

Advanced administration guide



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1. Introduction

What is Endpoint Protection?

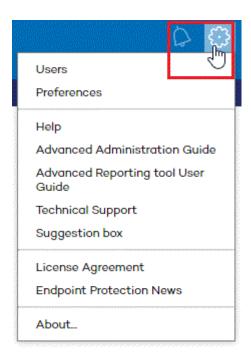
Protection technologies
Information, queries and services
Requirements and external URLs



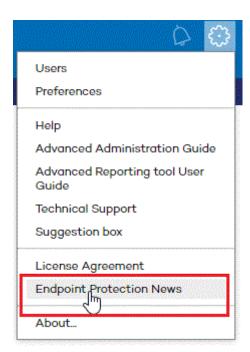
1.1. What's new in this version

Endpoint Protection is a security solution in constant evolution. Our technical team is responsible for including in each version the necessary improvements to provide you with maximum protection and security for all your devices.

For detailed information about the new features included in the new version, click the settings menu at the top of the Web console:



Then, click Endpoint Protection News.





1.2. What is Endpoint Protection?

Endpoint Protection is a complete security solution to protect your computer network and manage security online with none of the hassle. The protection it provides neutralizes spyware, Trojans, viruses and any other threats. Its main features include:

- Maximum protection for PCs, laptops, servers and Android devices.
- Easy to install, manage and maintain through its Web console.
- Management and organization based on protection profiles and user groups.

Endpoint Protection's management center is the Web console, which allows you to:

- Configure the protection -for Windows, Linux, OS X and Android-, distribute it and install it on your computers.
- Monitor the protection status of your computers.
- Generate reports about the security status and threats detected.
- Manage detections to monitor, at any time, what has been detected, when and on which computers.
- Configure the quarantine of suspicious items.

1.2.1 The protection

Depending on your computers' protection needs, you will be able to create profiles and configure the behavior of the different protection modules for each profile. Then, you will be able to assign those profiles to the computers or computer groups to protect.

1.2.2 Which protections are available?

Remember that you will only be able to use some of the protections provided by Endpoint Protection if you have Endpoint Protection Plus licenses.

We advise that you visit the Endpoint Protectionand Endpoint Protection Plus Web pages for information about each solution and to select the protection that best suits your needs. http://www.pandasecurity.com/enterprise/solutions/cloud-office-protection/http://www.pandasecurity.com/enterprise/solutions/cloud-office-protection-advanced

Configuring the protection

You can configure the protection installed on your computers before or after installing it. <u>In this Help file</u>, the configuration process is explained as a step prior to installing the protection on your network. In any event, we recommend that you spend some time carefully analyzing the protection needs of your network.

These needs might vary from one computer to another, or be the same for all computers on your network. Depending on these circumstances, you might need to create new profiles or simply use the Endpoint Protection default settings.

1.2.3 Installation

Recommendations prior to installation



Before installing the protection, we advise that you check the Recommendations prior to installation. You will find important information about the install and uninstall processes.

Computer requirements

Remember to check the minimum requirements that your computers and devices must meet to install the protection on them, and configure it to make the most of all the benefits provided by Endpoint Protection.

We hope that you find the information in this Help file useful.

1.3. Protection technologies

1.3.1 Anti-exploit technology

Panda Security's new anti-exploit technology optimizes its security solutions and allows the company to detect viruses no other company can detect.

Our new anti-exploit technology detects and neutralizes malware like Blackhole or Redkit that exploits zero-day vulnerabilities (in Java, Adobe, MS Office, etc.), before it infects the computer.

The key to detect as-yet-unknown exploits is to use heuristic technologies with powerful detection capabilities. For this purpose, the new anti-exploit protection included in Endpoint Protection analyzes how exploits behave instead of their morphology.

Endpoint Protection uses multiple sensors to send Collective Intelligence information about the behavior of suspicious files that try to exploit 0-day vulnerabilities to infect systems.

This information allows Panda Security to keep the proactive technologies included in its products constantly up-to-date (via on-the-fly updates from the cloud).

In short, Endpoint Protection detects and neutralizes this type of malware before it has been identified (and even created), protecting users against new malware variants.

1.3.2 Security from the cloud and Collective Intelligence

What is 'the cloud'?

Cloud computing is a technology that allows services to be offered across the Internet. Consequently, the term 'the cloud' is used as a metaphor for the Internet in IT circles.

Endpoint Protection is served from the cloud, connecting to Collective Intelligence servers to protect your computer at all times, increasing its detection capabilities and not interfering with the performance of the computer. Now all knowledge is in the cloud, and thanks to Endpoint Protection you can benefit from it.

What is Collective Intelligence?

Collective Intelligence is a security platform that provides high-level protection in real time, exponentially increasing the detection capabilities of Endpoint Protection.



How does detection with Collective Intelligence work?

Collective Intelligence has servers that classify and process all the data provided by the user community about detections on their computers. Endpoint Protection sends requests to Collective Intelligence whenever it requires, ensuring maximum detection without negatively affecting resource consumption on computers.

When new malware is detected on a computer in the user community, Endpoint Protection sends the relevant information to our Collective Intelligence servers in the cloud, automatically and anonymously. This information is processed by our servers, delivering the solution to all users in the community in real time. Hence the name Collective Intelligence. Given the current context of increasing amounts of malware, Collective Intelligence and services hosted in the cloud are an essential complement to traditional updates to successfully combat the enormous amount of threats in circulation. Information and queries.

1.4. Information, queries and services

Along with the products themselves, Panda Security offers you Help files and documentation to extend information, resolve queries, access the latest updates and benefit from other services. You can also keep up-to-speed on the latest IT security news. Visit the Panda Security Website to access all the information you need.

1.4.1 Useful links

- Home page

http://www.pandasecurity.com/

All the Panda Security information at your disposal.

- Documentation

http://www.pandasecurity.com/enterprise/downloads/docs/product

All the latest product documentation and other publications.

- Technical Support

http://www.pandasecurity.com/enterprise/support

Clear up any questions you may have about infections, viruses, and Panda Security products and services, with continuous and fully up-to-date information, any time of the day, all year round.

- Endpoint Protection Technical Support

http://www.pandasecurity.com/enterprise/support/cloud-office-protection.htm

- Endpoint Protection Plus Technical Support

 $\label{lem:http://www.pandasecurity.com/enterprise/support/cloud-office-protection-advanced.htm$

- Trial software

http://www.pandasecurity.com/enterprise/downloads/evaluation/

Panda Security offers you free trial software of the product you want.

- Products

http://www.pandasecurity.com/enterprise/solutions/

Check out the features of all Panda Security products. You can also buy them or try



them without obligation.

1.4.2 Endpoint Protection services

In addition to this Help, which will let you get the most out of your protection, Panda Security offers you other services. These value-added services will ensure that you always have access to expert advice and the latest security technology developed by Panda Security. Services offered by Endpoint Protection:

- Daily updates of the signature file.
- Specialized Technical Support via email and telephone.
- General updates of Endpoint Protection
 New features, improvements to its detection capabilities, etc.
- Documentation

Access to the Advanced administration guide.

http://resources.pandasecurity.com/enterprise/solutions/endpoint2015/ENDPOINT PROTECTION-GuiaAvanzada-EN.pdf

1.4.3 Other services

The Endpoint Protection Web console lets you access other services to send suggestions or contact the Panda Security technical support. To do this, click **Other services**.

1.4.4 Technical support

Access the Technical Support area where you will find the answers to any questions you might have about Endpoint Protection, as well as other information and utilities provided by Panda Security.

1.4.5 Troubleshooting

Visit our support Web page for a **list of the most common error codes** that you may face while using Endpoint Protection as well as up-to-date information about all of them.

Go to:

http://www.pandasecurity.com/enterprise/support/card?id=50032

1.4.6 Suggestion box

Your comments and suggestions help us improve Endpoint Protection, adapting it to your needs. Please do not hesitate to contact us.

1.4.7 Icons

The following icons appear in the guide:

(i)

Additional information, such as an alternative way of performing a certain task.





Suggestions and recommendations.



Important advice regarding the use of features in Adaptive Defense 360.

1.5. Requirements and external URLs

Endpoint Protection is the ideal solution to protect your computer network. Nevertheless, to make the most out of it, the computers used to access, install, configure and deploy the protection must meet a series of hardware and software requirements.

1.5.1 Requirements for Windows systems

Requirements for accessing the Administration Console

Browser:

- Internet Explorer
- Mozilla Firefox
- Google Chrome

Network:

- Internet connection: direct or through a local area network.
- HTTP connection (port 443).

Requirements on the computer from which deployment is performed

- Operating system: Windows 8.1 (PCOP 6.70.20), Windows 8 (PCOP 6.20.10), Windows 7 (32 and 64-bit), Windows Vista (32 and 64-bit), Windows XP Professional (32 and 64-bit), Windows 2000 Professional, Windows Server 2000, Windows Server 2003 (32 and 64-bit), Windows Server 2008 (32 and 64-bit), Windows Server 2008 R2, Windows Home Server, Windows Server 2012, Windows Server 2012 R2 (PCOP 6.70.20).
- Memory: 64 MB
- Hard disk: 20 MB
- Processor: Pentium II 300 MHz or equivalent.
- Windows Installer 2.0 (yet, Windows Installer 3.0 is recommended if you want to uninstall remotely).
- Browser: Internet Explorer 6.0 or later

Other:

- Access to the Admin\$ resource on the computers to be protected.
- A user with administrator rights to the computers to which the protection is distributed.

Minimum requirements for the computers to which the protection is distributed

• Processor: Pentium 300 MHz or equivalent

Hard disk: 256 MB

Space for the installation: 500 MBBrowser: Internet Explorer: 6.0 or later



- Others: On computers running earlier versions of Windows XP SP2 or Windows 2003 Server SP1:
- Windows Installer 2.0 (yet, Windows Installer 3.0 is recommended if you want to uninstall remotely)
- Disable the Windows firewall or configure the exception File and printer sharing (Start > Settings > Control panel>Network connections > Local area connections > (right button) Properties > General).
- To have Use simple file sharing disabled (on Windows XP, Tools > Folder Options > View > Use simple file sharing).

