manually, add a path using a supported mask:
    - `<*.ext>` - all files with the extension `<ext>`, regardless of their location;
    - `<*\name.ext>` - all files with name `<name>` and extension `<ext>`, regardless of their location;
    - `<\dir\*>` - all files in directory `<\dir>`;
    - `<\dir*\name.ext>` - all files with the name `<name>` and extension `<ext>` in directory `<\dir>` and all of

its subdirectories.

When specifying a monitoring scope manually, be sure that the path is in the following format: <volume letter>:\<mask>. If the volume letter is missing, Kaspersky Security 10.1 for Windows Server will not add the specified monitoring scope.

6. In the **Trusted users** tab, click the **Add** button.

The standard Microsoft Windows **Select Users or Groups** window opens.

7. Select the users or groups of users for whom file operations are allowed in the selected monitoring scope, and click the **OK** button.

By default, Kaspersky Security 10.1 for Windows Server treats all users not on the trusted user list as untrusted (see Section "About file operation monitoring rules" on page [253](#)), and generates Critical events for them.

8. Select the **File operation markers** tab.

9. If required, perform the following actions to select a number of markers:

- a. Select the **Detect file operations basing on the following markers** option.
- b. In the list of available file operations (see Section "About file operation monitoring rules" on page [253](#)) select the check boxes next to the operations you want to monitor.

By default Kaspersky Security 10.1 for Windows Server detects all file operation markers, the **Detect file operations basing on all recognizable markers** option is selected.

10. If you want Kaspersky Security 10.1 for Windows Server to calculate files checksum after operation is performed, do the following:

- a. In the **Checksum calculation** section select the **Calculate checksum for a file final version, after the file was changed, if possible** check box.

If the check box is selected, Kaspersky Security 10.1 for Windows Server calculates the checksum of the modified file, where the file operation with at least one selected marker was detected.

If the file operation is detected by a number of markers, only the final file checksum after all modifications is calculated.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server does not calculate the checksum for the modified files.

No checksum calculation is performed in the following cases:

- If the file became unavailable (for example, due to the change of access permissions).
- If the file operation is detected in the file that has been removed afterwards.

The check box is cleared by default.

- b. In the **Calculate the checksum using the algorithm** drop down list select one of the options:
  - **MD5 hash**



- **SHA256 hash**

11. If you do not want to monitor all file operations in the list of available file operations (see Section "About file operation monitoring rules" on page [253](#)), and select the check boxes next to the operations you want to monitor.
12. If necessary, add excluded monitoring scopes by performing the following steps:
  - a. Select the **Exclusions** tab.
  - b. Select the **Consider excluded monitoring scope** check box.
 

The check box disables use of exclusions for folders where file operations do not need to be monitored.

If the check box is selected, Kaspersky Security 10.1 for Windows Server skips the monitoring scopes specified in the exclusions list when the File Integrity Monitor task is run.

If the check box is cleared, Kaspersky Security 10.1 for Windows Server logs events for all specified monitoring scopes.

By default, the check box is cleared and the exclusion list is empty.
  - c. Click the **Add** button.
 

The **Select folder to add** window opens.
  - d. In the window that opens, specify the folder that you want to exclude from the monitoring scope.
  - e. Click **OK**.
 

The specified folder is added to the list of excluded scopes.
13. Click **OK** in the **Monitoring Scope** window.
 

The specified rule settings will be applied to the selected monitoring scope of the File Integrity Monitor task.

## Log Inspection

This section contains information about the Log Inspection task and task settings.

### In this section

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## About the Log Inspection task

When the Log Inspection task runs, Kaspersky Security 10.1 for Windows Server monitors the integrity of the protected environment based on the results of an inspection of Windows Event Logs. The application notifies the administrator upon detecting abnormal behavior in the system, which may be an indication of attempted cyberattacks.

Kaspersky Security 10.1 for Windows Server considers the Windows event logs and identifies breaches based on the rules specified by a user or by the settings of the heuristic analyzer, which is used by the task to inspect logs.

### Predefined rules and heuristic analysis

You can use the Log Inspection task to monitor the state of the protected system by applying the predefined rules, that are based on existing heuristics. The heuristic analyzer identifies abnormal activity on the protected server, which may be evidence of an attempted attack. Templates to identify abnormal behavior are included in the available rules in the predefined rules settings.

Seven rules are included in the rule list for the Log Inspection task. You can enable or disable the use of any of the rules. You cannot delete existing or create new rules.

You can configure the triggering criteria for rules that monitor events for the following operations:

- Password brute-force detection
- Network login detection

You can also configure exclusions in the task settings. The heuristic analyzer is not activated when a login is conducted by a trusted user or from a trusted IP address.

Kaspersky Security 10.1 for Windows Server does not use heuristics to inspect Windows logs if the heuristic analyzer is not used by the task. By default, the heuristic analyzer is enabled.

When the rules are applied, the application records a *Critical event* in the Log Inspection task log.

### Custom rules for the Log Inspection task

You can use the task rule settings to specify and change the criteria for triggering rules upon detecting the selected events in the specified Windows log. By default, the list of Log Inspection task rules contains four rules. You can enable and disable the use these rules, remove rules, and edit rule settings.

You can configure the following rule triggering criteria for each rule:

- List of record identifiers in the Windows Event Log.

The rule is triggered when a new record is created in the Windows Event Log, if the event properties includes an event identifier specified for the rule. You can also add and remove identifiers for each specified rule.

- Event source.

For each rule, you can define a sublog of the Windows Event Log. The application will search for records with the specified event identifiers only in this sublog. You can select one of the standard sublogs (Application, Security, or System), or specify a custom sublog by entering the name in the source selection field.

The application does not verify that the specified sublog actually exists in the Windows Event Log.

When the rule is triggered, Kaspersky Security 10.1 for Windows Server records a Critical event in the log Inspection task log.

By default Log Inspection task does not apply custom rules.

Before starting the Log Inspector task make sure the system audit policy is set up correctly. Refer to Microsoft article <https://technet.microsoft.com/en-us/library/cc952128.aspx> for details.

## Configuring predefined task rules

► Perform the following actions to configure the predefined rules for the Log Inspection task:

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page 107) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page 118) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **System Inspection** section click the **Settings** button in the **Log Inspection** block.

The **Log Inspection settings** window opens.

4. Select the **Predefined rules** tab.
5. Select or clear check box **Apply predefined rules for Log Inspection**.

If this check box is selected, Kaspersky Security 10.1 for Windows Server applies heuristic analyzer to detect abnormal activity on the protected server.

If this check box is cleared the heuristic analyzer is not running and Kaspersky Security 10.1 for Windows Server applies preset or custom rules to detect abnormal activity.

The check box is selected by default.

For the task to run, at least one Log Inspection rule must be selected.

6. Select the rules which you want to apply from the list of predefined rules:
  - There are patterns of a possible brute-force attack in the system.
  - There are patterns of a possible Windows Event log abuse.
  - Atypical actions detected on behalf of a new service installed.
  - Atypical logon that uses explicit credentials detected.
  - There are patterns of a possible Kerberos forged PAC (MS14-068) attack in the system.
  - Atypical actions detected directed at a privileged built-in group Administrators.

- There is an atypical activity detected during a network logon session.
7. To configure the selected rules, click the **Advanced settings** button.  
The **Log Inspection** window opens.
  8. In the **Brute-force attack detection** section set the number of attempts and a time frame when these attempts occurred, which will be considered as triggers for heuristic analyzer.
  9. In the **Network logon detection** section, indicate the start and end of the time interval during which Kaspersky Security 10.1 for Windows Server treats sign-in attempts as abnormal activity.
  10. Select the **Exclusions** tab.
  11. Perform the following actions to add trusted users:
    - a. Click the **Browse** button.
    - b. Select a user.
    - c. Click **OK**.  
A selected user is added to the list of trusted users.
  12. Perform the following actions to add trusted IP-addresses:
    - a. Enter the IP-address.
    - b. Click the **Add** button.
  13. An entered IP-address is added to the list of trusted IP-addresses.
  14. On the **Task management** tab configure the task start schedule (see Section "Configuring the task start schedule settings" on page [138](#)).
  15. Click **OK**.  
The Log Inspection task configuration is saved.

## Configuring the Log inspection rules

► *Perform the following actions to add and configure a new log Inspection custom rule:*

1. Expand the **Managed devices** node in the Kaspersky Security Center Administration Console tree and select the administration group for which you want to configure application settings.
2. Perform one of the following actions in the details pane of the selected administration group:
  - To configure application settings for a group of servers, select the **Policies** tab and open the **Properties: <Policy name>** (see Section "Configuring policy" on page [107](#)) window.
  - If you want to configure the application for a single server, select the **Devices** tab and open the **Application settings** (see Section "Configuring local tasks in Application settings window of Kaspersky Security Center" on page [118](#)) window.

If a device is being managed by an active Kaspersky Security Center policy and this policy blocks changes to the application settings, these settings cannot be edited in the **Application settings** window.

3. In the **System Inspection** section click the **Settings** button in the **Log Inspection** block.

The **Log Inspection** window opens.

4. On the **Log Inspection rules** tab select or clear the **Apply custom rules for Log Inspection** check box.

If the check box is selected, Kaspersky Security 10.1 for Windows Server applies custom rules for Log Inspection according to each rule settings. You can add, remove or configure Log Inspection rules.

If the check box is cleared, you cannot add or modify the custom rules. Kaspersky Security 10.1 for Windows Server applies default rules settings.

The check box is selected by default. Only the Application popup detection rule is active.

You can control whether the preset rules are applied for Log Inspection. Select the check boxes corresponding to the rules you want to apply for the Log Inspection.

5. To add a new custom rule, click the **Add** button.

The **Log inspection rules** window opens.

6. In the **General** section enter the following information about the new rule:

- **Name**
- **Source**

Select a source log to use recorded events for analysis. The following Windows event log types are available:

- Application
- Security
- System

You can add a new custom log by entering the log name into the **Source** field.

7. In the **Triggered events ID** section specify the item IDs that will trigger the rule on detection:

- a. Enter an ID's numeric value.
- b. Click the **Add** button.

A selected rule ID is added to the list. You can add an unlimited number of identifiers for each rule.

- c. Click **OK**.

The Log inspection rule is added to the list of rules.

# Working with Kaspersky Security 10.1 for Windows Server from the command line

This section describes working with Kaspersky Security 10.1 for Windows Server from the command line.

## In this chapter

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Command line return codes.....	<a href="#">290</a>

## Command line commands

You can perform basic Kaspersky Security 10.1 for Windows Server management commands from the command line of the protected server if you included the Command line utility component into the list of installed features during installation of Kaspersky Security 10.1 for Windows Server.

Using command line commands you can manage only those functions which are accessible to you based on the permissions assigned to you in Kaspersky Security 10.1 for Windows Server.

Certain Kaspersky Security 10.1 for Windows Server commands are executed in the following modes:

- Synchronous mode: management returns to the Console only after command execution is complete.
- Asynchronous mode: management returns to the Console immediately after the command is run.

### ► To interrupt command execution in synchronous mode

press the **Ctrl+C** keyboard shortcut.

Follow the following rules when entering Kaspersky Security 10.1 for Windows Server commands:

- Enter modifiers and commands using upper and lower case.
- Delimit modifiers with the space character.
- if the file/folder name whose path you specify as the key value contains a space, specify the file/folder path in quotes, for example: "C:\TEST\test cpp.exe"
- if necessary, use placeholders in the filename or path masks, for example: "C:\Temp\Temp\*\", "C:\Temp\Temp???.doc", "C:\Temp\Temp\*.doc"

You can use the command line for the entire range of operations required for management and administration of Kaspersky Security 10.1 for Windows Server (see the table below).