Workstations

- Operating systems: Windows 8.1 (PCOP 6.70.20), Windows 8 (PCOP 6.20.10),
 Windows 7 (32 and 64-bit), Windows Vista (32 and 64-bit), Windows XP (32 and 64-bit) and Windows 2000 Professional.
- RAM: For the antivirus protection: 64 MB, for the Firewall: 128 MB

Servers

- Operating systems: Windows 2000 Server, Windows Home Server, Windows Server 2003 (32 and 64-bit), Windows Server 2008 (32 and 64-bit)*, Windows Server 2008 R2*, Windows Server 2012 (PCOP 6.20.10) and Windows Server 2012 R2 (PCOP 6.70.20).
- RAM: 256 MB

Other compatible applications:

- VMWare ESX 3.x,4.x, 5,x
- VMWare Workstation 6.0, 6.5, 7.x, 8.x and 9.x
- Virtual PC 6.x
- Microsoft Hyper-V Server 2008 R2 and 2012 3.0
- Citrix XenDesktop 5.x, XenClient 4.x, XenServer and XenApp 5.x and 6.x



To deploy the protection from the distribution tool to machines with Windows server 2008 R2, you must enable the option Enable remote management of the server from another computer. This option is disabled by default, and is required to be enabled and allowed by the firewall. To enable this option, follow the instructions specified in the following Microsoft article: http://support.microsoft.com/kb/976839

Minimum requirements for the computers to which the Exchange Servers protection is distributed (only in Endpoint Protection Plus)

Hardware requirements: The hardware requirements to install the Exchange Server protection are determined according to the Exchange Server specifications:

- Exchange 2003: http://technet.microsoft.com/en-us/library/cc164322(v=exchg.65).aspx
- Exchange 2007: http://technet.microsoft.com/en-us/library/aa996719(v=EXCHG.80).aspx
- Exchange 2010: http://technet.microsoft.com/en-us/library/aa996719(v=exchg.141).aspx



- Exchange 2013 http://technet.microsoft.com/en-us/library/aa996719(v=exchg.150).aspx

Versions protected by the Exchange Servers protection in Endpoint Protection Plus:

- Microsoft Exchange Server 2003 Standard (SP0 / SP1 / SP2)
- Microsoft Exchange Server 2003 Enterprise (SP0 / SP1 / SP2)
- Microsoft Exchange Server 2003 included in Windows SBS 2003
- Microsoft Exchange Server 2007 Standard (SP0 / SP1 / SP2 / SP3)
- Microsoft Exchange Server 2007 Enterprise (SP0 / SP1 / SP2 / SP3)
- Microsoft Exchange Server 2007 included in Windows SBS 2008
- Microsoft Exchange Server 2010 Standard (SP0 / SP1 / SP2)
- Microsoft Exchange Server 2010 Enterprise (SP0 / SP1 / SP2)
- Microsoft Exchange Server 2010 included in Windows SBS 2011
- Microsoft Exchange Server 2013 Standard
- Microsoft Exchange Server 2013 Enterprise

Roles in which the Exchange Servers protection is installed (Exchange 2007 and Exchange 2010):

- Mailbox
- Hub Transport
- Edge Transport

Roles in which Exchange Server protection is installed in Exchange 2013

Mailbox

Operating systems supported:

- Exchange 2003: Windows Server 2003 32-bit Edition SP1+ and Windows Server 2003 R2 32-bit Edition
- Exchange 2007: Windows Server 2003 64-bit Edition SP1+, Windows Server 2003 R2 64-bit Edition, Windows 2008 64-bit Edition and Windows 2008 R2
- Exchange 2010: Windows 2008 64-bit Edition and Windows 2008 R2
- Exchange 2013: Windows 2012



Installation of the firewall is not supported on Windows Server 2008 with NLB in PCOP 5.x versions.

For more information, refer to the following article about how to avoid loss of communication on a Windows Server 2008 cluster with Network Load Balancing (NLB) and install the protection:

http://www.pandasecurity.com/uk/support/card?id=50048

Bear in mind that if you want your computers to communicate with the Collective Intelligence servers you must have an Internet connection. If you connect to the Internet via a proxy, it must be configured correctly. To do this, enter the necessary details in the Internet connection via a proxy section in the - Advanced options profile edit window. Go to the General settings of Endpoint Protection Plus article for more details.



1.5.2 Requirements for Linux systems

Supported distributions

- Endpoint Protection supports the following operating systems:
- Red Hat Enterprise (64-bit), version 6.0 or later
- Debian Squeeze (32-bit and 64-bit)
- Ubuntu (32-bit and 64-bit), version 12 or later
- OpenSuse (32-bit and 64-bit), version 12 or later
- Suse Enterprise Server (64-bit), version 11 SP2 or later
- CentOS 6.x and later

Preinstallation requirements

The system must meet the following requirements for the product to work correctly:

- The "Isb_release" utility must be installed (on RedHat and Debian).
- This utility is used to determine the Linux distribution the installer is running on.
- On Debian, download and install the following package: lsb-release_3.2-23.2squeeze1_all.deb
- On RedHat, download and install the following package: redhat-lsb.i686

PavSL protection dependencies (all distributions).

The PavSL protection requires the installation of the following libraries to work properly:

- libsoup-2.4.so.1 (HTTP client/server library for GNOME)
- libgthread-2.0
- libmcrypt.so.4 (MCrypt encryption functions)
- libz.so.1 (zlib compression and decompression library)

Make sure the $\protect\prote$

Idd libPskcomms.so

On SUSE/OpenSUSE x64, use the following workaroundif there are any issues:

- Install ligsoup-2_4-1-32bit (if it is not already installed). For example: # zypper install libsoup-2_4-1-32bit
- Install libgthread-2_0-0-32bit (if it is not already installed). For example:
 # zypper install libgthread-2_0-0-32bit
- Uninstall libmcrypt and mcrypt:
 # zypper rm libmcrypt
 - # zypper rm mcrypt
- Install "libmcrypt-2.5.8-109.1.2.i586.rpm". Download and install it, if it is not already installed.

On Ubuntu x64, run the following commands to install the required dependencies for the service to to work properly:

- sudo dpkg --add-architecture i386
- sudo apt-get update



- sudo apt-get install libglib2.0-0:i386
- sudo apt-get install libsoup2.4-1:i386
- sudo apt-get install libmcrypt4:i386
- sudo apt-get install libgssapi-krb5-2:i386

AT/CRON must be properly installed and enabled (in all distributions):

Make sure the AT and CRON services are properly installed and enabled in the system services.

Workaround for the "ATD" service (on SUSE and openSUSE)

Follow the steps below if the "ATD" service doesn't start automatically on openSUSE:

Edit the file /etc/sysconfig/atd

ATD_BATCH_INTERVAL = "60"

ATD_LOADAVG = "0.8"

Edit the file /lib/systemd/system/atd.service as follows:

cat /lib/systemd/system/atd.service

[Unit]

Description=Execution Queue Daemon

After=syslog.target

[Service]

Type=forking

EnvironmentFile=-/etc/sysconfig/atd

ExecStart=/usr/sbin/atd -b \${ATD_BATCH_INTERVAL} -I \${ATD_LOADAVG}

[Install]

WantedBy=multi-user.target

- Reload the daemon, start it, and check the service status:
 - # chkconfig --add atd
- # systemctl --system daemon-reload
- # systemctl enable atd.service
- # systemctl start atd.service
- # systemctl status atd.service

atd.service - Execution Queue Daemon

Loaded: loaded (/lib/systemd/system/atd.service; disabled)

Active: active (running) since Fri, 05 Oct 2012 12:14:52 -0500; 1s ago

Process: 20851 ExecStart=/usr/sbin/atd -b \${ATD_BATCH_INTERVAL} -I \${ATD_LOADAVG}

(code=exited, status=0/SUCCESS)

Main PID: 20852 (atd)

CGroup: name=systemd:/system/atd.service

|_ 20852 /usr/sbin/atd -b 60 -l 0.8

Reboot the computer so that it takes it into account from then on:



reboot

After the computer finishes booting, check the service status:

systemctl status atd.service

To run the proxy server configuration script, the whiptail command must be available. On SUSE, this command is included in the newt package. Run the following command to install it:

zipper install newt

1.5.3 Requirements for OS X systems

In order to install and operate Endpoint Protection for OS X systems, the computer must meet the following system requirements:

Operating systems

Endpoint Protection supports the following OS X operating systems:

- MAC OS X 10.6 Snow Leopard (Intel Core 2 Duo Processor or higher)
- MAC OS X 10.7 Lion
- MAC OS X 10.8 Mountain Lion
- Mac OS X 10.9 Mavericks
- Mac OS X 10.10 Yosemite

Hardware requirements

• Processor: Intel® Core 2 Duo

• Hard disk: 1.5 GB of available disk space

Browser: Internet Explorer: 5.5 or later, Firefox and Chrome

Others

Access to the following URLs must be granted:

- mp-agents-inst.pandasecurity.com
- mp-agents-sync.pandasecurity.com
- mp-agents-async.pandasecurity.com
- proinfo.pandasoftware.com
- http://www.netupdate2.intego.com
- https://www.netupdate2.intego.com
- http://www.integodownload.com
- http://www.intego.com

1.5.4 Requirements for Android devices

Android version 2.3 (Gingerbread) or later.

Before installing the protection it is advisable to make sure that you have a QR code reader installed on your device.



1.5.5 External URLs

To access the Endpoint Protection servers and be able to download updates, at least one of the computers on the subnet must have access to a series of Web pages.

Console

https://www.pandacloudsecurity.com/

https://managedprotection.pandasecurity.com/

https://pandasecurity.logtrust.com

Updates and Upgrades

http://acs.pandasoftware.com/member/installers/

http://acs.pandasoftware.com/member/uninstallers/

http://enterprise.updates.pandasoftware.com/pcop/pavsig/

http://enterprise.updates.pandasoftware.com/pcop/nano

http://enterprise.updates.pandasoftware.com/pcop/sigfiles/sigs

http://acs.pandasoftware.com/free/

http://acs.pandasoftware.com/sigfiles

http://acs.pandasoftware.com/pcop/uacat

http://enterprise.updates.pandasoftware.com/pcop/uacat/

http://enterprise.updates.pandasoftware.com/updates_ent/

https://pcopsupport.pandasecurity.com

http://pcoplinux.updates.pandasecurity.com/updates/nanoupdate.phtml (Linux systems)

http://pcoplinux.downloads.pandasecurity.com/nano/pavsignano/nano_1/ (Linux systems)

http://www.intego.com (OS X systems)

http://www.integodownload.com (OS X systems)

http://www.netupdate2.intego.com (OS X systems)

https://www.netupdate2.intego.com (OS X systems)

Megaquarantine

http://hercules.pandasoftware.com/getqesi.aspx

http://hercules.pandasoftware.com/getqesd.aspx

Communication with the server

https://mp-agents-inst.pandasecurity.com

http://mp-agents-inst.pandasecurity.com/Agents/Service.svc

https://mp-agents-inst.pandasecurity.com/AgentsSecure/Service.svc

http://mp-agents-sync.pandasecurity.com/Agents/Service.svc

https://mp-agents-sync.pandasecurity.com/AgentsSecure/Service.svc

http://mp-agents-async.pandasecurity.com/Agents/Service.svc

https://agentscomp.pandasecurity.com/AgentsSecure/Service.svc

mp-agents-inst.pandasecurity.com (OS X systems)



mp-agents-sync.pandasecurity.com (OS X systems)

mp-agents-async.pandasecurity.com (OS X systems)

https://pac100pacprodpcop.table.core.windows.net

https://storage.accesscontrol.pandasecurity.com

https://prws.pandasecurity.com

https://rpuws.pandasecurity.com/frws (v7.10)

Communication with the Collective Intelligence servers

http://cache.pandasoftware.com

http://cache2.pandasecurity.com

https://rpkws.pandasecurity.com/kdws/files

http://proinfo.pandasoftware.com (OS X systems)

http://proinfo.pandasoftware.com/connectiontest.html

If connection to the above URL fails, the product will try to reach http://www.iana.org.

https://ims.pandasecurity.com/ProySRF

http://statistics.pandasoftware.com

https://euws.pandasecurity.com

https://rpuws.pandasecurity.com

https://rpkws.pandasecurity.com/kdws/sigs

Android

https://dmp.devicesmc.pandasecurity.com

https://pcopsupport.pandasecurity.com

https://rpuws.pandasecurity.com

https://rpkws.pandasecurity.com/kdws/sigs

http://iext.pandasecurity.com/ProylEXT/ServletlExt

Panda Cloud Systems Management agent installation from PCOP (v6.70)

https://sm.pandasecurity.com/csm/profile/downloadAgent/

For incoming and outgoing traffic (Antispam and URL Filtering in PCOPA)

http://*.pand.ctmail.com

http://download.ctmail.com

For the correct functioning of the P2P technology and centralization of connections with the server through a computer, you must enable port TCP 18226 and UDP 21226 on the client's intranet.



Creating Panda Account

What is your Panda Account?

How to create your Panda Account

How to activate your Panda Account



2.1. What is your Panda Account?

When you buy **Adaptive Defense 360** you will receive an email from Panda Security. Click the link in the message to go to the website where you can create your Panda Account.

You must then activate your Panda Account using the link sent to you in another email message.

Finally, go to Panda Cloud. There you will find the shortcut to access the **Adaptive Defense 360** Web console.

This new method aims to increase the security of your login credentials as, instead of receiving them via email, you yourself create and activate your Panda Account, the entry point to access the **Adaptive Defense 360** Web console.