Table 43. Kaspersky Security 10.1 for Windows Server commands

Command	Description
---------	-------------

Command	Description
KAVSHELL APPCONTROL (see Section "Filling list of Applications Launch Control rules KAVSHELL APPCONTROL" on page <a href="#">277</a> )	Renews the specified rules list according to selected adding principle.
KAVSHELL APPCONTROL /CONFIG (see Section "Managing the Applications Launch Control task KAVSHELL APPCONTROL /CONFIG" on page <a href="#">274</a> )	Controls the operating mode of the Applications Launch Control task
KAVSHELL APPCONTROL /GENERATE (see Section "Rule Generator for Applications Launch Control KAVSHELL APPCONTROL /GENERATE" on page <a href="#">275</a> )	Starts the Rule Generator for Applications Launch Control task.
KAVSHELL VACUUM (see Section "Kaspersky Security 10.1 for Windows Server log files defragmentation. KAVSHELL VACUUM" on page <a href="#">285</a> )	Defragments Kaspersky Security 10.1 for Windows Server log files.
KAVSHELL PASSWORD	Manages password protection settings.
KAVSHELL HELP (see Section "Displaying Kaspersky Security 10.1 for Windows Server command help. KAVSHELL HELP" on page <a href="#">267</a> )	Displays Kaspersky Security 10.1 for Windows Server command help.
KAVSHELL START (see Section "Starting and stopping Kaspersky Security service KAVSHELL START, KAVSHELL STOP" on page <a href="#">267</a> )	Starts Kaspersky Security 10.1 for Windows Server service.
KAVSHELL STOP (see Section "Starting and stopping Kaspersky Security service KAVSHELL START, KAVSHELL STOP" on page <a href="#">267</a> )	Stops Kaspersky Security 10.1 for Windows Server service.
KAVSHELL SCAN (see Section "Scanning selected area. KAVSHELL SCAN" on page <a href="#">268</a> )	Creates and starts a temporary On-Demand Scan task with the scan scope and security settings set by the command modifiers.

Command	Description
KAVSHELL SCANCritical (see Section "Starting the Critical Areas Scan task. KAVSHELL SCANCritical" on page <a href="#">271</a> )	Starts the Critical Areas Scan system task.
KAVSHELL TASK (see Section "Managing specified task asynchronously. KAVSHELL TASK" on page <a href="#">272</a> )	Starts / pauses / resumes / stops the selected task asynchronously / returns the current task status / statistics.
KAVSHELL RTP (see Section "Starting and stopping Real-Time Protection tasks. KAVSHELL RTP" on page <a href="#">274</a> )	Starts or stops all Real-Time Protection tasks.
KAVSHELL UPDATE (see Section "Starting Kaspersky Security 10.1 for Windows Server databases update task. KAVSHELL UPDATE" on page <a href="#">279</a> )	Starts Kaspersky Security 10.1 for Windows Server bases update task with the settings specified using command modifiers.
KAVSHELL ROLLBACK (see Section "Rolling back Kaspersky Security 10.1 for Windows Server database updates. KAVSHELL ROLLBACK" on page <a href="#">282</a> )	Rolls back bases to the previous version.
KAVSHELL LICENSE (see Section "Activating application KAVSHELL LICENSE" on page <a href="#">283</a> )	Manages keys and activation codes.
KAVSHELL TRACE (see Section "Enabling, configuring and disabling trace log. KAVSHELL TRACE" on page <a href="#">284</a> )	Enables or disables the tracing log, manages settings of the tracing log.
KAVSHELL DUMP (see Section "Enabling and disabling dump file creation. KAVSHELL DUMP" on page <a href="#">287</a> )	Enables or disables Kaspersky Security 10.1 for Windows Server process dump files in case of abnormal termination of processes.
KAVSHELL IMPORT (see Section "Importing settings. KAVSHELL IMPORT" on page <a href="#">288</a> )	Imports general Kaspersky Security 10.1 for Windows Server settings, functions, and tasks from a configuration file created beforehand.
KAVSHELL EXPORT (see Section "Exporting settings. KAVSHELL EXPORT" on page <a href="#">288</a> )	Exports all Kaspersky Security 10.1 for Windows Server settings and existing tasks to a configuration file.



Command	Description
KAVSHELL DEVCONTROL (see Section "Filling the list of Device Control rules. KAVSHELL DEVCONTROL" on page <a href="#">278</a> )	Adds to the list of generated device control rules according to selected method.

## Displaying Kaspersky Security 10.1 for Windows Server command help. KAVSHELL HELP

To obtain the list of all Kaspersky Security 10.1 for Windows Server commands, run one of the following commands:

```
KAVSHELL
```

```
KAVSHELL HELP
```

```
KAVSHELL /?
```

To obtain a description of a command and its syntax, run one of the following commands:

```
KAVSHELL HELP <command>
```

```
KAVSHELL <command> /?
```

### KAVSHELL HELP command examples

To view detailed information about the KAVSHELL SCAN command, execute the following command:

```
KAVSHELL HELP SCAN
```

## Starting and stopping Kaspersky Security service KAVSHELL START, KAVSHELL STOP

To run the Kaspersky Security Service, execute the command

```
KAVSHELL START
```

By default when Kaspersky Security Service is started, tasks Real-Time File Protection and Scan at system startup as well as other tasks that are scheduled to start **At application launch** will be started.

To stop the Kaspersky Security Service, execute command

```
KAVSHELL STOP
```

Password might be required to execute the command. To enter the current password use `[/pwd:<password>]` key.

## Scanning selected area. KAVSHELL SCAN

In order to start a task for scanning specific areas of the protected server use command `KAVSHELL SCAN`. The command modifiers specify the scan scope and security settings of the selected node.

The On-Demand Scan task started using `KAVSHELL SCAN` command is a temporary task. It is displayed in the Kaspersky Security 10.1 Console only while being executed (you cannot view task settings in the Kaspersky Security 10.1 Console). The task performance log is generated at the same time. It is displayed in the **Task logs** of the Kaspersky Security 10.1 Console. Kaspersky Security Center policies can be applied to tasks that are created and run using the `SCAN` command.

When specifying paths in scan tasks for specific areas, you can use environmental variables. If you use environmental variable specified for user, execute `KAVSHELL SCAN` command with the permissions for this user.

Command `KAVSHELL SCAN` is executed in the synchronous mode.

To start an existing On-Demand Scan task from the command line, use the `KAVSHELL TASK` (see Section "Managing specified task asynchronously. `KAVSHELL TASK`" on page [272](#)) command.

### KAVSHELL SCAN command syntax

```
KAVSHELL SCAN <scan scope>
[/MEMORY|/SHARED|/STARTUP|/REMDRIVES|/FIXDRIVES|/MYCOMP] [/L:< path to file
with the list of scan scopes >] [/F<A|C|E>] [/NEWONLY]
[/AI:<DISINFECT|DISINFDEL|DELETE|REPORT|AUTO>]
[/AS:<QUARANTINE|DELETE|REPORT|AUTO>] [/DISINFECT|/DELETE] [/E:<ABMSPO>]
[/EM:<"masks">] [/ES:<size>] [/ET:<number of seconds>] [/TZOFF]
[/OF:<SKIP|RESIDENT|SCAN[=<days>] [NORECALL]>]
[/NOICHECKER] [/NOISWIFT] [/ANALYZERLEVEL] [/NOCHECKMSSIGN] [/W:<path to task log
file>] [/ANSI] [/ALIAS:<task alias>]
```

The `KAVSHELL SCAN` command has both mandatory and optional keys (see table below).

### KAVSHELL SCAN command examples

```
KAVSHELL SCAN Folder56 D:\Folder1\Folder2\Folder3\ C:\Folder1\ C:\Folder2\3.exe
"\another server\Shared\" F:\123\*.fgb /SHARED /AI:DISINFDEL /AS:QUARANTINE /FA
/E:ABM /EM:"*.xtx;*.fff;*.ggg;*.bbb;*.info" /NOICHECKER /ANALYZERLEVEL:1
/NOISWIFT /W:log.log
```

```
KAVSHELL SCAN /L:scan_objects.lst /W:c:\log.log
```

Table 44. `KAVSHELL SCAN` command modifiers

Key	Description
<b>Scan scope.</b> Mandatory modifier.	
<files>	Specifies the scan scope - list of files, folders, network paths and predefined areas.
<folders>	Specify network paths to the UNC format (Universal Naming Convention).

Key	Description
<network path>	<p>In the following example folder Folder4 is specified without a path - it is located in the folder from which you run KAVSHELL command:</p> <p>KAVSHELL SCAN Folder4</p> <p>If the name of the object to be checked contains spaces, it must be placed in quotation marks.</p> <p>When a folder is selected, Kaspersky Security 10.1 for Windows Server will also check all subfolders for the folder in question.</p> <p>The symbols * or ? can be used to scan a group of files.</p>
/MEMORY	Scan objects in RAM
/SHARED	Scan shared folders on the server
/STARTUP	Scan startup objects
/REMDRIVES	Scan removable drives
/FIXDRIVES	Scan hard drives
/MYCOMP	Scan all areas of protected server
/L:<path to file with the list of scan scopes>	<p>File name with the list of scan scopes including full path to the file.</p> <p>Delimit scan scopes in the files using line breaks. You can specify predefined scan areas as shown as follows in this example of a file with a scan scope list:</p> <p>C:\ D:\Docs\*.doc E:\My Documents /STARTUP /SHARED</p>
<p><b>Scanned objects</b> (File types). If you do not specify values for this modifier, Kaspersky Security 10.1 for Windows Server will scan objects by their format.</p>	
/FA	Scan all objects
/FC	Scan objects by format (by default). Kaspersky Security 10.1 for Windows Server scans only objects format of which are included into the list of formats of infectable objects.
/FE	Scan objects by extension. Kaspersky Security 10.1 for Windows Server scans only objects with extensions included into the list of extensions of infectable objects.
/NEWONLY	<p>Scan only new and modified files.</p> <p>If you do not provide this modifier, Kaspersky Security 10.1 for Windows Server will scan all objects.</p>
<p><b>Action to perform on infected and other objects.</b> If you do not specify values for this modifier, Kaspersky Security 10.1 for Windows Server will perform the <b>Skip</b> action.</p>	
DISINFECT	Disinfect, skip if disinfection is not possible
DISINFDEL	Disinfect, delete if disinfection is not possible

Key	Description
DELETE	Delete The settings DISINFECT and DELETE are saved in the current version of Kaspersky Security 10.1 for Windows Server in order to ensure compatibility with previous versions. These settings can be used instead of the key commands /AI: and /AS: In this case, Kaspersky Security 10.1 for Windows Server will not process probably infected objects.
REPORT	Send report (by default)
AUTO	Perform recommended action
<b>/AS: Action to perform on probably infected objects/</b> If you do not specify values for this modifier, Kaspersky Security 10.1 for Windows Server will perform the <b>Skip</b> action.	
QUARANTINE	Quarantine
DELETE	Delete
REPORT	Send report (by default)
AUTO	Perform recommended action
<b>Exclusions</b>	
/E:ABMSPO	Excludes compound objects of the following types: A – archives (scan SFX archives only) B – email databases M – plain mail S – archives and SFX-archives P – packed objects O – embedded OLE objects
/EM:<"masks">	Exclude files by mask You can specify several masks, for example: EM:"*.txt;*.png; C:\Videos\*.avi".
/ET:<number of seconds>	Stop processing object if it continues longer than the number of seconds specified by value <number of seconds>. There is no time restriction by default.
/ES:<size>	Do not scan compound objects larger than the size (in MB) specified by value <size>. Kaspersky Security 10.1 for Windows Server scans all sizes of objects by default.
/TZOFF	Disable Trusted Zone exclusions
<b>Advanced settings (Options)</b>	
/NOICHECKER	Disable the use of iChecker (enabled by default)
/NOISWIFT	Disable the use of iSwift (enabled by default)

Key	Description
/ANALYZERLEVEL:<analysis intensity>	<p>Enable Heuristic Analyzer, configure analysis level.</p> <p>The following levels of heuristic analysis intensity are available:</p> <ul style="list-style-type: none"> <li>1 – light</li> <li>2 – medium</li> <li>3 – deep</li> </ul> <p>If you omit the modifier, Kaspersky Security 10.1 for Windows Server will not use heuristic analyzer.</p>
/ALIAS:<task alias>	<p>Enables you to assign an On-Demand Scan task a temporary name by which the task can be accessed during its execution, for example in order to view its statistics using TASK command. The task alias must be unique among the task aliases of all functional components of Kaspersky Security 10.1 for Windows Server.</p> <p>If this modifier is not specified, temporary name scan_&lt;kavshell_pid&gt; is used, for example scan_1234. In Kaspersky Security 10.1 Console, the task is assigned the name Scan objects (&lt;date and time&gt;), for example, Scan objects 8/16/2007 5:13:14 PM.</p>
Settings of task logs (Report settings)	
/W:<path to task log file>	<p>If this key is specified, Kaspersky Security 10.1 for Windows Server will save the task log file with the name defined by the key's value.</p> <p>The log file contains task execution statistics, the time when it was started and completed (stopped), and information about events in this task.</p> <p>The log is used to register events defined by the settings of task logs and the Kaspersky Security 10.1 for Windows Server event log in the "Event Viewer".</p> <p>Either the absolute or relative path to the log file can be specified. If you specify only the name of a file without specifying the respective path, the log file will be created in the current folder.</p> <p>Restarting the command with the same log settings will overwrite the existing log file.</p> <p>The log file can be viewed while a task is running.</p> <p>The log appears in the Task logs node of Kaspersky Security 10.1 Console.</p> <p>If Kaspersky Security 10.1 for Windows Server fails to create the log file, it will not stop the command from executing but it will display an error message.</p>
/ANSI	<p>The option enables recording of events to task log in the ANSI encoding.</p> <p>The ANSI option will not be applied, if the W option is not defined.</p> <p>If the ANSI option is not specified, task log is generated using the UNICODE encoding.</p>

## Starting the Critical Areas Scan task. KAVSHELL SCANCRITICAL

Use the `KAVSHELL SCANCRITICAL` command to start the system On-Demand Scan task Critical Areas Scan

with the settings defined in Kaspersky Security 10.1 Console.