Panda Cloud lets you manage your cloud solutions quickly and easily and, if necessary, access information regarding other Panda Security solutions which will resolve all your network's protection needs.

2.2. How to create your Panda Account

After you purchase your licenses you will receive an email message to create your Panda Account. Follow these steps:

- 1. Open the message and click the link included in it.
- 2. You will access a Web page to create your Panda Account.
- 3. Enter an email address and click Create.
- 4.



Use the language menu if you want to display the page in a different language. You can view the license agreement and the privacy policy by clicking the relevant links.

You will receive another message at the email address specified when creating your Panda Account. Follow the instructions in that message to activate your account.

2.3. How to activate your Panda Account

Once you have created your Panda Account you need to activate it. In order to do that, you will receive a message at the email address you specified when creating your Panda Account.

- 1. Find the message in your Inbox.
- 2. Click the activation button. By doing that you will validate the email address that you provided when creating your Panda Account. If the button doesn't work, copy



- and paste the URL included in the message into your browser.
- 3. The first time that you access your Panda Account you will be asked to set a password. Set it and click Activate account.
- 4. Enter the required data and click Save data. If you prefer to enter your data later, click Not now.
- 5. Accept the license agreement and click **OK**.

You will have successfully activated your Panda Account.

You will then find yourself in the Panda Cloud site. From there, you will be able to access your Endpoint Protection console. To do that, simply click the solution icon in the My Services section.



My services



Other Panda Cloud services



Remote device management and monitoring

Panda Cloud Systems Management lets you ranaa croot dystern manage all your network devices. Keep track of all your PCs, servers and other IT devices. Configure warnings and troubleshoot problems remotely. All managed centrally from a single console.



Virus and spam-free email

Panda Cloud Email Protection protects email viruses, phishing and all types of malicious content. much more. More information



Web tra security Web traffic control and

Panda Cloud Internet Protection protects you from randa cloud remail r forection process email accounts most effectively, eliminating non-productive traffic at the network perimeter. It filters inbound and outbound email, ridding it of spam, and online threats. Additionally, it is the ideal solution to monitor all access to Web inbound and outbound email, ridding it of spam,

More information



3. Login to the Web console

Login to the Web console

Preferences



3.1. Login to the Web console

When you access the Web console you will see the Status window. There you will see a number of counters with information about your licenses and the status of your protection. If you still have not installed the protection on any of your computers, the window will display a message prompting you to install it and indicating from where to do it.

3.1.1 Other options available in the Web console

Log out

Click Log out to close the session.

Select language

You can select the language for viewing the Web console. Use the Language list next to the active language.

Create users

To create new users and assign access permissions and management privileges to them, click Users.

Set preferences

To configure general aspects of the Web console, click Preferences.

Access more information

If you want to access the Help file, discover the latest Endpoint Protection's news or check the Advanced Administration Guide, select the relevant option in the Help menu.

Use this menu too if you want to view the License Agreement, send suggestions to us or access technical support (http://www.pandasecurity.com/enterprise/uk/support/cloud-office-protection-advanced.htm)

About...

This menu shows the following information:

- Web console version.
- The Endpoint Protection version installed on the network.
- The <u>agent</u> version installed on the network.
- If you have several computers and each of them has a different protection version installed, the **About** menu will display the latest version of them all.
- If you haven't installed the protection on any computers yet, the window will
- isplay the latest available version of the protection

3.2. Preferences

This window lets you configure a number of general settings regarding your Web console: **Default view**

Choose the way in which computers are displayed: by name or by IP address. Select the option you want.



Preferences

Select the general settings for the console.

Default view

Select how you want to view the computers in the console:

- View computers by name.
- View computers by IP address.

Group restrictions

The group restrictions let you assign a number of installations and an expiry date to the computer groups.

Assign restrictions to groups.

Remote Access

✓ Let my service provider access my computers remotely.

Configure the credentials to access your computers remotely.

	User	Password
LogMeln		
TeamViewer		
₩ VNC		

3.2.2 Group restrictions

Select this option to limit the number of installations and the groups' expiration dates. Select the relevant checkbox.

3.2.3 Remote access

Use this section to enter the credentials to access other computers using different remote access tools.

These credentials are unique for each user, that is, each user of the administration console will enter their own credentials to access other computers.

If you don't want to allow your service provider to access your computers, clear the option Let my service provider access my computers remotely..

Remote access from the Partner Center console

If your Web console is accessed from the Partner Center console (http://www.pandasecurity.com/enterprise/solutions/cloud-partner-center/)

the credentials entered by the user that accesses it for the first time will be the same as those used by other users of the Partner Center's console that try to access it later.

Every user that accesses your Web console from the Partner Center's console will be able to change the access credentials, although this change will affect other users.

3.2.4 Automatic management of suspicious files

Use this option if you want to send suspicious files to our laboratory for analysis. In the event of malware infection, we will send you a solution and distribute adequate protection as soon as possible.



3.2.5 Account management

If you are a user with total control permissions, you will be able to access the account management feature.

- Merging accounts
- Delegating security management to a partner



4. The Status window

Protection status
License status
Viewing licenses



4.1. Protection status

The **Status** window is the first one you see when accessing the console for the first time. It shows a number of counters with information about your licenses and the status of your protection.

If you haven't installed the protection on any of your computers, you'll be prompted to go to the **Computers** window to begin the installation.

4.1.1 Notifications

This area is only displayed when there are issues that may be of interest to you, such as the availability of new product versions, warnings about technical incidents, messages about your license status, or any critical issue that requires your attention.

4.1.2 Upgrading to a new product version

If a new version of the protection is made available, click **See the new features included in version XXX** to see a summary of its new features and improvements.

To upgrade the product, click **Upgrade to the new version** and accept the confirmation message. You will be logged out. Enter your Login Email and password again and you will access the new version of the Endpoint Protection Web console.

4.1.3 Protection status

The **Status** window shows the status of the protection installed on your computers, the number of computers with errors, and the number of computers whose antivirus engine or signature file is out-of-date (including those computers where the automatic protection updates are disabled). You will also see if there are any computers that require a restart.



Installed protection

Click the number of computers with protection installed to access the list of protected computers.

Outdated protection

Click the number of computers whose protection is outdated (outdated protection engine,



outdated signature file or pending restart), to access the relevant list of computers.

Excluded computers

Click the number of excluded computers to access a list of computers excluded from the protection.

Computers not connected to the server

Click the numbers in this section to access a list of protected computers which have not connected to the Endpoint Protection servers for the last 30 days, 7 days or 72 hours.

Unprotected computers

Click the number in this section to access the list of unprotected computers.



You will only be able to see information about those computers on which you have permissions. Refer to the Types of permissions section.

4.2. License status

This section displays the number of licenses that you have for the different operating systems, how many have expired and how many are close to expiring.

Unlike the information displayed in the protection status counters, the number of contracted licenses shows the total number of licenses that you have, regardless of your permissions.



Licenses next to expire

Click this number to go to the License list window, from which you can add licenses for Windows/Linux computers.

When your licenses expire your computers stop being protected, and so it will be advisable to buy more licenses by contacting your reseller or sales advisor.

Contracted licenses

Click this number to access detailed information in the License list window.

Used licenses

Click this number to access the list of protected computers.

Computers without a license

Computers without a license are computers without protection as you don't have enough licenses to protect them, or they are in a group with restrictions that are not being met.





You can only see the computers without a license included in groups on which you have permissions. For more information, refer to the Types of permissions section.

The color of the contracted, used and unused licenses will vary depending on whether you are using more licenses that contracted and grace licenses (grayish-red color), or you are using all licenses contracted and also have computers without a license (red color).

Example:

If you are using more licenses that contracted and grace licenses:



60

If you are using all licenses contracted and also have computers without a license:

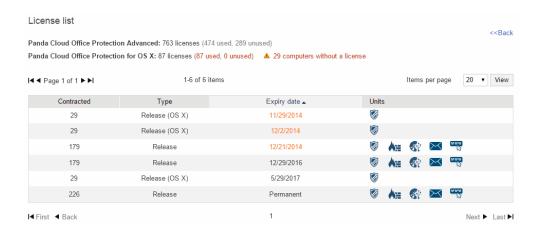
4.3. Viewing licenses

The **Licenses** section in the **Status** window shows the number of licenses that you have contracted and their expiration date.

4.3.1 License list

To access the list of licenses, click the number that indicates the amount of contracted licenses. Additionally, click the number of used licenses to access the list of protected computers.

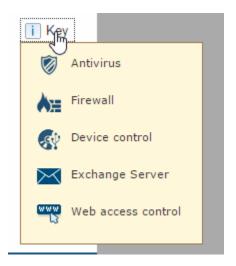
Data displayed in the list of licenses:



The data is displayed in the following columns: **Contracted** (total number of contracted licenses), **Type** (type of license), **Expiry date** and **Units**.

The different protection modules are represented by icons. Move the mouse pointer over **Key** to see what each icon represents.





The data displayed refers to licenses for Windows/Linux/Android computers and devices, as well as Mac computers/servers. In the latter case, the text (OS X) is displayed in the **Type** column.

As licenses expire they will disappear from the list.

4.3.2 How to manage expired licenses or licenses about to expire

Windows/Linux/Android

If any of your license contracts expired within 30 days and, once expired, the number of licenses used exceeded the number of licenses contracted, you could use the option to release licenses. To do this, click the Select licenses to release link to go to the Select licenses to release window.

OS X

If any of your OS X licenses are about to expire, it means that some of your computers will soon be moved to the list of computers without a license.

When the expiration date is getting close, a warning will be displayed and you will be able to release the licenses you consider appropriate. To do that, click the Select licenses to release link.

4.3.3 How to release licenses and move computers to the list of computers without a license

Windows/Linux/Android

If you are a user with total control permissions, you can release the licenses of the computers that you select. If you choose this option, the affected computers will cease to be protected, and will be automatically moved to the list of computers without a license.

OS X

Click Select licenses to release and choose the OS X computers whose licenses you want to release

If you do this, the affected computers will cease to be protected, and will be automatically moved to the list of computers without a license.

For more information about license management, refer to the License management



section.



Clients can only have licenses of one product: Endpoint Protection or Endpoint Protection Plus, which can be used for Windows/Linux/Android or OS X computers.



5. Detected threats

Detected threats and detection origin

Filtered messages

Web access control

Detection details

Scheduled scans



5.1. Detected threats and detection origin

To view information about the detections made on your network, go to the **Detected threats** and **Detection origin** sections in the **Status** window.

These sections show the status of the protection installed on your computers, by malware type and by detection origin.

5.1.1 Detections on Linux computers

- 1. The **Detected threats** graph adds the detections made on Linux systems to the relevant categories. If the category cannot be identified, the relevant detection will be added to **Other**.
- 2. In the **Detection origin** graph, the detections made on Linux systems are added to the **File system** category.

5.1.2 Detections on OS X computers

- The Detected threats graph adds the detections made on OS X systems to the Viruses category.
- 2. In the **Detection origin** graph, the detections made on OS X systems are added to the **File system** category.

To see the detections made over a given period of time, select an option in the **Period** menu.

5.1.3 Detections on Android devices

Threats detected on Android devices will be added to the **File system** category in the **Detection origin** graph.

As for the **Detected threats** graph, it will work in exactly the same way as for Windows computers, as explained below.

5.1.4 Detections on Windows computers

Detected threats

Displays detections of each type of malware threat. It also displays information about the total number of intrusion attempts, devices, dangerous operations and *tracking cookies* blocked.

Malware URLs are included in the Other category, whereas phishing URLs are included in the Phishing category.

Detection origin

Indicates the protection unit that detected the malicious items.

It shows the detections reported by the following protections:

- File system
- Mail
- Web (detection of malware and/or phishing Web pages)
- Firewall
- Device control (access denied to USB flash drives, CD/DVD readers, imaging and



Bluetooth devices)

• Exchange Server (detections on Exchange servers)

To see the list of scheduled scans, click the **Scheduled scans** link.

Click **Detection details** for more information about the detections made.



By default, the list of detections shows the items detected over the last seven days.

5.2. Filtered messages

The **Filtered messages** graph shows the number of messages that have been blocked for containing potentially dangerous attachments. This protection acts on Exchange servers.

You must have previously configured, in the **Content Filtering** window, the extensions that you want to block or allow (in the case of double extensions).

For more information go to Content Filtering feature for Exchange Server.

5.3. Web access control

If you have licenses of Endpoint Protection Plus you will have the option to configure the Web access control feature in the profile settings window.

The **Status** window will display statistics on the Websites visited and give you access to detailed information.



If you want to try or buy Endpoint Protection Plus, contact your reseller or sales advisor to obtain the relevant licenses.

5.3.1 Web access control: Results

If you have Endpoint Protection Plus licenses, you'll be able to see in this section information about the Web pages that have been accessed from all computers on your network. As you can see, the information is displayed in the graph with different colors for each category. Each part of the graph shows the percentage of visits to the relevant category.

These categories will have been previously configured in the Web access control settings.

- Click the graph to expand it.
- Click the View Web access details link at the bottom of the page to go to the Web access window.

In the **Web access** window, first select if you want to display data about the last 7 days, the last 24 hours or the last month. Click **Apply**.

The data displayed is organized into four panes:

- Top 10 most-accessed categories
- Top 10 computers with most access attempts
- Top 10 most-blocked categories
- Top 10 computers with most access attempts blocked

To see a complete list of accessed and blocked categories, or computers with most access



attempts, click the See full list link.

Computers with most access attempts/most access attempts blocked

Click a computer's name to see all allowed or blocked access attempts from that computer.

Most accessed/blocked categories

Click a category's name to see the access attempts that have been allowed or denied to Web pages in that category for all computers.

You can export the results by using the Export to Excel or CSV option.

5.4. Detection details

The detection monitoring feature allows you to carry out searches of your network to know when your computers have been in danger, what types of threats have been detected, and which action was taken against them.

To access this information, click the **Detection details** link in the **Status** window.

Use the drop-down menu to select the information you want to see:

- **Detected threats**. Shows a list of malware categories and the number of times they have been detected during the specified period of time.
- Computers with most threats. Shows the computers with most detections, ordered by the number of detections.
- Most detected malware. Shows the malware items most frequently detected on your computers.

In all the aforementioned cases, use the drop-down menu in the upper-right corner of the window to display data for the last 7 days, last 24 hours or last month.

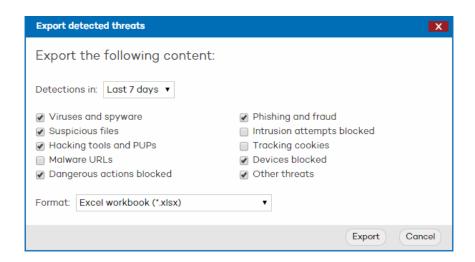
Information about detections on Linux/OS X/Android computers and devices

The information displayed in the Detection details window for Linux/OS X/Android computers and devices is the same as for Windows computers.

Exporting the list

The list of detections made can be exported either to Excel or CSV format. To do that, click the **Export** button at the top of the window.

In the **Export detected threats** window, select a time period (last 24 hours, last 7 days or last month) and the threats to include in the report.





Both the Excel and CSV files will include a header which specifies the date and time when the file was created, a summary of the search criteria, and the details of the list, including the source IP address of the infection(s).

Exported files will display the full path of groups (All\group1\group2).

5.4.1 Viewing information about detected threats

Click the icon next to a threat category for information about it.



You can search for information about threats belonging to the following categories:

- Viruses and spyware
- Suspicious files
- Hacking tools and PUPs (potentially unwanted programs)
- Malware URLs
- Dangerous actions blocked
- Phishing and fraud
- Intrusion attempts blocked
- Tracking cookies
- Devices blocked
- Other threats

The results will display detailed information about the malware items detected, the computers where they were found, the action taken against them (disinfect, send to quarantine,...) and the date of detection.

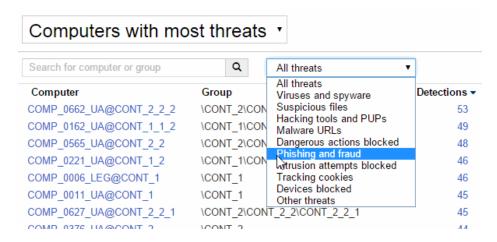
You will also obtain information about where the threat was detected (file system, email, Exchange Server).

In the case of blocked devices, you can filter your search by the type of device.

5.4.2 Viewing information about computers with most threats

Use the drop-down menu to look for information about a specific threat category.





The search results will display the computers where the threat was detected, the group the computer belongs to, the number of detections and the date when the item was first and last detected.

Detailed information about detections

Click the number of detections and then the icon next to the name of a specific threat. This will show the computers where the threat was detected, the action taken against it (disinfect, send to quarantine, etc.) and the date of detection.

5.4.3 Viewing information about the most detected malware

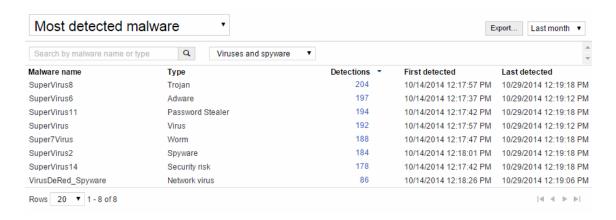
Use the drop-down menu to look for information about a specific threat type.



- All threats
- Viruses and spyware
- Hacking tools and PUPs
- Tracking cookies
- Other threats

The search results will display the name and type of the detected malware, the number of detections, and the date when the item was first and last detected.







In some cases you will be able to access additional information about the malware item on Panda Security's Website. To do that, click the name of the threat.

The detections made by the background scans provided by the Exchange Server protection (in Exchange 2007/Exchange 2010) will appear as "Notified by: Intelligent mailbox scan".



In Exchange 2003 it is not possible to differentiate between items detected by the background scan or by other types of scans. They will appear as "Notified by: Exchange Server Protection".

5.5. Scheduled scans

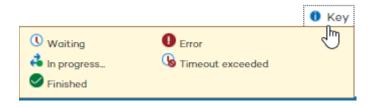
5.5.1 Viewing scheduled scans and their results

If you want to see the list of scheduled scans, click the **Scheduled scans** link in the Status window

From this window you can see at all times which scheduled scan tasks have been created for the different configuration profiles, and view their results.

The information is structured in four columns:

- **Name**. Displays the name of the scheduled scan task. If you click the task name, you will see the window with the results of the scheduled scan.
- **Profile.** This specifies the configuration profile to which the scheduled scan belongs.
- Frequency. This details the type of scan (periodic, immediate, scheduled).
- **Task status**. This column uses a series of icons to indicate the status of the scan task (*Waiting, In progress, Finished, Finished with errors, Timeout exceeded*). You can see the list of icons by placing the mouse pointer on the **Key** option.





5.5.2 Results of the scheduled scan tasks

In this window you will see the list of computers subject to the scan tasks, unless the scan status is *Waiting*.

If it is a periodic scan, you can choose between the options See result of last scan or See results of previous scans.

The data is displayed in six columns:

- Computer. This indicates which computer was subject to the scan. The computer will be listed by its name or IP address, in accordance with your selection in the Preferences window.
- Container. The group to which the computer belongs.
- **Status.** This column uses a series of icons to indicate the status of the computer (*Error*, *Scanning*, *Finishing*, *Timeout exceeded*). You can see the list of icons by placing the mouse pointer on the **Key** option.
- **Detections.** Here you can see the number of detections during the scan. Click the number to go to the list of detections.
- Start date. Indicates the task start date and time.
- End date. Indicates the task end date and time.

To see the scheduled settings for the scan, click **Scheduled scan settings**.

Linux computers

The protection for Linux computers lets you run on-demand and scheduled scans. You can scan the following items:

- The whole computer. Scans the entire computer.
- Hard disks. Scans all hard disks.
- **Email.** This option is not applicable to Linux computers.
- Other items. Lets you specify paths in Linux format.

Example: /root/documents

For more information about scheduled scans, refer to the Advanced scan options section.

Android devices

Android devices allow the following scan types: immediate, scheduled and periodic.

Please, for more information go to Antivirus protection settings for Android section.



6. License management

License-related warnings
Releasing licenses
Adding licenses using the activation code



6.1. License-related warnings

You can purchase licenses of Endpoint Protection for Windows/Linux/Android or Endpoint Protection for OS X. Based on your needs, you can install the protection on your computers, uninstall it, remove computers from the list of protected computers, add computers to that list, etc. As you use your licenses, the number of available licenses will decrease.



Your Endpoint Protection licenses can be used interchangeably on Windows, Linux, and Android computers and devices.



However, if you want to protect your OS X workstations and servers you'll have to purchase specific licenses for OS X, which are different from the licenses purchased for Linux/Windows/Android systems.

6.1.1 Updating the number of licenses

If you:

- Install the protection on one computer One license of Endpoint Protection for Windows/Linux/Android or Endpoint Protection for OS X will be subtracted from the total number of available licenses.
- Remove a computer from the list of protected computers One license of Endpoint Protection for Windows/Linux/Android or Endpoint Protection for OS X will be added to the total number of available licenses, depending on the operating system of the computer you remove.
- Reduce by 'X' the number of contracted licenses The solution will move to the Computers without a license section in the Computers window as many Windows/Linux/Android or OS X computers and devices as licenses you have deleted

6.1.2 License expiration warnings

The notification area displays different warnings relating to the expiration date of your licenses: whether it has been exceeded, whether there are licenses expiring in the next 60 days, and whether you can be left with fewer licenses than those currently used.

These notifications are different depending on the operating system of the computers whose licenses are about to expire. That is, warnings regarding licenses of Endpoint Protection for Windows/Linux/Android, and Endpoint Protection for OS X appear separately.

In both cases you can renew your licenses by contacting your usual reseller or sales advisor. Endpoint Protection will display a reminder in the **Status** window. When the 60-day period is over, you will have an additional 15-day *grace period* to renew your licenses. After this, you will not be able to renew them.

6.1.3 Excluded computers

If you exclude a computer, it will be moved to the list of excluded computers in the Computers window. Excluded computers are only displayed in the Excluded section, they



are not shown anywhere else in the console. No warnings about them are displayed either.

6.1.4 Computers without a license

If you try to install the protection on a computer once the maximum number of installations allowed has been exceeded, or when the license has expired, the computer will be moved to the list of computers without a license in the **Computers** window.

This will also occur if any of the restrictions placed on a group are violated. These restrictions are enabled in the Preferences window and configured in **Settings / Edit group**.

Blacklisted computers don't update. Also, they are not taken into account in the statistics, reports and scans performed by Endpoint Protection. These computers' licenses are not added to the total number of licenses used, but are subtracted from it.

Refer to the Computer monitoring section for more information.

6.2. Releasing licenses

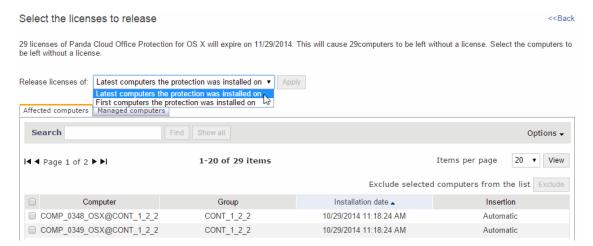
If you have licenses -for Windows, Linux, OS X or Android- close to expiring, Endpoint Protection will let you know through a notification in the Status window.

This notification will indicate the expiration date of the licenses, the number of licenses that need to be released, and will warn you that, after the expiration date, the affected computers will be automatically moved to the list of computers without a license.