### KAVSHELL SCANCRITICAL command syntax

```
KAVSHELL SCANCRITICAL [/W:<path to task log file>]
```

### KAVSHELL SCANCRITICAL command examples

To run the Critical Areas Scan On-Demand Scan task, and save the task log scancritical.log in the current folder, execute the following command:

```
KAVSHELL SCANCRITICAL /W:scancritical.log
```

Depending upon the syntax of the /W modifier, you can configure the location of the task log (see the table below).

Table 45. Syntax of the /W modifier for the KAVSHELL SCANCRITICAL command

Key	Description
/W:<path to task log file>	<p>If this key is specified, Kaspersky Security 10.1 for Windows Server will save the task log file with the name defined by the key's value.</p> <p>The log file contains task execution statistics, the time when it was started and completed (stopped), and information about events in this task.</p> <p>The log is used to register events defined by the settings of task logs and the application event log in the Event Viewer.</p> <p>Either the absolute or relative path to the log file can be specified. If you specify only the name of a file without specifying the respective path, the log file will be created in the current folder.</p> <p>Restarting the command with the same log settings will overwrite the existing log file.</p> <p>The log file can be viewed while a task is running.</p> <p>The log appears in the <b>Task logs</b> node of Kaspersky Security 10.1 Console.</p> <p>If Kaspersky Security 10.1 for Windows Server fails to create the log file, it will not stop the command from executing but it will display an error message.</p>

## Managing specified task asynchronously. KAVSHELL TASK

Using KAVSHELL TASK command you can manage the specified task: run, pause, resume and stop the specified task and view the current task status and statistics. The command is performed in asynchronous mode.

Password might be required to execute the command. To enter the current password use [/pwd:<password>] key.

### KAVSHELL TASK command syntax

```
KAVSHELL TASK [<task name alias> </START | /STOP | /PAUSE | /RESUME | /STATE | /STATISTICS >]
```

## KAVSHELL TASK command examples

```
KAVSHELL TASK
```

```
KAVSHELL TASK on-access /START
```

```
KAVSHELL TASK user-task_1 /STOP
```

```
KAVSHELL TASK scan-computer /STATE
```

KAVSHELL TASK command can run without modifiers or with one/several modifiers (see the table below).

Table 46. KAVSHELL TASK command modifiers

Key	Description
Without keys	Returns the list of all existing Kaspersky Security 10.1 for Windows Server tasks The list contains the fields: alternative task name, task category (system or custom) and current task status.
<task alias>	Instead of the task name, in the SCAN TASK command, use its Task alias, an additional short-form name that Kaspersky Security 10.1 for Windows Server assigns to tasks. To view Kaspersky Security 10.1 for Windows Server task aliases enter the command KAVSHELL TASK without any modifiers
/START	Starts the specified task in asynchronous mode.
/STOP	Stops the specified task.
/PAUSE	Pauses the specified task.
/RESUME	Resumes the specified task in asynchronous mode.
/STATE	Returns the current task status (for example, <b>Running</b> , <b>Completed</b> , <b>Paused</b> , <b>Stopped</b> , <b>Failed</b> , <b>Starting</b> , <b>Recovering</b> ).
/STATISTICS	Retrieve task statistics - information on the number of objects processed from the time the task started until now.

Return codes for the KAVSHELL TASK command (see Section "Return codes for KAVSHELL TASK command" on page [292](#)).

## Starting and stopping Real-Time Protection tasks. KAVSHELL RTP

Using the `KAVSHELL RTP` command you can start or stop all Real-Time Protection tasks.

Password might be required to execute the command. To enter the current password use `[/pwd:<password>] key`.

### KAVSHELL RTP command syntax

```
KAVSHELL RTP {/START | /STOP}
```

### KAVSHELL RTP command examples

To start all Real-Time Protection tasks, execute the following command:

```
KAVSHELL RTP /START
```

The `KAVSHELL RTP` command can include any of two mandatory modifiers (see the table below).

Table 47. *KAVSHELL RTP command modifiers*

Key	Description
/START	Starts all Real-Time Protection tasks: Real-Time File Protection, Script Monitoring and KSN Usage.
/STOP	Stops all Real-Time Protection tasks.

## Managing the Applications Launch Control task KAVSHELL APPCONTROL /CONFIG

You can use the `KAVSHELL APPCONTROL /CONFIG` command to configure the mode in which the Applications Launch Control task runs and monitors the loading of DLL modules.

### KAVSHELL APPCONTROL /CONFIG command syntax

```
/config /mode:<applyrules|statistics> [/dll:<no|yes>] | /config  
/savetofile:<full path to XML file>
```

### Examples of the KAVSHELL APPCONTROL /CONFIG command

- To run the Applications Launch Control task in **Active** mode without loading a DLL and save the task settings upon completion, run the following command:

```
KAVSHELL APPCONTROL /CONFIG /mode:applyrules /dll:<no>  
/savetofile:c:\appcontrol\config.xml
```

You can configure Applications Launch Control task settings using the command-line parameters (see the table below).



Table 48. *KAVSHELL APPCONTROL /GENERATE* command switches

Key	Description
<code>/mode:&lt;applyrules statistics&gt;</code>	Operating mode of the Applications Launch Control task. You can select one of the following modes: <ul style="list-style-type: none"> <li>• active - Apply Applications Launch Control rules;</li> <li>• statistics - Only statistics.</li> </ul>
<code>/dll:&lt;no yes&gt;</code>	Enable or disable monitoring of DLL loading.
<code>/savetofile: &lt;path to XML file&gt;</code>	Export specified rules in the indicated file in XML format.
<code>/savetofile: &lt;the fullname to xml file&gt;</code>	Save the list of rules to file.
<code>/savetofile: &lt;the fullname to xml file&gt; /sdc</code>	Save the list of Software Distribution Control rules to file.
<code>/clearsdc</code>	Delete all Software Distribution Control rules from the list.

## Rule Generator for Applications Launch Control KAVSHELL APPCONTROL /GENERATE

Using the `KAVSHELL APPCONTROL /GENERATE` command you can generate the Applications Launch Control rules lists.

Password might be required to execute the command. To enter the current password use `[/pwd:<password>]` key.

### KAVSHELL APPCONTROL /GENERATE command syntax

```
KAVSHELL APPCONTROL /GENERATE <path to folder> | /source:<path to file with folders list> [/masks:<edms>] [/runapp] [/rules:<ch|cp|h>] [/strong]
[/user:<user or group of users>] [/export:<path to XML file>] [/import:<a|r|m>]
[/prefix:<prefix for rules names>] [/unique]
```

### KAVSHELL APPCONTROL /GENERATE command examples

- ▶ To generate rules for files from specified folders, execute the following command:

```
KAVSHELL APPCONTROL /GENERATE /source:c:\folderslist.txt
/export:c:\rules\appctrlrules.xml
```

- ▶ To generate rules for executable files of all extensions available in the specified folder and, upon the

task completion, save generated rules in the specified file XML file, execute the following command:

```
KAVSHELL APPCONTROL /GENERATE c:\folder /masks:edms
/export:c\rules\appctrlrules.xml
```

Depending on keys syntax you can configure automatic rules generation settings for the Applications Launch Control task (see table below).

Table 49. KAVSHELL APPCONTROL /GENERATE command keys

Key	Description
<b>Allowing rules usage scope</b>	
<path to folder>	Specifies path to folder with executable files generated allowing rules.
/source: <path to file with folders list>	Specifies path to TXT file with list of folders require automatically generated allowing rules.
/masks: <edms>	Specifies extensions of executable files that allowing rules.  You can include into rules usage scope file: <ul style="list-style-type: none"> <li>e - EXE files</li> <li>d - DLL files</li> <li>m - MSI files</li> <li>s - scripts</li> </ul>
/runapp	When generation allowing rules, takes into protected server at the moment of the task.
<b>Actions when automatically generating allowing rules</b>	
/rules: <ch cp h>	Specifies actions to perform during the Applications Launch Control rules generation: <ul style="list-style-type: none"> <li>ch - use digital certificate. If the certificate is not specified, the certificate of the executable file is used.</li> <li>cp - use digital certificate. If the certificate is not specified, the certificate of the executable file is used.</li> <li>h - use SHA256 hash.</li> </ul>
/strong	Use digital certificate subject and thumbprint for Applications Launch Control allowing rules. /rules: <ch cp> key is specified.
/user: <user or group of users>	Specifies user name or a group of users for which application will monitor any applications running of users.
<b>Actions on completion of Rule Generator for Applications Launch Control</b>	
/export: <path to XML file>	Saves generated rules into XML file.

/unique	Add information about the server with applying the Applications Launch Control allowing rules.
/prefix: <prefix for rules names>	Specifies name prefix for the generating a rules.
/import: <a r m>	Imports generated rules to the list of specified according to the selected adding principle. <ul style="list-style-type: none"> <li>• a - <b>Add to existing rules</b> (rules with identical settings are not added)</li> <li>• r - <b>Replace existing rules</b> (rules with identical settings are replaced; the rule is added if at least one rule parameter is different)</li> <li>• m - <b>Merge with existing rules</b> (rules with identical settings are not added; the rule is added if at least one rule parameter is different)</li> </ul>

## Filling list of Applications Launch Control rules KAVSHELL APPCONTROL

Using the `KAVSHELL APPCONTROL` you can add rules from the XML file to the Applications Launch Control task rules list according to the selected principle and also delete all set rules from the list.

Password might be required to execute the command. To enter the current password use `[/pwd:<password>]` key.

### KAVSHELL APPCONTROL command syntax

```
KAVSHELL APPCONTROL /append <path to XML file> | /replace <path to XML file> | /merge <path to XML file> | /clear
```

### KAVSHELL APPCONTROL command examples

- To add rules from an XML file to already specified rules for the Applications Launch Control task according to Add to existing rules principle, execute the following command:

```
KAVSHELL APPCONTROL /append c:\rules\appctrlrules.xml
```

Depending on the keys syntax, you can select principle to add new rules an XML file specified to a list of the Applications Launch Control defined rules (see table below).

Table 50. `KAVSHELL SCAN` command keys

Key	Description
/append <path to XML file>	Renew list of applications launches control rules based on a specified XML file. Adding principle - <b>Add to existing rules</b> (rules with identical settings are duplicated).

/replace <path to XML file>	Renew list of applications launches control rules based on a specified XML file. Adding principle - <b>Replace existing rules</b> (rules with identical parameters are not added; the rule is added if at least one rule parameter is unique).
/merge <path to XML file>	Renew list of applications launches control rules based on a specified XML file. Adding principle - <b>Merge with existing rules</b> (new rules do not duplicate already set rules).
/clear	Clear the list of Applications Launch Control rules.

## Filling the list of Device Control rules. KAVSHELL DEVCONTROL

Using `KAVSHELL DEVCONTROL` you can add rules from the XML file to the Device Control task rules list according to the selected principle and also delete all set rules from the list.

Password might be required to execute the command. To enter the current password use `[/pwd:<password>] key`.

### KAVSHELL DEVCONTROL command syntax

```
KAVSHELL DEVCONTROL /append <path to XML file> | /replace <path to XML file> | /merge <path to XML file> | /clear
```

### KAVSHELL DEVCONTROL command examples

- To add rules from an XML file to already specified rules for the Device Control task according to **Add to existing rules** principle, execute the following command:

```
KAVSHELL DEVCONTROL /append :c:\rules\devctrlrules.xml
```

Depending on the keys syntax, you can select principle to add new rules an XML file specified to a list of the Device Control defined rules (see table below).

Table 51. `KAVSHELL DEVCONTROL` command keys

Key	Description
/append <path to XML file>	Renew list of device control rules based on a specified XML file. Adding principle - <b>Add to existing rules</b> (rules with identical settings are duplicated).