The option to release licenses lets you select the computers that will be left unprotected after the expiration date displayed in the notification.

License selection

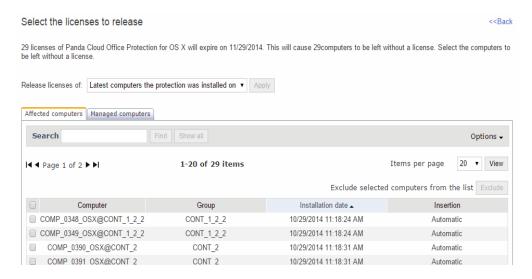
- 1. Click the Select licenses to release link displayed in the notification.
- 2. In the **Release licenses of** menu, select the computers that will be left without a license. You can choose between the first or the last computers that had the protection installed.
- Click the Apply button. The list will display as many computers as licenses need to be released.



6.2.1 Affected computers and managed computers

The **Select licenses to release** window displays two tabs: affected computers and managed computers.





Affected computers

This is the default tab. It displays the list of computers whose licenses will be released and therefore will cease to be administered.

If the licenses that are about to expire are licenses of Endpoint Protection for Windows/Linux, the tab will display only computers with these operating systems. If the licenses to expire were licenses of Endpoint Protection for OS X, the tab would display only computers with this operating system.

The information is divided into four columns: Computer, Group, Installation date, and Insertion. The Insertion column will display the term Automatic if the computer comes from the selection you made in the Release licenses of menu, or Manual if it comes from the Managed computers tab. To exclude a computer from the list of computers whose licenses will be released, select the relevant checkbox and click Exclude.

The Options menu lets you search for specific computers, indicating the time when the protection was installed on them.

Managed computers

This tab displays the computers that you administer. If you want to add any of them to the list of affected computers, select the relevant checkbox and click Add. The computer will be moved to the list of affected computers and the Insertion column will display Manual. If the licenses that are about to expire are licenses of Endpoint Protection for Windows/Linux, the tab will display only computers with these operating systems. If the licenses to expire were licenses of Endpoint Protection for OS X, the tab would display only computers with this operating system. Finally, after the expiration date, the solution will move as many computers as licenses have been released from the list of affected computers to the list of computers without a license.

6.3. Adding licenses using the activation code

Use this feature to add more licenses of Endpoint Protection for Windows/Linux/Android.

Activate the service from your Web console quickly and simply, using the activation code



provided by Panda Security or your reseller when you bought the solution.

Follow these steps:

1. In the **Status** window, click the number that indicates the number of contracted licenses. You will be taken to the **License list** window.



- 2. Click Add additional licenses.
- 3. Enter the activation code.
- 4. Click OK.



Note: The process of adding licenses is not immediate, and you might have to wait a short time before the additional licenses are displayed in the Licenses section of the Status window.

If an error occurs, refer to the Possible errors when adding licenses section.

6.3.1 Possible errors when adding licenses for Windows/Linux/Android computers and devices

The following errors can occur when entering the activation code:

- The activation code entered is invalid/doesn't exist. Make sure you have entered the code correctly.
- The activation code entered is already in use. The activation code is already being used. Contact your reseller or sales advisor to get a new code.
- Could not perform the operation. The characteristics of the services/licenses you have contracted do not allow you to add new licenses.

This error can also occur if a Endpoint Protection client tries to add licenses by entering a Endpoint Protection Plus activation code in their console and vice versa.

6.3.2 Other errors

Once you have successfully entered the activation code, the following error may occur:

Could not register the request. This error occurs when the process fails for an
unknown reason. Please try again and if you cannot activate the solution, contact
the Panda Security technical support.



7. Account management

Introduction to account management

Delegating account management

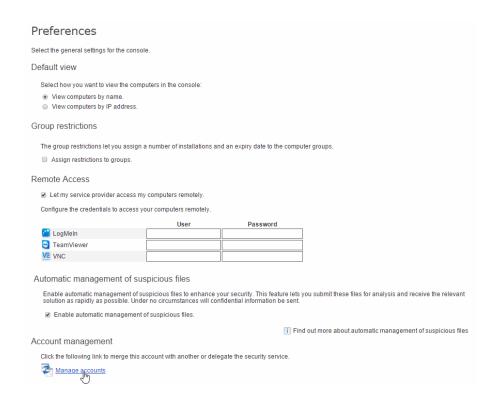
Merging accounts



7.1. Introduction to account management

If you are a user with total control permissions, you will have access to the account management features provided by Endpoint Protection: delegating account management and merging accounts.

Both options are found in the window **Account management.** To access it, go to **Preferences** and click **Manage accounts**.



Delegating account management

This feature lets you delegate security management to a partner, or change the partner that takes care of managing your network security.

For more information about this feature, refer to the Delegating account management section.

Merging accounts

When there are several client accounts, they can be merged to allow central management of the security of all the computers.

For more information about this feature, refer to the Merging accounts section.

7.2. Delegating account management

If you want to delegate the management of the security of your computers to a partner, you can do so using the **Delegate service** feature.

The partner to whom you delegate the service will have access to your console.





Note: To delegate management of your account to a partner, you will need the partner's Panda Security identifier.

Follow these steps:

- Click Manage accounts in the Preferences window. You will see the Account management window.
- In the Delegate security to your service provider section, enter the partner's identifier.

Delegate security to your service provider

Enter the identifier of the service provider that will manage the security of this account.

Identifier:

Delegate



To confirm that you want to continue with the delegation, click **Delegate**.



Note: The process of delegating management is not immediate, and you will have to wait until your data is accessible to the specified partner.

In the event of an error, refer to the Possible errors when delegating account management section.

7.2.1 Possible errors on delegating account management

The following errors may appear when trying to delegate account management:

- Invalid identifier. Please make sure you have entered it correctly and try again. Please make sure you have entered these details correctly.
- You do not have licenses to perform this operation. Contact your sales advisor or your usual reseller to renew them. If your licenses have expired you will not be able to access the management delegation feature. Please contact your reseller or sales advisor.
- Could not perform the operation. Please contact your reseller or sales advisor. It is
 possible that the characteristics of the services/licenses that you have contracted
 do not allow you to use the management delegation feature. Please contact your
 reseller or sales advisor.

7.2.2 Other errors

An error occurred: could not register the request. Please try again later. This error
occurs when the process has failed for an unknown reason. Please try again and if
you cannot activate the service, contact Panda Security technical support.

7.3. Merging accounts

7.3.1 What does merging accounts involve?

If you have several client accounts and want to merge them in order to manage them centrally, use the account merging feature. This way, you'll be able to manage all your accounts from a



single Web console.



Important note: It is very important that before you merge accounts you understand the consequences. Please refer to the Consequences of merging accounts section.

When it is NOT possible to merge accounts

- When the clients are using different versions of the protection.
- When the clients have different products:
- When the client that the source account belongs to has Systems Management licenses.
- When one of the clients has Endpoint Protection licenses and the other has Endpoint Protection Plus licenses.
- If the accounts to merge belong to clients belonging to different partners.

7.3.2 How are accounts merged?

Basically, the process consists of transferring data from a source account (account A) to a target account (account B). This target account must already be active.

Follow these steps to merge accounts:

- Access the Web console of account A (the source account which will be canceled).
- 2. Click Manage accounts, in the Preferences window. You will be taken to the Account management window.
- 3. Select Merge.
- Enter the Login Email of a user with <u>total control permissions</u> over the account to transfer the data to, as well as the client number provided in the welcome message.

Once you're sure you want to merge the accounts, click **Merge**.



Note: The process of transferring data is not immediate. It will take a short time before you see the change reflected in the Web console of account B.

For more information about potential errors, refer to the <u>Possible errors when merging</u> <u>accounts</u> section.

7.3.3 What information is transferred when merging accounts?

Merging accounts involves transferring information about the computers managed from an account A to an account B. The following information is transferred:

- Information about active license contracts, that is, information about active licenses, start and end dates, types of licenses, etc.
- Configuration profiles. All configuration profiles from the source account. If there is a
 profile with the same name in the target account (for example, Sales Profile), the
 profile from the source account will be renamed with a numeric suffix (Sales Profile1).



Note: The default profile -Default- from the source account will be transferred to the target account, but will be considered as just another profile and will lose the status of default profile.



- **Groups of computers.** All groups of computers. In the case of groups with the same name, the same criteria will be applied as with profiles in the previous point.



Note: The default group -Default- from the source account will be transferred to the target account, but will be considered as just another group and will lose the status of default profile.

- Information about active protections and <u>excluded computers or computers</u> without a license
- Reports and detection statistics.
- All items in quarantine, including excluded and restored items.
- All users of the Web console (with their permissions), except the default user.

7.3.4 Consequences of merging accounts

Before merging accounts, it is **VERY IMPORTANT** that you are aware of the consequences:

- The services associated with account A will cease to be active, and the account will be deleted. Obviously, access to the Web console of account A will be denied.
- The Web console of account B will display data and information about the computers managed from account A. To check this, just access the Web console of account B.
- The protection installed on computers managed from account A will be reassigned automatically, and will be manageable from account B. It will not be necessary to reinstall the protection.



Note: The process of transferring data is not immediate, and so it will take time before you can check this has been successful in the Web console of account B.

In the event of an error, refer to the Possible errors when merging accounts section.

7.3.5 Possible errors when merging accounts

When accessing the form for merging accounts, the following errors may occur:

- The Login Email and/or client ID (client number) are incorrect. Please make sure you
 have entered these details correctly.
- Could not perform the operation. It is possible that the characteristics of the services/licenses that you have contracted do not allow you to merge accounts. Please contact your reseller or sales advisor.
- You do not have licenses to perform this operation. If your licenses have expired, you will not be able to access the account merging feature. Please contact your reseller or sales advisor to renew your licenses.
- The specified account is already being merged. If the account B (target account)
 that you have specified is already being merged, you will have to wait for that
 process to finish before starting a new one.
- The account with which you have started the session exceeds the maximum number of computers allowed. The process of merging accounts is only possible if account A (the source account) has less than 10,000 computers.
- The accounts to be merged belong to different versions of Endpoint Protection. For accounts A and B to be correctly merged, they must both correspond to the same Endpoint Protection version. It is highly unlikely that the accounts will belong to different versions, other than in situations where a version has been updated.
- Could not register the request. This error occurs when the process fails for an



unknown reason. Please try again and if you cannot merge the accounts, contact the Panda Security technical support.



8. Creating and managing users

Creating users
Changing user details



8.1. Creating users

If the default user provided by the solution does not adapt to the protection needs of your network, you can create new users and assign different types of permissions to them, depending on what you want each user to manage.

In the main console window, click Users.



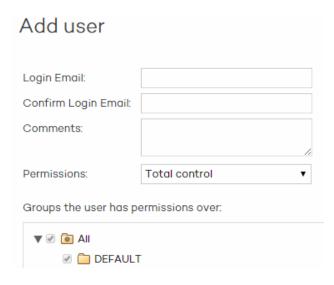
The **Users** window shows three columns: **Login Email**, **Name** and **Permissions**. As you create users, these will appear in the list, along with the type of permissions that you have given them.

Follow these steps to create a user:

1. In the Users window, click Add user.



2. Enter the Login Email and confirm it.



3. You can add more information in the **Comments** section.



- 4. Select the permission to assign to the user. For more information on permissions, refer to the <u>Types of permissions</u> section.
- 5. In the case of users with <u>Security administrator</u> or <u>Monitoring</u> permissions, select the group/subgroup or groups/subgroups they can act upon. Users with <u>Total control</u> permissions can act on all groups.
- 6. Click **Add**. A message will be displayed informing you that an email message has been sent to the address specified when creating the user.
- Once the user has been created, it will appear in the list available in the Users section.

8.2. Changing user details

To change a user's details, go to the **Users** section, and click the user's login email address to access the **Edit users** window.