/replace <path to XML file>	Renew list of device control rules based on a specified XML file. Adding principle - <b>Replace existing rules</b> (rules with identical parameters are not added; the rule is added if at least one rule parameter is unique).
/merge <path to XML file>	Renew list of device control rules based on a specified XML file. Adding principle - <b>Merge with existing rules</b> (new rules do not duplicate already set rules).
/clear	Clear the list of Device Control rules.

## Starting Kaspersky Security 10.1 for Windows Server databases update task. KAVSHELL UPDATE

The `KAVSHELL UPDATE` command can be used to start the Kaspersky Security 10.1 for Windows Server databases update command in the synchronous mode.

The Kaspersky Security 10.1 for Windows Server databases update task, run using a `KAVSHELL UPDATE` command, is a temporary task. It is only displayed in the Kaspersky Security 10.1 Console while being executed. The task log is generated at the same time. It is displayed in the **Task logs** of the Kaspersky Security 10.1 Console. Kaspersky Security Center policies may apply to update tasks created and started using the `KAVSHELL UPDATE` command and update tasks created in the Kaspersky Security 10.1 Console. For information about managing Kaspersky Security 10.1 for Windows Server on computers using Kaspersky Security Center, refer to the section "Managing Kaspersky Security 10.1 for Windows Server using Kaspersky Security Center".

Environment variables can be used when specifying the path to updates source in this task. If a user's environment variables are used, execute the `KAVSHELL UPDATE` command with the permissions for this user.

### Command syntax for KAVSHELL UPDATE

```
KAVSHELL UPDATE < Path to updates source | /AK | /KL> [/NOUSEKL]
[/PROXY:<address>:<port>] [/AUTHTYPE:<0-2>] [/PROXYUSER:<user name>]
[/PROXYPWD:<password>] [/NOPROXYFORKL] [/USEPROXYFORCUSTOM] [/NOFTPPASSIVE]
[/TIMEOUT:<seconds>] [/REG:<iso3166 code>] [/W:<path to task log file>]
[/ALIAS:<task alias>]
```

The `KAVSHELL UPDATE` command has both mandatory and optional keys (see the following table).

### Examples of the KAVSHELL UPDATE command

- ▶ To start a custom database update task, execute the following command:

```
KAVSHELL UPDATE
```

- ▶ To run the database update task using the update files in the `\\server\databases` network folder, run the following command:

```
KAVSHELL UPDATE \\server\databases
```

- ▶ To start an update task from the FTP server <ftp://dnl-ru1.kaspersky-labs.com/> and write all task events

to the `c:\update_report.log` file, execute the command:

```
KAVSHELL UPDATE ftp://dnl-ru1.kaspersky-labs.com /W:c:\update_report.log
```

- In order to download Kaspersky Security 10.1 for Windows Server database updates from Kaspersky Lab's update server, connect to the updates source through a proxy server (proxy server address: `proxy.company.com`, port: 8080), to access the server using the in-built Microsoft Windows NTLM authentication with user name: `inetuser`, password: 123456, execute the following command:

```
KAVSHELL UPDATE /KL /PROXY:proxy.company.com:8080 /AUTHTYPE:1  
/PROXYUSER:inetuser /PROXYPWD:123456
```

Table 52. KAVSHELL UPDATE command keys

Key	Description
<b>Updates source</b> (mandatory key). Specify one or multiple sources. Kaspersky Security 10.1 for Windows Server will access the sources in the order in which they are listed. Delimit sources with a space.	
<path in UNC format>	User-defined update source. Path to network update folder in the UNC format.
<URL>	User-defined updates source. HTTP or FTP server address where update folder is located.
<Local folder>	User-defined updates source. Folder on the protected server.
/AK	Kaspersky Security Center Administration server as the updates source.
/KL	Kaspersky Lab's update servers as the updates sources.
/NOUSEKL	Do not use Kaspersky Lab's update servers if other updates sources are not available (used by default).
<b>Proxy server settings</b>	
/PROXY:<address>:<port>	Network name or IP address of the proxy server and its port. If this key is not specified, Kaspersky Security 10.1 for Windows Server will automatically detect the settings of the proxy server used in the local area network.
/AUTHTYPE:<0-2>	This key specifies the authentication method to access proxy server. It can have the following values: <b>0</b> – in-built Microsoft Windows NTLM-authentication; Kaspersky Security 10.1 for Windows Server will contact the proxy computer under the <b>Local system (SYSTEM)</b> account <b>1</b> – in-built Microsoft Windows NTLM-authentication; Kaspersky Security 10.1 for Windows Server will contact the proxy computer under account with login name and password specified by the keys /PROXYUSER and /PROXYPWD <b>2</b> – authentication by login name and password specified by keys /PROXYUSER and /PROXYPWD (basic authentication) If authentication is not required for accessing the proxy server, there is no requirement to specify a key.
/PROXYUSER:<user name>	User name which will be used for accessing proxy server. If the value of key /AUTHTYPE:0 is specified, then /PROXYUSER:<user name> and /PROXYPWD:<password> keys will be ignored.

Key	Description
/PROXYPWD:<password>	User password which will be used for accessing proxy server. If the value of key /AUTHTYPE:0 is specified, then /PROXYUSER:<user name> and /PROXYPWD:<password> keys will be ignored. If /PROXYUSER key is specified and /PROXYPWD omitted, the password will be considered blank.
/NOPROXYFORKL	Do not use proxy server settings for connecting with Kaspersky Lab's update servers (used by default).
/USEPROXYFORCUSTOM	Use proxy server settings for connecting to user-defined updates sources (not used by default).
/USEPROXYFORLOCAL	Use proxy server settings for connecting to local updates sources. If not specified, the value <b>Do not use proxy server for local addresses</b> will apply.
<b>General FTP and HTTP server settings</b>	
/NOFTPPASSIVE	If this key is specified, Kaspersky Security 10.1 for Windows Server will use the active FTP computer mode to connect to the protected server. If this key is not specified, Kaspersky Security 10.1 for Windows Server will use the passive FTP computer mode, if possible.
/TIMEOUT:<number of seconds>	FTP or HTTP server connection timeout. If you do not specify this key, Kaspersky Security 10.1 for Windows Server will use the default value: 10 sec. The key value must be a whole number.
/REG:<iso3166 code>	Regional settings. This key is used when receiving updates from Kaspersky Lab's update servers. Kaspersky Security 10.1 for Windows Server optimizes the update load on the protected server by selecting the update server nearest to it.  As the value of this key, specify the letter code of the location country for the protected server in accordance with ISO 3166-1, for example /REG: gr or /REG:RU. If this key is omitted or a non-existent country code is specified, Kaspersky Security 10.1 for Windows Server will detect the location of the protected server based on the regional settings on the computer where the Kaspersky Security 10.1 Console is installed.
/ALIAS:<task alias>	This key will allow you to assign a temporary name to the task, to be used to access the task during its execution. For example, task statistics can be viewed using the TASK command. The task alias must be unique among the task aliases of all functional components of Kaspersky Security 10.1 for Windows Server.  If this key is not specified, update_<kavshell_pid>, for example, update_1234 will be used. In the Kaspersky Security 10.1 Console the task will be automatically assigned Update-databases (<date time>), for example, Update-databases 8/16/2007 5:41:02 PM.

Key	Description
/W:<path to task log file>	<p>If this key is specified, Kaspersky Security 10.1 for Windows Server will save the task log file with the name defined by the key's value.</p> <p>The log file contains task execution statistics, the time when it was started and completed (stopped), and information about events in this task.</p> <p>The log is used to register events defined by the settings of task logs and the Kaspersky Security 10.1 for Windows Server event log in the "Event Viewer".</p> <p>Either the absolute or relative path to the log file can be specified. If only the file name is specified without its path, then the log file will be created in the current folder.</p> <p>Restarting the command with the same log settings will overwrite the existing log file.</p> <p>The log file can be viewed while a task is running.</p> <p>The log appears in the <b>Task logs</b> node of Kaspersky Security 10.1 Console.</p> <p>If Kaspersky Security 10.1 for Windows Server fails to create the log file, it does not stop the command from executing or display an error message.</p>

Return codes for KAVSHELL UPDATE command (on page [293](#)).

## Rolling back Kaspersky Security 10.1 for Windows Server database updates. KAVSHELL ROLLBACK

The `KAVSHELL ROLLBACK` command can be used to perform a Kaspersky Security 10.1 for Windows Server database rollback system task (roll back Kaspersky Security 10.1 for Windows Server databases to the previously installed version). The command is performed synchronously.

### Command syntax:

```
KAVSHELL ROLLBACK
```

Return codes for the KAVSHELL ROLLBACK command (on page [293](#)).

## Managing log inspection. KAVSHELL TASK LOG-INSPECTOR

The `KAVSHELL TASK LOG-INSPECTOR` command can be used to monitor the environment integrity based on the Windows Event Log analysis.

### Command syntax

```
KAVSHELL TASK LOG-INSPECTOR
```

### Command examples

```
KAVSHELL TASK LOG-INSPECTOR /stop
```

Table 53. `KAVSHELL TASK LOG-INSPECTOR` command modifiers

Key	Description
/START	Starts the specified task in asynchronous mode.
/STOP	Stops the specified task.



Key	Description
/STATE	Returns the current task status (for example, <b>Running, Completed, Paused, Stopped, Failed, Starting, Recovering</b> ).
/STATISTICS	Retrieve task statistics - information on the number of objects processed from the time the task started until now.

Return codes for the KAVSHELL TASK LOG-INSPECTOR command (see Section "Return codes for KAVSHELL TASK LOG-INSPECTOR command" on page [291](#)).

## Activating application KAVSHELL LICENSE

Kaspersky Security 10.1 for Windows Server keys and activation codes can be managed using the `KAVSHELL LICENSE` command.

Password might be required to execute the command. To enter the current password use `[/pwd:<password>]` key.

### Command syntax for KAVSHELL FULLSCAN

```
KAVSHELL LICENSE [/ADD:<key file | activation code> [/R] | /DEL:<key number | activation code number>]
```

### Examples of the KAVSHELL SCAN command

► *To activate the application, execute the command:*

```
KAVSHELL.EXE LICENSE / ADD: <activation code of key number>
```

► *To view information on added keys, execute the command:*

```
KAVSHELL LICENSE
```

► *To remove an added key with number 0000-000000-00000001, execute the command:*

```
KAVSHELL LICENSE /DEL:0000-000000-00000001
```

The `KAVSHELL LICENSE` command can run with keys or without them (see table below).

Table 54. `KAVSHELL LICENSE` command keys

Key	Description
Without keys	<p>The command returns the following information about added keys:</p> <ul style="list-style-type: none"> <li>• Key number.</li> <li>• License type (commercial or trial).</li> <li>• Duration of the license associated with the key.</li> <li>• Key status (active or additional). If the value specified is *, the key has been added as an additional key.</li> </ul>

Key	Description
/ADD:<key file name or activation code>	Adds key via the specified file or activation code. System environment variables can be used when specifying the path to a key file; user environment variables are not allowed.
/R	The /R activation code or key is an addition to the /ADD activation code or key and indicates that the activation code or key being added is an additional activation code or key.
/DEL:<key number or activation code>	Deletes the key with the specified number or the selected activation code.

Return codes for KAVSHELL LICENSE command (see Section "Return codes for the KAVSHELL LICENSE command" on page [294](#)).

## Enabling, configuring and disabling trace log. KAVSHELL TRACE

The `KAVSHELL TRACE` command can be used to enable and disable the trace log for all Kaspersky Security 10.1 for Windows Server subsystems and to set the log detail level.

Kaspersky Security 10.1 for Windows Server writes information to trace files and the dump file in unencrypted form.

### Command syntax for KAVSHELL TRACE

```
KAVSHELL TRACE </ON /F:<path to trace log file folder> [/S:<maximum log size in megabytes>] [/LVL:debug|info|warning|error|critical] | /OFF>
```

If the trace log is maintained and you wish to change its settings, enter `KAVSHELL TRACE` command with /ON key and specify log settings with values of /S and /LVL keys (see table below).

Table 55. *KAVSHELL TRACE* command keys

Key	Description
/ON	Enables the trace log.
/F:<folder with trace log files>	This key specifies the full path to the folder to which the trace log files will be saved (required). If a path to a non-existent folder is specified, no trace log will be created. Network paths in UNC (Universal Naming Convention) format can be used, but paths to folders on the network drives of the protected server cannot be specified. If a space character is contained in the name of the folder to which you specify the path as the value of the key, put the path to this folder into quotes, for example: /F:"C:\Trace Folder". System environment variables can be used when specifying the path to the trace log files; user environment variables are not allowed.

Key	Description
/S: <maximum log file size in megabytes>	This key sets the maximum size of a single trace log file. As soon as the log file reaches the maximum level, Kaspersky Security 10.1 for Windows Server will start recording information into a new file; the previous log file will be saved. If the value of this key is not specified, the maximum size of one log file will be 50 MB.
/LVL:debug info warning error critical	This key sets the log detail level from maximum ( <b>All debug information</b> ) in which all events are recorded into the log, to minimum ( <b>Critical events</b> ) in which only critical events are recorded. If this key is not specified, events with the <b>All debug information</b> level of detail will be recorded in the trace log.
/OFF	This key disables the trace log.

### Examples of the KAVSHELL TRACE command

- ▶ To enable the trace log using the **All debug information** level of detail and maximum log size of 200MB, and to save the log file to folder C:\Trace Folder, execute the command:

```
KAVSHELL TRACE /ON /F:"C:\Trace Folder" /S:200
```

- ▶ To enable the trace log using the **Important events** level of detail, and to save the log file to folder C:\Trace Folder, execute the command:

```
KAVSHELL TRACE /ON /F:"C:\Trace Folder" /LVL:warning
```

- ▶ To disable the trace log, execute the command:

```
KAVSHELL TRACE /OFF
```

Return codes for KAVSHELL TRACE command (see Section "Return codes for the KAVSHELL TRACE command" on page [294](#)).

## Kaspersky Security 10.1 for Windows Server log files defragmentation. KAVSHELL VACUUM

Using the `KAVSHELL VACUUM` command you can defragment the application log files. It allows to avoid system errors or errors during the Kaspersky Security 10.1 for Windows Server work that are connected to a hard log storage.

Password might be required to execute the command. To enter the current password use `[/pwd:<password>]` key.

It is recommended to apply the `KAVSHELL VACUUM` command to optimize log files storage in case of frequent On-Demand Scan scans and update tasks starts. While executing the command, Kaspersky Security 10.1 for

Windows Server renews a logical structure for the application log files that are stored on a protected server by specified path.

By default, the application log files are stored at C:\ProgramData\Kaspersky Lab\Kaspersky Security 10.1 for Windows Server\10.1\Reports. If you have manually specified another path for the log storage, the `KAVSHELL VACUUM` command executes defragmentation for files in folder that is specified in the Kaspersky Security 10.1 for Windows Server logs settings.

Big size of files defragmenting increases the `KAVSHELL VACUUM` command execution period.

The Real-Time Protection and the Server Control tasks are not available to perform during the `KAVSHELL VACUUM` command execution. On-going defragmentation process restricts access to Kaspersky Security 10.1 for Windows Server log and rejects events logging. To avoid security level decrease, it is recommended to plan the `KAVSHELL VACUUM` command execution at the downtime in advance.

- To defragment the Kaspersky Security 10.1 for Windows Server log files, execute the following command:

```
KAVSHELL VACUUM
```

Command execution is possible if started with local administrator account rights.

## Cleaning iSwift base. `KAVSHELL FBRESET`

Kaspersky Security 10.1 for Windows Server uses the iSwift technology, which allows the application to avoid rescanning files that have not been modified since the last scan (**Use iSwift technology**).

Kaspersky Security 10.1 for Windows Server creates in the %SYSTEMDRIVE%\System Volume Information directory the file `fidbox.dat`, which contains information about clean objects that have already been scanned. The file `fidbox.dat` grows with the number of files scanned by Kaspersky Security 10.1 for Windows Server. The file only contains current information about files existing in the system: if a file is removed, Kaspersky Security 10.1 for Windows Server purges information about it from `fidbox.dat`.

To clean up a file, use the command `KAVSHELL FBRESET`.

Please keep in mind the following specifics for operating the `KAVSHELL FBRESET` command:

- While cleaning the file `fidbox.dat` by means of the `KAVSHELL FBRESET` command, Kaspersky Security 10.1 for Windows Server does not pause the protection (unlike in cases of manual deletion of `fidbox.dat`).
- Kaspersky Security 10.1 for Windows Server may increase the server workload after the data is cleared in `fidbox.dat`. In this case, Anti-Virus scans all files accessed for the first time after the clearing of `fidbox.dat`. After the scan, Kaspersky Security 10.1 for Windows Server adds back to `fidbox.dat` the information about each scanned object. In the case of new attempts to access the object, the iSwift

technology will prevent rescanning of the file provided it remains unchanged.

The `KAVSHELL FBRESET` command execution is available only if the command line is started under the `SYSTEM` account.

## Enabling and disabling dump file creation. `KAVSHELL DUMP`

Creation of snapshots (dump file) for Kaspersky Security 10.1 for Windows Server processes in cases of abnormal termination can be enabled or disabled using the `KAVSHELL DUMP` command (see the following table). Additionally memory snapshots of Kaspersky Security 10.1 for Windows Server processes in progress can be taken at any time.

For the dump file to be successfully created the `KAVSHELL DUMP` command must be executed under the local system account (`SYSTEM`).

### Command syntax for `KAVSHELL DUMP`

```
KAVSHELL DUMP </ON /F:<folder with the dump file>|/SNAPSHOT /F:< folder with the dump file> / P:<pid> | /OFF>
```

### Examples of the `KAVSHELL DUMP` command

- ▶ To enable creation of the dump file; to save the dump file to folder `C:\Dump Folder`, execute the command:

```
KAVSHELL DUMP /ON /F:"C:\Dump Folder"
```

- ▶ To make a dump for the process with ID 1234 to folder `C:/Dumps`, execute the command:

```
KAVSHELL DUMP /SNAPSHOT /F: C:\Dumps /P:1234
```

- ▶ To disable generation of the dump file, execute the command:

```
KAVSHELL DUMP /OFF
```

Table 56. `KAVSHELL DUMP` command keys

Key	Description
<code>/ON</code>	Enables creation of the process memory dump file in cases of abnormal termination.
<code>/F:&lt;path to folder with dump files&gt;</code>	This is a mandatory key. It specifies the path to the folder to which the dump file will be saved. If a path to a non-existent folder is specified, no dump file will be created. Network paths can be used in UNC (Universal Naming Convention) format, but paths to folders on network drives of the protected server cannot be specified. System environment variables can be used when specifying the path to the folder with the memory dump file; user environment variables are not allowed.

Key	Description
/SNAPSHOT	Takes a snapshot of the memory of the specified Kaspersky Security 10.1 for Windows Server process in progress and saves the dump file into the folder the path to which is specified by key /F.
/P	PID process identifier is displayed in the Microsoft Windows Task Manager.
/OFF	Disables the creation of the memory dump file in cases of abnormal termination.

Return codes for KAVSHELL DUMP command (see Section "Return codes for the KAVSHELL DUMP command" on page [295](#)).

## Importing settings. KAVSHELL IMPORT

The `KAVSHELL IMPORT` command allows you to import the settings of Kaspersky Security 10.1 for Windows Server, its features and tasks from a configuration file to a copy of Kaspersky Security 10.1 for Windows Server on the protected server. A configuration file can be created using the `KAVSHELL EXPORT` command.

Password might be required to execute the command. To enter the current password use `[/pwd:<password>]` key.

### Command syntax for KAVSHELL IMPORT

```
KAVSHELL IMPORT <name of configuration file and path to file>
```

### Examples of KAVSHELL IMPORT command

```
KAVSHELL IMPORT Host1.xml
```

Table 57. *KAVSHELL IMPORT* command keys

Key	Description
<name of configuration file and path to file>	Name of configuration file used as the import source for settings. System environment variables can be used when specifying the path to the file; user environment variables are not allowed.

Return codes for KAVSHELL IMPORT command (see Section "Return codes for the KAVSHELL IMPORT command" on page [295](#)).

## Exporting settings. KAVSHELL EXPORT

The `KAVSHELL EXPORT` command allows you to export all of the settings of Kaspersky Security 10.1 for Windows Server and its current tasks to a configuration file in order to import them later into copies of Kaspersky Security 10.1 for Windows Server installed on other server.

## Command syntax for KAVSHELL EXPORT

KAVSHELL EXPORT <name of configuration file and path to file>

## Examples of KAVSHELL EXPORT command

KAVSHELL EXPORT Host1.xml

Table 58. KAVSHELL EXPORT command keys

Key	Description
<name of configuration file and path to file>	Name of configuration file which will contain settings. Any extension can be assigned to the configuration file. System environment variables can be used when specifying the path to the file; user environment variables are not allowed.

Return codes for KAVSHELL EXPORT command (see Section "Return codes for the KAVSHELL EXPORT command" on page [296](#)).

## Integration with MS Operation Management Suite. KAVSHELL OMSINFO

Using the KAVSHELL OMSINFO command you can review status of the application and information about threats detected by anti-virus databases and KSN service. The data about threats is taken from the available event logs.

## KAVSHELL OMSINFO command syntax

KAVSHELL OMSINFO <full path to generated file with file name>

## Examples of KAVSHELL OMSINFO command

KAVSHELL OMSINFO C:\Users\Admin\Desktop\omsinfo.json

Table 59. KAVSHELL OMSINFO command keys

Key	Description
<path to generated file with file name>	Name of the generated file which will contain information about application status and detected threats.

## Command line return codes

### In this section

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## Return code for the commands KAVSHELL START and KAVSHELL STOP

Table 60. Return code for the commands KAVSHELL START and KAVSHELL STOP

Return code	Description
0	Operation completed successfully
-3	Permissions error
-5	Invalid command syntax
-6	Invalid operation (for example, Kaspersky Security 10.1 for Windows Server service is already running or already stopped)
-7	Service not registered
-8	Automatic Service startup is disabled.
-9	Attempt to start computer under another user account failed (by default Kaspersky Security 10.1 for Windows Server service runs under the Local system user account)
-99	Unknown error



## Return code for KAVSHELL SCAN and KAVSHELL SCANCritical commands

Table 61. Return code for KAVSHELL SCAN and KAVSHELL SCANCritical commands

Return code	Description
0	Operation completed successfully (no threats detected)
1	Operation canceled
-2	Service not running
-3	Permissions error
-4	Object not found (file with the list of scan scopes not found)
-5	Invalid command syntax or scan scope not defined
-80	Infected and other objects detected
-81	Probably infected objects detected
-82	Processing errors detected
-83	Unchecked objects found
-84	Corrupted objects detected
-85	Task log file creation failed
-99	Unknown error
-301	Invalid key

## Return codes for KAVSHELL TASK LOG-INSPECTOR command

Table 62. Return code for KAVSHELL TASK LOG-INSPECTOR command

Return code	Description
0	Operation completed successfully
-6	Invalid operation (for example, Kaspersky Security 10.1 for Windows Server service is already running or already stopped)
402	Task is already running (for modifier /STATE)

## Return codes for KAVSHELL TASK command

Table 63. Return codes for KAVSHELL TASK command

Return code	Description
0	Operation completed successfully
-2	Service not running
-3	Permissions error
-4	Object not found (task not found)
-5	Invalid command syntax
-6	Invalid operation (for example, task not running, already running, or cannot be paused)
-99	Unknown error
-301	Invalid key
401	Task not running (for modifier /STATE)
402	Task already running (for modifier /STATE)
403	Task already paused (for modifier /STATE)
-404	Error executing operation (change in task status led to it crashing)

## Return codes for the KAVSHELL RTP command

Table 64. Return codes for the KAVSHELL RTP command

Return code	Description
0	Operation completed successfully
-2	Service not running
-3	Permissions error
-4	Object not found (one of the Real-Time Protection tasks or all Real-Time Protection tasks not found)
-5	Invalid command syntax
-6	Invalid operation (for example, the task is already running or already stopped)
-99	Unknown error
-301	Invalid key

## Return codes for KAVSHELL UPDATE command

Table 65. Return codes for KAVSHELL UPDATE command

Return code	Description
0	Operation completed successfully
200	All objects are up-to-date (database or program components are current)
-2	Service not running
-3	Permissions error
-5	Invalid command syntax
-99	Unknown error
-206	Extension files are missing in the specified source or have unknown format
-209	Error connecting to the update source
-232	Authentication error while connecting to proxy server
-234	Error connecting to Kaspersky Security Center
-235	Kaspersky Security 10.1 for Windows Server was not authenticated when connecting to the update source
-236	Application database is corrupted
-301	Invalid key

## Return codes for the KAVSHELL ROLLBACK command

Table 66. Return codes for the KAVSHELL ROLLBACK command

Return code	Description
0	Operation completed successfully
-2	Service not running
-3	Permissions error
-99	Unknown error
-221	Backup copy of database not found or corrupted
-222	Backup copy of database corrupted