Edit users

User name:	uctclip06_fm01
Login Email:	uctclip06_fm01@panda.com
Comments:	
Permissions:	Total control ▼
Groups the us	er has permissions over:
Groups the us	er has permissions over:

This window lets you change the user's comments, permissions and group, but not their name or login email address.



In the case of the Default user, it will only be possible to edit the Comments field.

If you create an administrator user with permissions on a group (and all of its subgroups), and you add a new subgroup to it, the user will automatically have permission on that subgroup as well.

However, if you create an administrator user with permissions on certain subgroups in a group, and you add a new subgroup to it, the user will NOT automatically have permissions on the new subgroup.

8.2.1 Changing user names

To change a user's name, log in to the Panda Cloud console using the user's credentials and click the user's name. Then, click **Edit account**.

This option on the Panda Cloud console will only be available as long as you has activate user's Panda Account before.

You will access the management window of Panda Account, where you can change the



username and password. Then click **Update**.

Automatically, both Web consoles (Panda Cloud and Endpoint Protection) will show the new user name.

8.2.2 Deleting users

To delete a user, go to the **Users** section.

In the user list, select the checkbox next to the user that you want to delete. You can select all users at once by selecting the checkbox in the **Login Email** column header. Then, click **Delete**.



Creating and managing managing groups

Creating groups

Moving computers to a group

Adding a computer to a group during installation

Adding and deleting groups



9.1. Creating groups

Endpoint Protection lets you group a series of computers together, and apply the same protection profile to the whole group.

9.1.1 Types of groups

Manual groups

Manual groups contain computers that have been manually added or moved to them (using the Move option in the Computers window).

For more information, refer to the Moving computers to a group section.

Automatic groups (arranged by IP address)

Automatic groups contain computers that have been automatically moved to them based on their IP addresses.



Bear in mind that once you have created a group you won't be able to change its type.

9.1.2 Creating a manual group

- 1. Click the **Settings** tab.
- 2. Click the + icon.

Computer groups Computer groups Assigned profile I DEFAULT Group_1 Computer groups Assigned profile DEFAULT DEFAULT DEFAULT

- 3. Enter the name of the group and select the protection profile to assign to it. Remember that you cannot have two groups with the same name on the same level.
- 4. In Group type, select Manual.
- 5. Click **Add**. The group will be automatically added to the group tree displayed in the **Settings** and **Computers** windows.

To edit a group, select it and click the icon. You can assign the profile of your choice to the group you have just created.



9.1.3 Creating an automatic group

You can only create an automatic group if the Group restrictions option in the Preferences window is disabled.

- 1. The group creation process is the same as for manual groups, the only difference being that you must select **Automatic (arranged by IP address)** in **Group type**.
- 2. Click **Add**. A window will be displayed to edit the automatic group. Configure the rules to apply to the group.

You can configure them manually or import them from a .CSV file.

Importing rules from a .CSV file

- 1. Click Import.
- 2. Enter the name of the file or find it using the **Select** button.
- 3. Click **OK**. This will generate the relevant group structure based on the IP addresses assigned to computers.

Format of the .CSV file

The .CSV file must have the following characteristics:

Each line must contain one to three data strings separated with tabs, and in the following order:

- 1. Group path (full path). For example: \Hall of Justice\Room1
- 2. IP range. Two options are possible: IP-IP or IP-mask (this field is optional)
- 3. **Profile**. (This field is optional)

If a profile instead of an IP address range is used, use a **double tab** to separate the two visible fields (group path and profile):

\Hall of Justice JusticeP

Other examples:

\Hospital\Emergency Room\Ambulance110.10.10.10.10.10.10.19

\Hospital\Emergency Room

\Hospital\Emergency Room\Ambulance210.10.10.20-10.10.10.29AmbulanceP

\Hospital\Boston Clinic10.10.20.10/22Clinic Profile

\Hall of Justice\Court of Appeals10.10.50.10/12Justice 2

If, when importing groups from a .CSV file, the information in one of the lines is incorrect, an error will be displayed indicating the line and string whose format is invalid. No groups will be imported.

Once you have successfully imported groups from a .CSV file into an automatic group, it won't be possible to repeat the same operation for the same group.

Manually configuring group rules

- 1. Click the / icon.
- 2. Select the profile to assign to the group.
- 3. Enter the IP addresses or IP address ranges of the computers to add to the group.
- 4. Click OK.

9.2. Moving computers to a group

You can move a computer or computer group to any other group, regardless of whether



this is a manual or automatic group (arranged by its computers' IP addresses).

The <u>Computer details</u> window displays information about each computer's IP address, the group the computer was assigned to when installing the protection and the group it was later moved to.

Follow these steps to move a computer to a group:

- Go to the Computers window. In the Protected tab, select the computer/computers that you want to assign to a group.
- 2. Click Move.
- 3. In the **Move computers** window, select the group/subgroup to move the computer/computers to.
- 4. Click Move.



You won't be able to assign computers to a group if you only have monitoring permissions. For information about the rest of permissions, refer to the <u>Types of permissions</u> section in this Help.



If you try to move one or multiple computers to a group that has reached the maximum number of allowed installations, a message will be displayed informing you that the operation cannot be carried out.

9.3. Adding a computer to a group

When installing the protection on a computer using the installer, you must select the group that the computer will be added to once the installation is complete.

Groups can be manual or automatic (arranged by the IP addresses of the computers that comprise them), and they can contain subgroups. In the case of the automatic groups/subgroups, the computers that make them must meet a series of rules based on their IP addresses. These rules are configured when creating the group/subgroup.

There are two ways to add a computer to a group/subgroup depending on whether the group/subgroup is manual or automatic.

In the case of manual groups there are no problems, any computer can be added to a manual group/subgroup. However, if the computer is to be added to an automatic group/subgroup, it must meet the rules specified for it.

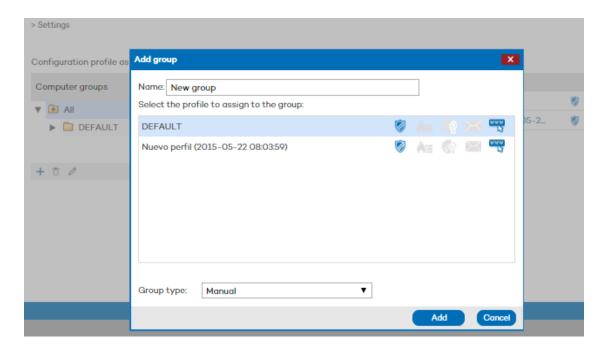
If the computer does not meet the rules of a subgroup but does meet those of its parent group, it will be moved to the group whose rules it does meet.

9.4. Adding and deleting groups

9.4.1 Adding a manual group

Follow the steps below to add a group to an existing group:





- Go to the Computers window. In the My organization tree, select the parent group to add the new group to.
 Click the icon.
- 3. Enter the name of the group and select the protection profile to assign to it (the parent group's profile will be selected by default).
- 4. Click Add. The new group will appear in the tree as a subgroup or child group of the parent group selected in step 1.
- Bear in mind that the maximum number of group levels is six.
- Remember that you cannot have two groups with the same name on the same level.

9.4.2 Adding an automatic group

- 1. In the Settings window, select the parent group that the new group will be added to.
- 2. Click the / icon.
- 3. Click the **Edit group** button.
- 4. Click the 🛨 icon and enter the group's name, profile, and IP address ranges. Click Add.

9.4.3 Deleting a group

To delete a group, select it from the tree and click the icon.





Remember that you cannot delete groups that contain other groups or subgroups. For that reason, before deleting a group you must move every computer it may contain to another group/subgroup.

When this is complete, you will be able to delete the relevant group/subgroup.

9.4.4 Editing a manual group

To edit a manual group, select it from the tree and click the
icon.



You will then be able to edit the group's name and assign a protection profile to it from the profile list displayed.

If the group contains subgroups, you will be able to apply the selected profile to all of them. To do that, select the corresponding checkbox and click **OK**.

You can also access the options to create, delete and edit a group from the **Settings** window.

9.4.5 Editing an automatic group

1. To edit an automatic group, select it from the tree and click the
icon.



- 2. Then click the **Edit group** button.
- 3. In the window to **edit the automatic group**, click the icon.
- 4. You will then be able to edit the group's name and assign a protection profile to it from the profile list displayed. You will also be able to add, edit or delete the IP addresses of the computers that make up the group.



10. Types of permissions

Types of permissions

Total Control permission

Administrator permission

Monitoring permission



10.1. Types of permissions

Endpoint Protection includes three types of permissions. The permission assigned to a user will dictate which actions they can take and on which computers or groups.

The actions that a user can take affect various aspects of the basic and advanced protection settings, and include the creation and modification of their own user credentials, the configuration and assigning of user groups and profiles, the generation of different kinds of reports, etc.

The permissions that exist are:

- Total Control permission
- Administrator permission
- Monitoring permission

Select the type of permission to consult the specifications. These permissions will be useful for assigning different functions to members of your team, and getting the most out of all the Endpoint Protection security features.

10.2. Total control permission

User management

Users can:

- 1. View all users created on the system.
- 2. Remove users.

Group and computer management

Users can:

- 1. Create and delete groups/subgroups.
 - If a user has total control permissions on a group, they will also have them on all its subgroups.
 - If a user has total control permissions on a group and later a subgroup is added to that group, the user will automatically have total control permissions on the newly created subgroup.
- 2. Configure the protection profiles of all groups.
- 3. Assign computers to all groups/subgroups.
- 4. Move computers from one group/subgroup to another.
- 5. Edit the **Comments** field in the <u>Computer details</u> window.
- 6. Access all computers remotely.

Profile and report management

Users can:

- 1. Copy profiles and view the copies made of all profiles.
- 2. Configure scheduled scans of specific paths for any profile.
- 3. View reports (non-scheduled, 'immediate' reports) about any group.
- 4. Create tasks to send scheduled reports about any group
- 5. View all report sending tasks.

Search of unprotected computers

Users can:

1. Configure searches for unprotected computers



2. View and/or remove any of the tasks created.

Protection uninstallation

Users can:

- 1. Configure protection uninstallation tasks.
- 2. View and/or remove any of the tasks created.

License and account management

Users can:

- 1. Use the option to add licenses using the activation code.
- 2. Use the option to merge accounts.
- 3. Delegate security management to a partner.

10.3. Administrator permission

The actions that administrator users can perform (manage users, computers and groups, as well as configure and uninstall the protection), are restricted to those computers or groups they have created or have permissions on.

User management

Administrator users can:

- 1. Change their own credentials.
- 2. Create users.

Search of unprotected computers

Administrator users can:

- Create search tasks launched from those computers on which they have permissions.
- 2. View and/or delete any of the previously created search tasks but only from computers in groups on which they have permissions.

Group and computer management

Administrator users can:

- 1. Create manual or automatic groups/subgroups, and configure the protection profiles of the groups on which they have permissions. Administrator users cannot access a *child* group if they do not have access to the relevant *parent* group.
- 2. Delete the groups on which they have permissions. You can only delete groups that don't have any computers inside, that is, prior to deleting a group/subgroup you must assign or move its computers to another group/subgroup. Once you have emptied the group/subgroup, you can delete it.
- 3. Edit the Comments field of those computers on which they have permissions, in the Computer details window.
- 4. Remotely access computers that belong to groups on which they have permissions.

Protection uninstall

Administrator users can:

- 1. Configure uninstall tasks for those computers and groups on which they have permissions.
- 2. View and/or delete uninstall taks, but only on computers belonging to groups on which they have permissions.