## Return codes for the KAVSHELL LICENSE command

Table 67. Return codes for the KAVSHELL LICENSE command

Return code	Description
0	Operation completed successfully
-2	Service not running
-3	Insufficient privileges to manage keys
-4	Key with specified number not found
-5	Invalid command syntax
-6	Invalid operation (key already added)
-99	Unknown error
-301	Invalid key
-303	License applies to a different application

## Return codes for the KAVSHELL TRACE command

Table 68. Return codes for the KAVSHELL TRACE command

Return code	Description
0	Operation completed successfully
-2	Service not running
-3	Permissions error
-4	Object not found (path specified as path to the Tracking logs folder not found)
-5	Invalid command syntax
-6	Invalid operation (attempt of KAVSHELL TRACE /OFF command execution if trace log creation is already disabled)
-99	Unknown error

## Return codes for the KAVSHELL FBRESET command

Table 69. Return codes for the KAVSHELL FBRESET command

Return code	Description
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Return code	Description
0	Operation completed successfully
-99	Unknown error

## Return codes for the KAVSHELL DUMP command

Table 70. Return codes for the KAVSHELL DUMP command

Return code	Description
0	Operation completed successfully
-2	Service not running
-3	Permissions error
-4	Object not found (path specified as path to the dump file folder not found; process with specified PID not found)
-5	Invalid command syntax
-6	Invalid operation (attempt of KAVSHELL DUMP/OFF command execution if dump file creation is already disabled)
-99	Unknown error

## Return codes for the KAVSHELL IMPORT command

Table 71. Return codes for the KAVSHELL IMPORT command

Return code	Description
0	Operation completed successfully
-2	Service not running
-3	Permissions error
-4	Object not found (importable configuration file not found)
-5	Invalid syntax
-99	Unknown error
501	Operation completed successfully, however an error/comment occurred during the command execution, for example, Kaspersky Security 10.1 for Windows Server did not import parameters of some functional component
-502	File being imported is missing or has an unrecognized format

Return code	Description
-503	Incompatible settings (configuration file exported from a different program or a later and incompatible version of Kaspersky Security 10.1 for Windows Server)

## Return codes for the KAVSHELL EXPORT command

Table 72. Return codes for the KAVSHELL EXPORT command

Return code	Description
0	Operation completed successfully
-2	Service not running
-3	Permissions error
-5	Invalid syntax
-10	Unable to create a configuration file (for example no access to the folder specified in the path to the file)
-99	Unknown error
501	Operation completed successfully, however an error/comment occurred during the command execution, for example, Kaspersky Security 10.1 for Windows Server did not export parameters of some functional component

# Monitoring performance. Kaspersky Security 10.1 for Windows Server counters

This section provides information about Kaspersky Security 10.1 for Windows Server counters: System Monitor performance counters, and SNMP counters and traps.

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## Performance counters for System Monitor

This section contains information about performance counters for the Microsoft Windows System Monitor that are registered by Kaspersky Security 10.1 for Windows Server during installation.

### In this section

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Total number of denied requests .....	<a href="#">298</a>
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## About Kaspersky Security 10.1 for Windows Server SNMP counters

The **Performance counters** component is included in the installed components of Kaspersky Security 10.1 for Windows Server by default. Kaspersky Security 10.1 for Windows Server registers its own performance counters for the Microsoft Windows System Monitor during installation.

Using Kaspersky Security 10.1 for Windows Server counters, you can monitor the application's performance while Real-Time Protection tasks are running. You can uncover tight places when it is running with other applications and resource shortages. You can diagnose undesirable Kaspersky Security 10.1 for Windows Server settings and

crashes in its operation.

You can view Kaspersky Security 10.1 for Windows Server performance counters by opening the **Performance** console in the **Administration** item of Windows Control Panel.

The following sections list definitions of counters, recommended intervals for taking readings, threshold values, and recommendations for Kaspersky Security 10.1 for Windows Server settings if the counter values exceed them.

## Total number of denied requests

Table 73. Total number of denied requests

<b>Name</b>	Total number of requests denied
<b>Definition</b>	Total number of requests from the file interception driver to process objects that were not accepted by the application processes; counted from the time Kaspersky Security 10.1 for Windows Server was last started.  The application skips objects for which requests for processing are denied by Kaspersky Security 10.1 for Windows Server processes.
<b>Purpose</b>	This counter can help you detect: <ul style="list-style-type: none"> <li>• Lower quality of Real-Time Protection from bogging down the working processes of Kaspersky Security 10.1 for Windows Server.</li> <li>• Interruption of Real-Time Protection because of file interception dispatcher failures.</li> </ul>
<b>Normal / threshold value</b>	0 / 1.
<b>Recommended reading interval</b>	1 hour.
<b>Recommendations for configuration if value exceeds the threshold</b>	The number of requests for processed denied corresponds to the number of skipped objects.  The following situations are possible depending on counter behavior: <ul style="list-style-type: none"> <li>• the counter shows several requests denied over extended period of time: all Kaspersky Security 10.1 for Windows Server processes are fully loaded so Kaspersky Security 10.1 for Windows Server could not scan objects.  To avoid skipping objects, increase the number of application processes for Real-Time Protection tasks. You can use such settings of Kaspersky Security 10.1 for Windows Server as <b>Maximum number of active processes</b> and <b>Number of processes for Real-Time Protection</b>.</li> <li>• The number of request denied significantly exceeds the critical threshold and is growing quickly: the file interception dispatcher has crashed. Kaspersky Security 10.1 for Windows Server is not scanning objects on access.  Restart Kaspersky Security 10.1 for Windows Server.</li> </ul>

## Total number of skipped requests

Table 74. Total number of skipped requests

<b>Name</b>	Total number of requests skipped
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<b>Definition</b>	<p>The total number of requests from the file interception driver to process objects that have been received by Kaspersky Security 10.1 for Windows Server but have not generated events of processing completion; this number is counted starting from the moment application was last started.</p> <p>If a request for processing of such object accepted by one of the work processes did not send an event for completion of the processing, the driver will transfer such request to another process and the value of counter <b>Total Number of Skipped Requests</b> will increment by 1. If the driver has gone through all of the working processes and none of them has received the request for processing (was busy) or has sent events of processing completion, Kaspersky Security 10.1 for Windows Server will skip such object, so the value of counter <b>Total Number of Skipped Requests</b> will increment by 1.</p>
<b>Purpose</b>	<p>This counter enables you to detect drops in performance because of file interception dispatcher failures.</p>
<b>Normal / threshold value</b>	<p>0 / 1</p>
<b>Recommended reading interval</b>	<p>1 hour</p>
<b>Recommendations for configuration if value exceeds the threshold</b>	<p>If the counter value is anything other than zero, this means that one or several file interception dispatcher streams have frozen and are down. The counter value corresponds to the number of streams currently down.</p> <p>If the scan speed is not satisfactory, restart Kaspersky Security 10.1 for Windows Server to restore the off-line streams.</p>

## Number of requests not processed because of lack of system resources

Table 75. Number of requests not processed because of lack of system resources

<b>Name</b>	Number of requests not processed due to lack of resources.
<b>Definition</b>	Total number of requests from the file interception driver which were not processed because of a lack of system resources (for example, RAM); counted from the time Kaspersky Security 10.1 for Windows Server was last started. Kaspersky Security 10.1 for Windows Server skips objects requests to process which are not processed by the file interception driver.
<b>Purpose</b>	This counter can be used to detect and eliminate potentially lower quality in Real-Time Protection that occurs because of low system resources.
<b>Normal / threshold value</b>	0 / 1.
<b>Recommended reading interval</b>	1 hour.
<b>Recommendations for configuration if value exceeds the threshold</b>	If the counter value is anything other than zero, Kaspersky Security 10.1 for Windows Server working processes need more RAM to process requests. Active processes of other applications may be using all available RAM.

## Number of requests sent to be processed

Table 76. Number of requests sent to be processed

<b>Name</b>	Number of requests sent to be processed.
<b>Definition</b>	The number of objects that wait for processing by working processes.
<b>Purpose</b>	This counter can be used to track the load on Kaspersky Security 10.1 for Windows Server working processes and the overall level of file activity on the server.
<b>Normal / threshold value</b>	The counter value may vary depending on the level of file activity on the server.
<b>Recommended reading interval</b>	1 minute
<b>Recommendations for configuration if value exceeds the threshold</b>	No

## Average number of file interception dispatcher threads

Table 77. Average number of file interception dispatcher threads

<b>Name</b>	Average number of file interception dispatcher streams.
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<b>Definition</b>	The number of file interception dispatcher streams in one process and the average for all processes currently involved in Real-Time Protection tasks.
<b>Purpose</b>	This counter can be used to detect and eliminate potentially lower quality in Real-Time Protection that occurs because of full load on Kaspersky Security 10.1 for Windows Server processes.
<b>Normal / threshold value</b>	Varies / 40
<b>Recommended reading interval</b>	1 minute
<b>Recommendations for configuration if value exceeds the threshold</b>	Up to 60 file interception dispatcher streams can be created in each working process. If the counter value approaches 60, there is a risk that none of the working processes will be able to process the next request in queue from the file interception driver and Kaspersky Security 10.1 for Windows Server will skip the object. Increase the number of Kaspersky Security 10.1 for Windows Server processes for Real-Time Protection tasks. You can use such Kaspersky Security 10.1 for Windows Server settings as <b>Maximum number of active processes</b> and <b>Number of processes for Real-Time Protection</b> .

## Maximum number of file interception dispatcher threads

Table 78. Maximum number of file interception dispatcher threads

<b>Name</b>	Maximum number of file interception dispatcher streams.
<b>Definition</b>	The number of file interception dispatcher streams in one process and the maximum for all processes currently involved in Real-Time Protection tasks.
<b>Purpose</b>	This counter enables you to detect and eliminate drops in performance because of uneven distribution of loads in running processes.
<b>Normal / threshold value</b>	Varies / 40
<b>Recommended reading interval</b>	1 minute
<b>Recommendations for configuration if value exceeds the threshold</b>	If the value of this counter significantly and continuously exceeds the following of the <b>Average number of file interception dispatcher streams</b> counter, Kaspersky Security 10.1 for Windows Server is distributing the load to running processes unevenly. Restart Kaspersky Security 10.1 for Windows Server.

## Number of elements in infected objects queue

Table 79. Number of elements in infected objects queue

<b>Name</b>	Number of items in the infected objects queue.
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<b>Definition</b>	Number of infected objects currently waiting to be processed (disinfected or deleted).
<b>Purpose</b>	This counter can help you detect: <ul style="list-style-type: none"> <li>• Interruption of Real-Time Protection because of possible file interception dispatcher failures.</li> <li>• Overload of processes because of uneven distribution of processor time between different working processes and Kaspersky Security 10.1 for Windows Server.</li> <li>• Virus outbreaks.</li> </ul>
<b>Normal / threshold value</b>	This value may be something other than zero while Kaspersky Security 10.1 for Windows Server is processing infected or probably infected objects but will return to zero after processing is finished / The value remains non-zero for an extended period of time.
<b>Recommended reading interval</b>	1 minute
<b>Recommendations for configuration if value exceeds the threshold</b>	If the value of the counter does not return to zero for an extended period of time: <ul style="list-style-type: none"> <li>• Kaspersky Security 10.1 for Windows Server is not processing objects (the file interception dispatcher may have crashed). Restart Kaspersky Security 10.1 for Windows Server.</li> <li>• Not enough processor time to process the objects. Make sure Kaspersky Security 10.1 for Windows Server receives additional processor time (by lowering other applications' load on the computer, for example).</li> <li>• There has been a virus outbreak. A large number of infected or probably infected objects in the Real-Time File Protection task also is a sign of a virus outbreak. You can view information about the number of detected objects in the task statistics or task logs.</li> </ul>

## Number of objects processed per second

Table 80. Number of objects processed per second

<b>Name</b>	Number of objects processed per second.
<b>Definition</b>	Number of objects processed divided by the amount of time that it took to process those objects (calculated over equal time intervals).
<b>Purpose</b>	This counter reflects the speed of object processing; it can be used to detect and eliminate low points in server performance that occur because of insufficient processor time being allotted to Kaspersky Security 10.1 for Windows Server processes or errors in Kaspersky Security 10.1 for Windows Server operation.
<b>Normal / threshold value</b>	Varies / No.
<b>Recommended reading interval</b>	1 minute.

<b>Recommendations for configuration if value exceeds the threshold</b>	<p>The values of this counter depend on the values set in Kaspersky Security 10.1 for Windows Server settings and the load on the server from other applications' processes.</p> <p>Observe the average level of counter numbers over an extended period of time. If the general level of the counter values becomes lower, one of the following situations is possible:</p> <ul style="list-style-type: none"> <li>• Kaspersky Security 10.1 for Windows Server processes do not have enough processor time to process the objects. Make sure Kaspersky Security 10.1 for Windows Server receives additional processor time (by lowering other applications' load on the server, for example).</li> <li>• Kaspersky Security 10.1 for Windows Server has experienced an error (several streams are idle). Restart Kaspersky Security 10.1 for Windows Server.</li> </ul>
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## Kaspersky Security 10.1 for Windows Server SNMP counters and traps

This section contains information about Kaspersky Security 10.1 for Windows Server counters and traps.

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## About Kaspersky Security 10.1 for Windows Server SNMP counters and traps

If you have included **SNMP Counters and Traps** in the set of Anti-Virus components to be installed, you can view Kaspersky Security 10.1 for Windows Server counters and traps using Simple Network Management Protocol (SNMP).

To view Kaspersky Security 10.1 for Windows Server counters and traps from the administrator's workstation, start SNMP Service on the protected server and start SNMP and SNMP Trap Services on the administrator's workstation.

## Kaspersky Security 10.1 for Windows Server SNMP counters

This section contains tables with a description of the settings for Kaspersky Security 10.1 for Windows Server SNMP counters.

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General counters .....	<a href="#">305</a>
Update counter .....	<a href="#">305</a>
Real-Time Protection counters .....	<a href="#">305</a>

## Performance counters

Table 81. Performance counters

Counter	Definition
currentRequestsAmount	Number of requests sent to be processed (on page <a href="#">300</a> )
currentInfectedQueueLength	Number of elements in the infected objects queue (see Section "Number of elements in infected objects queue" on page <a href="#">301</a> )
currentObjectProcessingRate	Number of objects processed per second (on page <a href="#">302</a> )
currentWorkProcessesNumber	Current number of working processes used by Kaspersky Security 10.1 for Windows Server

## Quarantine counters

Table 82. Quarantine counters

Counter	Definition
totalObjects	Number of objects currently in Quarantine
totalSuspiciousObjects	Number of probably infected objects currently in Quarantine
currentStorageSize	Total size of data in Quarantine (MB)

## Backup counters

Table 83. Backup counters

Counter	Definition
currentBackupStorageSize	Total size of data in Backup (MB)

## General counters

Table 84. General counters

Counter	Definition
lastCriticalAreasScanAge	The period since the last complete scan of the server's critical areas (time elapsed in seconds since the last <i>Critical Areas Scan task</i> was completed).
licenseExpirationDate	License expiration date. If an active and additional keys or activation codes have been added, the date of expiry of the license associated with the additional key or activation code is displayed.
currentApplicationUptime	The amount of time that Kaspersky Security 10.1 for Windows Server has been running since it was last started, in hundredths of seconds.
currentFileMonitorTaskStatus	Real-Time File Protection task status: <b>On</b> – running; <b>Off</b> – stopped or paused.

## Update counter

Table 85. Updates counter

Counter	Definition
avBasesAge	"Age" of databases (time elapsed in hundredths of seconds since the creation date of the latest updated databases installed).

## Real-Time Protection counters

Table 86. Real-Time Protection counters

Counter	Definition
totalObjectsProcessed	Total number of objects scanned since the time the last Real-Time File Protection task was run
totalInfectedObjectsFound	Total number of infected and other objects detected since the time the last Real-Time File Protection task was run
totalSuspiciousObjectsFound	Total number of probably infected objects detected since the time the last Real-Time File Protection task was run
totalVirusesFound	Total number of objects detected since the time the Real-Time File Protection task was last run
totalObjectsQuarantined	Total number of infected, probably infected and other objects which were placed into Quarantine by Kaspersky Security 10.1 for Windows Server; calculated from the time the Real-Time File Protection task was last started

Counter	Definition
totalObjectsNotQuarantined	Total number of infected or probably infected objects Kaspersky Security 10.1 for Windows Server attempted to quarantine but was unable to do so; calculated from the time the Real-Time File Protection task was last started
totalObjectsDisinfected	Total number of infected objects which were disinfected by Kaspersky Security 10.1 for Windows Server; calculated from the time the Real-Time File Protection task was last started
totalObjectsNotDisinfected	Total number of infected and other objects which Kaspersky Security 10.1 for Windows Server attempted to disinfect but was unable to do so; calculated from the time Real-Time File Protection task was last started
totalObjectsDeleted	Total number of infected, probably infected and other objects which were disinfected by Kaspersky Security 10.1 for Windows Server; calculated from the time the Real-Time File Protection task was last started
totalObjectsNotDeleted	Total number of infected, probably infected and other objects which Kaspersky Security 10.1 for Windows Server attempted to disinfect but was unable to do so; calculated from the time Real-Time File Protection task was last started
totalObjectsBackedUp	Total number of infected objects and other which were placed into Backup by Kaspersky Security 10.1 for Windows Server; calculated from the time the Real-Time File Protection task was last started
totalObjectsNotBackedUp	Total number of infected objects and other which Kaspersky Security 10.1 for Windows Server attempted to place into Backup but was unable to do so; calculated from the time Real-Time File Protection task was last started

## SNMP traps

The settings of SNMP traps in Kaspersky Security 10.1 for Windows Server are summarized in the table below.

Table 87. Kaspersky Security 10.1 for Windows Server SNMP traps

Trap	Description	Options
eventThreatDetected	An object has been detected.	eventDateAndTime eventSeverity computerName userName objectName threatName detectType detectCertainty



Trap	Description	Options
eventBackupStorageSizeExceeds	<p>Maximum backup size exceeded. The total size of data in Backup has exceeded the value specified by the <b>Maximum Backup size (MB)</b>. Kaspersky Security 10.1 for Windows Server continues to back up infected objects.</p>	<p>eventDateAndTime eventSeverity eventSource</p>
eventThresholdBackupStorageSizeExceeds	<p>Backup free space threshold reached. The amount of free size in Backup assigned by the <b>Threshold value for space available (MB)</b> is equal to or less than the specified value. Kaspersky Security 10.1 for Windows Server continues to back up infected objects.</p>	<p>eventDateAndTime eventSeverity eventSource</p>

Trap	Description	Options
eventQuarantineStorageSizeExceeds	<p>Maximum Quarantine size exceeded. The total size of data in Quarantine has exceeded the value specified by the <b>Maximum Quarantine size (MB)</b>. Kaspersky Security 10.1 for Windows Server continues to quarantine probably infected objects.</p>	<p>eventDateAndTime eventSeverity eventSource</p>
eventThresholdQuarantineStorageSizeExceeds	<p>Quarantine free space threshold reached. The amount of free size in Quarantine assigned by the <b>Threshold value for space available (MB)</b> is less than the specified value. Kaspersky Security 10.1 for Windows Server continues to quarantine probably infected objects.</p>	<p>eventDateAndTime eventSeverity eventSource</p>

Trap	Description	Options
eventObjectNotQuarantined	Quarantine error.	eventSeverity eventDateAndTime eventSource userName computerName objectName storageObjectNotAddedEventReason
eventObjectNotBackupid	Error of saving an object copy in the backup storage.	eventSeverity eventDateAndTime eventSource objectName userName computerName storageObjectNotAddedEventReason
eventQuarantineInternalError	Quarantine error.	eventSeverity eventDateAndTime eventSource eventReason
eventBackupInternalError	Backup error.	eventSeverity eventDateAndTime eventSource eventReason
eventAVBasesOutdated	Anti-Virus database is out of date. Number of days since the last execution of database update task (local task, or group task, or task for sets of computers) is being calculated.	eventSeverity eventDateAndTime eventSource days

Trap	Description	Options
eventAVBasesTotallyOutdated	Anti-Virus database is obsolete. Number of days since the last execution of database update task (local task, or group task, or task for sets of computers) is being calculated.	eventSeverity eventDateAndTime eventSource days
eventApplicationStarted	Kaspersky Security 10.1 for Windows Server is running.	eventSeverity eventDateAndTime eventSource
eventApplicationShutdown	Kaspersky Security 10.1 for Windows Server is stopped.	eventSeverity eventDateAndTime eventSource
eventCriticalAreasScanWasntPerformForALongTime	Critical areas have not been scanned for a long time. Calculated as the number of days since the last completion of the <i>Critical Areas Scan</i> task.	eventSeverity eventDateAndTime eventSource days
eventLicenseHasExpired	License has expired.	eventSeverity eventDateAndTime eventSource

Trap	Description	Options
eventLicenseExpiresSoon	License expires soon. Calculated as the number of days until the expiration date for the license.	eventSeverity eventDateAndTime eventSource days
eventTaskInternalError	Task completion error.	eventSeverity eventDateAndTime eventSource errorCode knowledgeBaseId taskName
eventUpdateError	Error performance an update task.	eventSeverity eventDateAndTime taskName updaterErrorEventReason

The table below describes the settings of traps and possible parameter values.

Table 88. SNMP traps: values of the settings

Setting	Description and possible values
eventDateAndTime	Event time.
eventSeverity	Importance level. The setting can take the following values: <ul style="list-style-type: none"> <li>critical (1) – critical</li> <li>warning (2) – warning</li> <li>info (3) – informational</li> </ul>
userName	User name (for example, name of the user that attempted to gain access to an infected file).
computerName	Server name (for example, name of the server from which a user attempted to gain access to an infected file).

Setting	Description and possible values
eventSource	<p>Event source: functional component where the event was generated. The setting can take the following values:</p> <ul style="list-style-type: none"> <li>• unknown (0) – functional component not known</li> <li>• quarantine (1) – Quarantine</li> <li>• backup (2) – Backup</li> <li>• reporting (3) – task logs</li> <li>• updates (4) – Update</li> <li>• realTimeProtection (5) – Real-Time File Protection</li> <li>• onDemandScanning (6) – On-Demand Scan</li> <li>• product (7) – event related to operation of Kaspersky Security 10.1 for Windows Server as a whole rather than operation of individual components</li> <li>• systemAudit (8) – system audit log</li> </ul>
eventReason	<p>Event trigger: what provoked the event. The setting can take the following values:</p> <ul style="list-style-type: none"> <li>• reasonUnknown(0) – reason is unknown</li> <li>• reasonInvalidSettings (1) – only for a Backup and Quarantine events, displayed if Quarantine or Backup is unavailable (insufficient access permissions or the folder is specified incorrectly in the Quarantine settings -- for example, a network path is specified). In this case, Kaspersky Security 10.1 for Windows Server will use the default Backup or Quarantine folder.</li> </ul>
objectName	<p>Object name (for example, name of the file where the virus was detected).</p>
threatName	<p>The name of the object according to the Virus Encyclopedia classification. This name is included in the full name of the detected object that Kaspersky Security 10.1 for Windows Server returns on detecting an object. You can view the full name of a detected object in the task log (see Section "Configuring log settings" on page <a href="#">160</a>).</p>

Setting	Description and possible values
detectType	<p>Type of object detected.</p> <p>The setting can take the following values:</p> <ul style="list-style-type: none"> <li>• undefined (0) – undefined</li> <li>• virware – classic viruses and network worms</li> <li>• trojware – Trojans</li> <li>• malware – other malicious programs</li> <li>• adware – advertising software</li> <li>• pornware – pornographic software</li> <li>• riskware – legitimate applications that may be used by intruders to harm the user's computer or data</li> </ul>
detectCertainty	<p>Certainty level for threat detection. The setting can take the following values:</p> <ul style="list-style-type: none"> <li>• Suspicion (probably infected) – Kaspersky Security 10.1 for Windows Server has detected a partial match between a section of the object code and the known malicious code section.</li> <li>• Sure (infected) – Kaspersky Security 10.1 for Windows Server has detected a complete match between a section of the object code and the known malicious code section.</li> </ul>
days	<p>Number of days (for example, the number of days until the license expiration date).</p>
errorCode	<p>Error code.</p>
knowledgeBaselId	<p>Address of a knowledge base article (for example, address of an article that explains a particular error).</p>
taskName	<p>Task name.</p>