Profile and report management

Administrator users can:



- 1. Create and view new profiles.
- 2. Create copies of profiles on which they have permissions and view them.
- 3. Configure scheduled scans of specific paths for profiles on which they have permissions or which they have created.
- 4. View reports (immediate reports, not scheduled ones) about groups on which they have permissions, provided those permissions apply to all the groups covered in the report.
- 5. Create tasks to send scheduled reports about groups they have permissions on.
- 6. View tasks to send scheduled reports about groups they have permissions on, provided those permissions apply to all the groups covered in the report. Otherwise they will not be able to view the report sending task.

10.4. Monitoring permission

Users can:

- 1. Modify their user credentials.
- 2. View and monitor the protection of the groups/subgroups assigned to them.
 - If a user has monitoring permissions on a group, they will also have them on all its subgroups.
 - If a user has monitoring permissions on a group and later a subgroup is added to that group, the user will automatically have monitoring permissions on the newly created subgroup.
- 3. View the profiles assigned to the groups/subgroups on which they have permissions.
- 4. View searches for protected computers performed from computers belonging to groups/subgroups on which they have permissions.
- 5. View uninstallation tasks for groups/subgroups on which they have permissions.
- 6. View reports (immediate reports) about groups/subgroups on which they have permissions.
- 7. View tasks to send reports about groups/subgroups they have permissions on, provided those permissions apply to all the groups/subgroups covered in the report. Otherwise they will not be able to view the report sending task.



11. Protection settings

Introduction
Default profile



11.1. Introduction

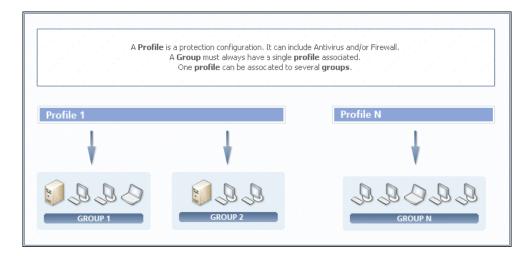
The protection provided by Endpoint Protection is designed to be installed and distributed across your IT network. Therefore, the protection to be installed will vary depending on the computers to protect and your specific security needs.

Endpoint Protection provides cross-platform protection that allows you to protect your Windows, Linux, Android and OS X workstations and servers.

You can configure the protection before or after installing it. In this Help file, the configuration process is explained as a step prior to installing the protection on your network. To do that, you must create a profile and then assign it to a group or groups of computers.



<u>IMPORTANT:</u> This Help file describes how to configure the different protections provided by the solution after creating a profile from scratch (Settings / Profiles / Add profile /...). However, you can edit the protection settings of an existing profile at any time. Therefore, for existing profiles, the steps to take will be: Settings / Profiles / Profile name, and change the relevant settings in the Edit profile window.



There are several options when assigning profiles to groups: one single profile applied to several groups, each group with a different profile, or just one profile and one group.

Creating a profile involves configuring the way that the protection will work for that specific profile, that is, you'll determine which types of scans will be carried out on which items, the frequency of protection updates, etc.

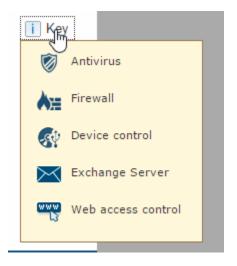
Before starting to **install the protection**, you can create and configure as many profiles as you need. Then, create groups of computers and assign the profiles to them, so that each group has a specific protection profile for all of its computers.

If you want, you can install the protection on your computers with the default configuration provided by Panda Security.

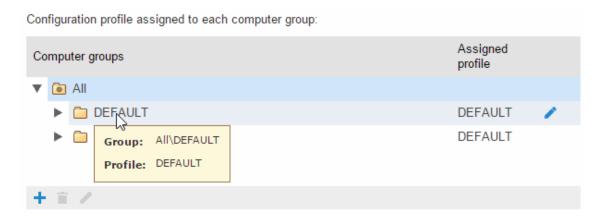
11.2. Default profile

The **Settings** window displays all existing profiles and the protections enabled in each of them. This is indicated through a series of icons. Place the mouse pointer over the **Key** section for more information about what each icon represents.

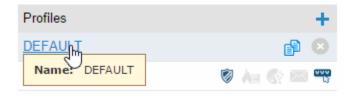




The Settings window also shows the profile assigned to each group.



The first time that you access the **Settings** window you will see the **Default** profile and information about the associated protection.



Bear in mind that:

The following protection modules are disabled by default:

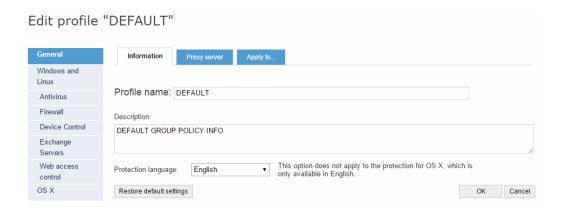
- Email protection.
- Device control.
- Protection for Exchange Server (only available to clients with Endpoint Protection Plus licenses).
- Web access control (only available to clients with Endpoint Protection Plus licenses).
- Anti-theft protection for Android devices (only available to clients with Endpoint Protection Plus licenses).

The protection for Exchange Server supports Exchange 2003, 2007, 2010 and 2013.



Editing the Default profile

If, at any time, you want to <u>change this profile's configuration</u>, click its name. This will take you to the Edit profile window. Select the corresponding options and click OK.



Restoring the original configuration of the Default profile

If later you want to restore the original configuration of the profile, use the option Restore default settings in the Edit profile window.

11.3. Introduction to the settings

The **Settings** window provides an overview of the protection profiles you have configured, the groups you have assigned those profiles to and the restrictions set for each group. That is, it offers a summary of the protection settings.

The **Settings** window is divided into two sections: The right-hand side displays a list of all available profiles, and the left-hand side displays the computer groups and the profile assigned to each of them.





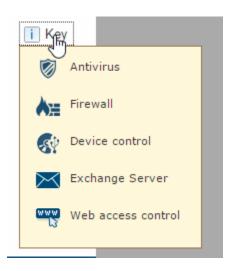
11.4. Profiles

11.4.1 Creating a new profile

Click the + symbol next to the profile list in the **Settings** window to access the **Edit profile** window. From there, you will be able to start configuring the different protections for the profile.

The icons next to each profile name indicate the protections included in the profile in question:

Click Key to see what each icon represents.



11.4.2 Copying a profile

Use the icons to copy and/or delete a profile. These icons are displayed when moving the mouse pointer over the profile name. More information on Copying a profile.

11.4.3 Editing a profile

Click a profile's name to access the Edit profile window from which you can modify its settings.

11.5. Groups and profiles

The information is structured in four columns:

- Computer groups
- Assigned profile
- Max. no. of installations
- Expiry date

The latter two will only appear if you have selected the **Assign restrictions to groups** option in the **Preferences** window.



12. Creating and and configuring profiles

Creating a profile

Copying a profile

General profile settings



12.1. Creating a profile

If you create new profiles, these will appear in the **Settings** window, next to the **Default** profile, with information about the protections they include.

You can edit a profile's settings at any time by clicking on its name and going to the **Edit profile** window.

You cannot assign the same name to two profiles. An error message will appear.

12.1.1 Permissions

If you cannot view an existing profile, it is probably because you do not have the necessary permissions. For more information, refer to the <u>Types of permissions</u> section.

To create a profile, click the **Add profile** icon (+) in the **Settings** window. You will access the **Edit profile** window. There, you will be able to <u>configure the new profile</u>.

12.1.2 Configuring a profile

The following sections are available to configure a profile: General, Windows and Linux, OS X and Android.



- The Windows and Linux section lets you configure the following protections: antivirus, firewall, device control, Exchange Server protection and Web access control (the latter two only if you have Endpoint Protection Plus licenses).
- The OS X section lets you configure the antivirus protection only.
- The Android section lets you configure the permanent antivirus protection and the anti-theft protection for your Android devices (only if you have Endpoint Protection Plus or Fusion licenses).

For a full description of the whole configuration process, please refer to the following



sections:

General profile settings

Windows/Linux protection settings:

Configuring the antivirus protection

Configuring the firewall protection

Configuring the Device Control feature

Configuring the protection for Exchange Server

Configuring the Web access control feature

OS X protection settings:

Configuring the protection for Mac workstations and servers

Android protection settings

Configuring the antivirus protection for Android devices

Configuring the anti-theft protection for Android devices

12.2. Copying a profile

Endpoint Protection gives you the option to make copies of existing profiles. This is useful when you think that the basic settings of a profile that you have created could be used for other computers.

This way, instead of having to create the basic settings every time, you can copy the profile and then adapt it to the specific circumstances as required.

In the Settings window, place the mouse pointer over the icons representing the active

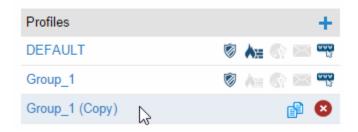
protections in the profile you want to copy, and click the



icon.



Once you have copied the profile, this will appear under the original profile with the same name as it and the text (Copy) at the end.







In the case of the Default profile, you can make a copy, although the copy will not have the status of default profile and will not be assigned automatically to any computer. The original Default profile will be the only predetermined one.

Profile copying is subject to the permissions that you have. For more information, refer to the Types of permissions section.

12.3. General profile settings

This section explains how to configure the protection profiles that you create. First, it is very important to have a clear idea of the type of profile that you want to configure and the computers it will be installed on.

The available options affect both Windows/Linux/Android and OS X computers.

To configure a profile, click Settings > Add profile.



12.3.1 Information tab

Click the **Information** tab to enter the name of the profile that you are creating, add a description to identify it, and select the language of the protection.

The protection language option only affects Windows computers, as Endpoint Protection for OS X always installs in English. On Android devices, the protection will install in the language of the device, or in English, if the relevant language is not supported by the protection.

12.3.2 Proxy server tab

Configure your computers' Internet connection. Specify the way your computers connect to the Internet, if they use a proxy server, and if proxy authentication is required.

In the case of Linux computers, you'll have to configure the Internet connection locally from each computer using the command line.

12.3.3 Apply to tab

Click this tab to assign the profile to a group or groups of computers.



13. Before installing the protection

Computer requirements
Installation methods according to the operating
system
Quick installation
Installation cases



13.1. Computer requirements

Regardless of the installation method to use, it is advisable to check the requirements to be met by the computers the protection is to be installed on. Please, go to **requirements**.

13.1.1 Computers with other security solutions installed

Solutions other than Panda Security

If you want to install Endpoint Protection on a computer that already has an antivirus solution from a vendor other than Panda Security, you can choose between installing the solution without uninstalling the current protection so that both products coexist on the same computer, or uninstall the other solution and work exclusively with Endpoint Protection. The behavior will be different depending on the Endpoint Protection version to install.

- Trial versions
 - By default, trial versions of Endpoint Protection can be installed on computers with a solution other than Endpoint Protection installed.
- Commercial versions

By default, it is not possible to install Endpoint Protection on a computer with a solution other than Endpoint Protection installed. If Endpoint Protection includes the uninstaller to uninstall the other vendor's product, it will uninstall it and then install Endpoint Protection. Otherwise, the installation process will stop.

This behavior can be changed both for trial and commercial versions. Go to Settings / (Click the profile to edit) / Windows and Linux / Advanced settings. In addition, both the Computers and Installation windows will show at all times the installation option you have configured.



This information will be displayed only if you have the same installation option configured for all profiles.

Panda Security solutions

If the existing security solution is a Panda Security solution, you must uninstall it before installing Endpoint Protection on the computer.

Uninstaller list

Go to Annex 8 for a list of the antivirus solutions that Endpoint Protection can uninstall automatically. If the solution you have to uninstall is not on the list, you'll have to uninstall it manually.

13.1.2 Manual uninstall

In Windows 8 and later:

Control Panel > Programs > Uninstall.

You can also type 'uninstall a program' from the Windows Start Screen.

In Windows Vista, Windows 7, Windows Server 2003, 2008 and 2012:

Control Panel > Programs and Features > Uninstall or change a program.



In Windows XP:

Control Panel > Add or remove programs.