Setting	Description and possible values
<p>updaterErrorEventReason</p>	<p>Reason of the update error. The setting can take the following values:</p> <ul style="list-style-type: none"> <li>• reasonUnknown(0) – reason is unknown</li> <li>• reasonAccessDenied – access denied</li> <li>• reasonUrlsExhausted – the list of update sources is exhausted</li> <li>• reasonInvalidConfig – invalid configuration file</li> <li>• reasonInvalidSignature – invalid signature</li> <li>• reasonCantCreateFolder – folder cannot be created</li> <li>• reasonFileOperError – file error</li> <li>• reasonDataCorrupted – object is corrupted</li> <li>• reasonConnectionReset – connection reset</li> <li>• reasonTimeOut – connection timeout exceeded</li> <li>• reasonProxyAuthError – proxy authentication error</li> <li>• reasonServerAuthError – server authentication error</li> <li>• reasonHostNotFound – computer not found</li> <li>• reasonServerBusy – server unavailable</li> <li>• reasonConnectionError – connection error</li> <li>• reasonModuleNotFound – object not found</li> <li>• reasonBlstCheckFailed(16) – error checking the black list of keys. It is possible that databases updates were being published at the moment of update; please repeat the update in a few minutes.</li> </ul>



Setting	Description and possible values
storageObjectNotAddedEventReason	<p>The reason why the object was not backed up or quarantined. The setting can take the following values:</p> <ul style="list-style-type: none"> <li>• reasonUnknown(0) – reason is unknown</li> <li>• reasonStorageInternalError – database error; please restore Kaspersky Security 10.1 for Windows Server.</li> <li>• reasonStorageReadOnly – database is read-only; please restore Kaspersky Security 10.1 for Windows Server.</li> <li>• reasonStorageIOError – input-output error: a) Kaspersky Security 10.1 for Windows Server is corrupted, please restore Kaspersky Security 10.1 for Windows Server; b) disk with Kaspersky Security 10.1 for Windows Server files is corrupted.</li> <li>• reasonStorageCorrupted – storage is corrupted; please restore Kaspersky Security 10.1 for Windows Server.</li> <li>• reasonStorageFull – database is full, free up disk space.</li> <li>• reasonStorageOpenError – database file could not be opened; please restore Kaspersky Security 10.1 for Windows Server.</li> <li>• reasonStorageOSFeatureError – some operating system features do not correspond to Kaspersky Security 10.1 for Windows Server requirements.</li> <li>• reasonObjectNotFound – object being placed to Quarantine does not exist on the disk.</li> <li>• reasonObjectAccessError – insufficient permissions to use Backup API: the account being used to perform the operation does not have Backup Operator permissions.</li> <li>• reasonDiskOutOfSpace – not enough space on the disk.</li> </ul>

# Contacting Technical Support

This section describes the ways to receive technical support and the conditions on which it is available.

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## How to get technical support

If you cannot find a solution to your problem in the application documentation or in one of the sources of information about the application, we recommend that you contact Technical Support. Technical Support specialists will answer your questions about installing and using the application.

Technical support is available only to users who have purchased a commercial license for the application. Technical support is not available to users who have a trial license.

Before contacting Technical Support, please read through the Technical Support rules.

You can contact Technical Support in one of the following ways:

- By calling Technical Support.
- By sending a request to Kaspersky Lab Technical Support through the Kaspersky CompanyAccount portal (<https://companyaccount.kaspersky.com>).

## Technical Support via Kaspersky CompanyAccount

Kaspersky CompanyAccount (<https://companyaccount.kaspersky.com>) is a portal for companies that use Kaspersky Lab applications. Kaspersky CompanyAccount is designed to facilitate interaction between users and Kaspersky Lab specialists via online requests. Kaspersky CompanyAccount lets you monitor the progress of electronic request processing by Kaspersky Lab specialists and store a history of electronic requests.

You can register all of your organization's employees under a single user account on Kaspersky CompanyAccount. A single account lets you centrally manage electronic requests from registered employees to Kaspersky Lab and also manage the privileges of these employees via Kaspersky CompanyAccount.

Kaspersky CompanyAccount is available in the following languages:

- English
- Spanish
- Italian

- German
- Polish
- Portuguese
- Russian
- French
- Japanese

To learn more about Kaspersky CompanyAccount, visit the Technical Support website [https://support.kaspersky.com/faq/companyaccount\\_help](https://support.kaspersky.com/faq/companyaccount_help).

## Using trace files and AVZ scripts

After you report a problem to Kaspersky Lab Technical Support specialists, they may ask you to generate a report with information about the operation of Kaspersky Security 10.1 for Windows Server and to send it to Kaspersky Lab Technical Support. Kaspersky Lab Technical Support specialists may also ask you to create a trace file. The trace file allows following the process of how application commands are performed, step by step, in order to determine the stage of application operation at which an error occurs.

After analyzing the data you send, Kaspersky Lab Technical Support specialists can create an AVZ script and send it to you. With AVZ scripts, it is possible to analyze active processes for threats, scan the computer for threats, disinfect or delete infected files, and create system scan reports.

For more effective support and troubleshooting of application problems, Technical Support specialists may ask you to change application settings temporarily for purposes of debugging during diagnostics. This may require doing the following:

- Activating the functionality that processes and stores extended diagnostic information.
- Fine-tuning the settings of individual software components, which are not available via standard user interface elements.
- Changing the settings of storage and transmission of diagnostic information that was processed.
- Configuring the interception and logging of network traffic.

# AO Kaspersky Lab

Kaspersky Lab is a world-renowned vendor of systems protecting computers against digital threats, including viruses and other malware, unsolicited email (spam), and network and hacking attacks.

In 2008, Kaspersky Lab was rated among the world's top four leading vendors of information security software solutions for end users (IDC Worldwide Endpoint Security Revenue by Vendor). Kaspersky Lab is the preferred vendor of computer protection systems for home users in Russia (IDC Endpoint Tracker 2014).

Kaspersky Lab was founded in Russia in 1997. It has since grown into an international group of companies with 38 offices in 33 countries. The company employs more than 3,000 skilled professionals.

**Products.** Kaspersky Lab products provide protection for all systems, from home computers to large corporate networks.

The personal product range includes security applications for desktop, laptop, and tablet computers, smartphones and other mobile devices.

The company offers protection and control solutions and technologies for workstations and mobile devices, virtual machines, file and web servers, mail gateways, and firewalls. The company's portfolio also features specialized products providing protection against DDoS attacks, protection for industrial control systems, and prevention of financial fraud. Used in conjunction with centralized management tools, these solutions ensure effective automated protection for companies and organizations of any size against computer threats. Kaspersky Lab products are certified by major test laboratories, compatible with software from diverse vendors, and optimized to run on many hardware platforms.

Kaspersky Lab virus analysts work around the clock. Every day they uncover hundreds of thousands of new computer threats, create tools to detect and disinfect them, and include their signatures in databases used by Kaspersky Lab applications.

**Technologies.** Many technologies that are now part and parcel of modern anti-virus tools were originally developed by Kaspersky Lab. It is no coincidence that many other developers use the Kaspersky Anti-Virus engine in their products, including: Alcatel-Lucent, Alt-N, Asus, BAE Systems, Blue Coat, Check Point, Cisco Meraki, Clearswift, D-Link, Facebook, General Dynamics, H3C, Juniper Networks, Lenovo, Microsoft, NETGEAR, Openwave Messaging, Parallels, Qualcomm, Samsung, Stormshield, Toshiba, Trustwave, Vertu, and ZyXEL. Many of the company's innovative technologies are patented.

**Achievements.** Over the years, Kaspersky Lab has won hundreds of awards for its services in combating computer threats. Following tests and research conducted by the reputed Austrian test laboratory AV-Comparatives in 2014, Kaspersky Lab ranked among the top two vendors by the number of Advanced+ certificates earned and was ultimately awarded the Top Rated certificate. But Kaspersky Lab's main achievement is the loyalty of its users worldwide. The company's products and technologies protect more than 400 million users, and its corporate clients number more than 270,000.

Kaspersky Lab website:

<https://www.kaspersky.com>

Virus encyclopedia:

<https://securelist.com>

Virus Lab:

<https://virusdesk.kaspersky.com> (for analyzing suspicious files and websites)

Kaspersky Lab's web forum:

<https://forum.kaspersky.com>

# Information about third-party code

Information about third-party code is contained in the file legal\_notices.txt, in the application installation folder.

# Trademark notices

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# Glossary

## A

### Active key

A key that is currently used by the application.

### Administration Server

A component of Kaspersky Security Center that centrally stores information about all Kaspersky Lab applications that are installed within the corporate network. It can also be used to manage these applications.

### Anti-virus databases

Databases that contain information about computer security threats known to Kaspersky Lab as of when the anti-virus databases are released. Entries in anti-virus databases allow malicious code to be detected in scanned objects. Anti-virus databases are created by Kaspersky Lab specialists and updated hourly.

### Archive

One or more file(s) packaged into a single file through compression. A dedicated application, called an archiver, is required for packing and unpacking the data.

## B

### Backup

A special storage for backup copies of files, which are created before disinfection or deletion is attempted.

## D

### Disinfection

A method of processing infected objects that results in full or partial recovery of data. Not all infected objects can be disinfected.

## E

### Event severity

Property of an event encountered during the operation of a Kaspersky Lab application. There are four severity levels:

- Critical event.
- Error.
- Warning.

- Info.

Events of the same type can have different severity levels depending on the situation in which the event occurred.

## F

### False positive

A situation when a Kaspersky Lab application considers a non-infected object to be infected because the object's code is similar to that of a virus.

### File mask

Representation of a file name using wildcards. The standard wildcards used in file masks are \* and ?, where \* represents any number of any characters and ? stands for any single character.

## H

### Heuristic analyzer

A technology for detecting threats about which information has not yet been added to Kaspersky Lab databases. The heuristic analyzer detects objects whose behavior in the operating system may pose a security threat. Objects detected by the heuristic analyzer are considered to be probably infected. For example, an object may be considered probably infected if it contains sequences of commands that are typical of malicious objects (open file, write to file).

## I

### Infectable file

A file that, due to its structure or format, can be used by criminals as a "container" to store and spread malicious code. As a rule, these are executable files, with such file extensions as .com, .exe, and .dll. The risk of penetration of malicious code into such files is quite high.

### Infected object

An object of which a portion of code completely matches part of the code of known malware. Kaspersky Lab does not recommend accessing such objects.

## K

### Kaspersky Security Network (KSN)

An infrastructure of cloud services that provides access to the Kaspersky Lab database with constantly updated information about the reputation of files, web resources, and software. Kaspersky Security Network ensures faster responses by Kaspersky Lab applications to threats, improves the performance of some protection components, and reduces the likelihood of false positives.



## L

### License term

A time period during which you have access to the application features and rights to use additional services. The services you can use depend on the type of the license.

### Local task

A task defined and running on a single client computer.

## O

### OLE object

An object attached to another file or embedded into another file through the use of the Object Linking and Embedding (OLE) technology. An example of an OLE object is a Microsoft Office Excel® spreadsheet embedded into a Microsoft Office Word document.

## P

### Phishing

A type of Internet fraud aimed at obtaining unauthorized access to users' confidential data.

### Policy

A policy determines the settings of an application and manages the access to configuration of an application installed on computers within an administration group. An individual policy must be created for each application. You can create an unlimited number of various policies for applications installed on computers in each administration group, but only one policy can be applied to each application at a time within an administration group.

### Protection state

Current protection status, which defines the level of computer security.

## Q

### Quarantine

The folder to which the Kaspersky Lab application moves probably infected objects that have been detected. Objects are stored in Quarantine in encrypted form in order to avoid any impact on the computer.

## R

### Real-time protection

The application's operating mode under which objects are scanned for the presence of malicious code in real time.

The application intercepts all attempts to open any object (read, write, or execute) and scans the object for threats. Uninfected objects are passed on to the user; objects containing threats or probably infected objects are processed according to the task settings (disinfected, deleted or quarantined).

## S

### Security level

The security level is defined as a pre-configured set of application component settings.

### SIEM

A technology that analyzes security events originating from various network devices and applications.

### Startup objects

A set of applications needed for the operating system and software that is installed on the computer to start and operate correctly. These objects are executed every time the operating system is started. There are viruses capable of infecting such objects specifically, which may lead, for example, to blocking of operating system startup.

### Suspicious object

An object containing modified code of a known virus or code that resembles a virus that is not yet known to Kaspersky Lab. Suspicious objects are detected using the heuristic analyzer.

## T

### Task

Functions performed by the Kaspersky Lab application are implemented as tasks, such as: Real-time file protection, Full computer scan, and Database update.

### Task settings

Application settings that are specific for each task type.

## U

### Update

The procedure of replacing / adding new files (databases or application modules) retrieved from the Kaspersky Lab update servers.

## V

### Vulnerability

A flaw in an operating system or an application that may be exploited by malware makers to penetrate the operating system or application and corrupt its integrity. Presence of a large number of vulnerabilities in an

operating system makes it unreliable, because viruses that penetrate the operating system may cause disruptions in the operating system itself and in installed applications.

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