In OS X:

Finder > Applications > Drag the icon of the application that you want to uninstall to the recycle bin.

In Android devices:

- 1. Go to Settings.
- 2. Security > Device administrators.
- 3. Clear the Endpoint Protection checkbox. Then, tap Disable > OK.
- Go back to the Settings window. Tap Apps. Tap Endpoint Protection > Uninstall > OK.

13.1.3 Configuring exclusions in the file protection for Exchange Server

To prevent interference between Endpoint Protection and Exchange, any Exchange servers with Endpoint Protection installed should have a series of folders excluded from the file protection.

For more information, go to the Tech Support Center:

http://www.pandasecurity.com/spain/enterprise/support/



If you have Endpoint Protection Plus licenses, the exclusions will have been implemented by default.

13.2. Installation methods according to the operating system

There are different installation methods depending on the operating system of the computer on which to install the protection.

Installation method	Operating system			
	Windows	Linux	os x	Android
Downloading the installer	YES	YES	YES	YES*
Generating an installation URL	YES	YES	YES	YES
Distribution tool	YES	NO	NO	NO

^{*} Only if the installer is downloaded from an Android device. On any other system, a QR code will be displayed and a button to access the Endpoint Protection page on Google Play, from which you will be able to install the protection and bind your device to Endpoint Protection.

In practice, this means the following:



- If you have licenses of Endpoint Protection for OS X and Windows/Linux/Android, you will be able to use the two installation methods above, plus the distribution tool to deploy the protection for Windows.
- **If you only have licenses of Endpoint Protection for OS X**, you will not be able to use the available options for Windows/Linux/Android.
- Please, go to Installing the protection chapter

13.3. Quick installation

If you have just purchased the product and still have not installed the protection on any computers, you will be taken to the **Computers** window on accessing the console.

This window will inform you that you haven't installed the protection on any computers yet, and will prompt you to do so.

You will have the following options:

- **Install on this computer now**. Click this option to download the Windows installer to your computer.
- Send installation URL by email.

You will also have the following options:

- Download the installer for the relevant operating system.
- Download the distribution tool (only available for Windows computers).

Once you have installed the protection across your network, your computers will appear on the list of protected computers in the **Computers** window.

If you are a new client you won't have any groups. Therefore, the protection will be installed on the *Default* group; that is, with the default configuration established by.

If, apart from the *Default* group, you have created other groups, you will see all of them in the group tree called **My organization**, on the left side of the window.

13.3.1 Adding computers

If you have computers with the protection installed, you will be able to see them in the **Computers window**. In addition, this window lets you add new computers very easily.

Selecting this option shows the same options displayed to those clients who have not installed the protection on any computers yet:

- Install on this computer now.
- Send installation URL by email.
- Download the installer for the relevant operating system.
- Download the distribution tool (only available for Windows computers).

13.4. Installation cases

13.4.1 Installing the solution on computers with no protection installed

1. Access the Web console and enter your login email and password.



- 2. Create a <u>new profile</u> (or use the <u>default profile</u>, depending on your needs).
- 3. Configure the different protections depending on the licenses that you have:
- Antivirus protection
- Firewall protection
- Device control
- Protection for Exchange Servers (if you have Endpoint Protection Plus licenses)
- Web access control (if you have Endpoint Protection Plus licenses)
- Protection for OS X
- Antivirus protection for Android devices.
- Anti-theft protection for Android devices (if you have Endpoint Protection Plus or Fusion licenses).
- 4. Create a group (optional).
- 5. Install the protection. Use the installation method that best adapts to your needs and the characteristics of your computer network.

13.4.2 Installing the solution on computers with protection installed

The installation process is similar to the previous one. However, it is **very important** that before installing Endpoint Protection you choose in the settings:

- Whether to install the protection together with any other security solution that might already be installed on the computer, or
- Uninstall these prior to installing Endpoint Protection.

Check the Recommendations prior to installation.

(i)

In most cases, when installing the new protection and uninstalling the previous one, you will need to restart the computer once (twice at most).



14. Installing the protection

Installing the protection on Windows/Linux computers
Installing the protection on OS X computers
Installing the protection on Android devices



14.1. Installing the protection on Windows/Linux computers

14.1.1 Installing the protection with the installer

Bear in mind that despite the installation method is very similar for all operating systems (Windows, Linux, OS X, and Android), it is advisable that you read the specific section for each of them to find out their peculiarities.



In Linux and Windows, the installer is the same for 32-bit and 64-bit platforms. Before downloading the installer, don't forget to check the requirements that the computers must meet.

14.1.2 Downloading the installer

First, select the operating system of the computer you will download the installer for.









If you have more than one group, select the group to which the computers to install the protection on will be added. If, otherwise, you have only one group (the *Default* group), the group selection window won't be displayed, and the protection will be installed on the computers in the default group.

- 1. Click Download.
- In the download dialog box, select Save. Then, once it has downloaded, run the file from the directory you saved it to. A wizard will guide you through the installation process.
- 3. Distribute the protection to the other computers on the network. You can use your own tools or install it manually.

Generating an installation URL

Use this option if you want to launch the installation from each computer.

Generate installation URL Group computers will be added to: DEFAULT Windows https://pcop600exchangeeaconsole.cloudapp.net/PartnerConsole/cv11/Customers/Administration/Install/Installer/GetAgent.aspx? CUST=MWo2TkVxOWxGSGJpUTJCZHM5MVVpdz09&OS=Windows&GROUP=Group_1 Linux https://pcop600exchangeeaconsole.cloudapp.net/PartnerConsole/cv11/Customers/Administration/Install/Installer/GetAgent.aspx? CUST=MWo2TkVxOWxGSGJpUTJCZHM5MVVpdz09&OS=Linux&GROUP=Group_1

- 1. Select the group to which you want to add the computers (the Default group is selected by default).
- 2. Copy the installation URL for the relevant operating system, and then access it from each computer you have access to and you want to install the protection on.



Sending the download link by email

- 1. Select the group to which you want to add the computers (the Default group is selected by default), and click **Send by email**.
- 2. End users will automatically receive an email with the download link for their operating systems. Clicking the link will download the installer.
- 3. Follow the instructions in the wizard to complete the installation process.

14.2. Installing the protection with the distribution tool

This installation method applies only to Windows computers.

14.2.1 Downloading the distribution tool

It is important that, before downloading the distribution tool, you check the minimum requirements the computer must meet.

The distribution tool lets you install and uninstall the protection centrally on Windows computers, avoiding manual intervention from end users throughout the process.



Remember that, if you want to uninstall the protection, you will be asked to enter the uninstallation password you set for the relevant configuration profile.

Use distribution tool

Download distribution tool

The distribution tool allows you to install the protection on the Windows computers on the network quickly and easily.

- 1. In Installation, click Download distribution tool.
- In the download dialog box, select Save, then, once it has downloaded, run the file from the directory you have saved it to. A wizard will guide you through the installation process.

Once you have installed the Endpoint Protection distribution tool, you have to open it in order to deploy the protection to your computers. You will then see the main window from which you can install and uninstall the protection.

Installing the protection

When selecting the computers on which to install the protection, the distribution tool lets you do this on the basis of two criteria: by domain or by IP address/computer name.

By domain

- 1. Click Install protection.
- 2. Click By domain.
- 3. Indicate the group of computers (optional).
- 4. In the tree, find the computers to which you want to distribute the protection, and select the relevant checkboxes.

Optionally, you can enter a user name and password with administrator privileges on the selected computers.

It is advisable to use a domain administrator password. This way, you won't have to specify the user name and password of every computer.



By IP address or computer name

- 1. Click By IP or computer name.
- 2. Indicate the group of computers (optional).
- 3. Select the computers to which you want to distribute the protection.

You can indicate the computers' names, IP addresses or IP address range, separating this data with commas.

Click Add to add them to the list, or Delete to remove them.

- Example of an individual IP address: 127.0.0.1
- Example of a computer name: COMPUTER03
- Example of an IP address range: 192.0.17.5-192.0.17.145

Optionally, you can enter a user name and password with administrator privileges on the selected computers.

It is advisable to use a domain administrator password. This way, you won't have to specify the user name and password of every computer.

For more information about the task, enable the Events log (View menu).

Installing the protection using other tools

If you often use other file distribution tools you can use them to distribute the protection.

14.3. Installing the protection on OS X computers

14.3.1 Requirements and installation modes

Before installing the protection, make sure your computers meet the installation requirements: Please, go to http://www.pandasecurity.com/uk/support/card?id=50076

14.3.2 Installation modes

There are two ways to install the protection on OS X computers:

- Using the installer.
- Generating an installation URL and launching the installation from each computer.

For more information, refer to the Installing the protection on OS X computers section in this Help.

14.4. Installing the protection on OS X computers

14.4.1 Downloading the installer

This installation process is similar to the installation for Windows/Linux computers.

- 1. Select the group to which you want to add the computers (the Default group is selected by default).
- 2. In the ${\it Installation}$ window, select the option to download the installer for OS X.
- 3. In the download dialog box, select **Save**, then, once it has downloaded, run the file from the directory you have saved it to. A wizard will guide you through the



installation process.

4. Distribute the protection to the other computers on the network. To do this you can use your own tools or install it manually.

14.4.2 Generating an installation URL

Use this option if you want to launch the installation from each computer.

- 1. Select the group to which you want to add the computers (the Default group is selected by default).
- 2. Simply copy the installation URL for Mac, and then access it from each computer you have access to and you want to install the protection on.

Sending the link by email

- Select the group to add the computers to (the Default group is selected by default), and click Send by email.
- End users will automatically receive an email message with the download link (the installation URL you generated previously). Clicking the URL will launch the installation process.
- 3. A wizard will guide you through the installation process.

After you have installed the protection on the computers you'll be able to configure it. Refer to the <u>Configuring the protection for OS X computers</u> section.

Detailed information about how to install the protection on OS X computers

Installing PCOP for OS X is very simple. Once the installer for Mac OS X has been deployed to your computer, run it and follow the instructions in the wizard.

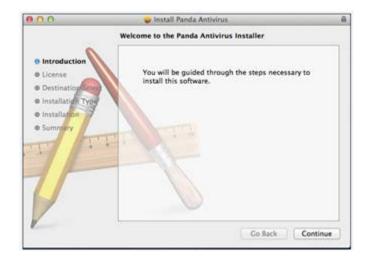


Bear in mind that PCOP for OS X always installs in English.

Follow these steps to install the protection on a OS X computer:

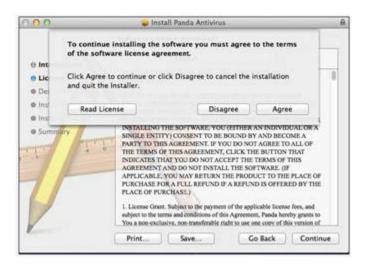
1. Run the program installer.

The installation wizard will run

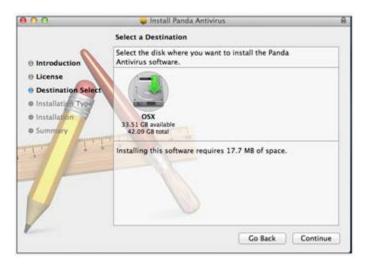


- 2. At the welcome screen, click Continue
- 3. Click Read License to view the license agreement.
- 4. Click Agree and then Continue to proceed with the installation process.

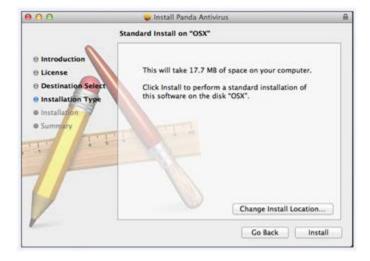




5. Select the disk drive where you want to install the protection, and click Continue.



 If you want to change the default installation folder -/Applications and /Library/Intego-, click Change Install Location... and select another folder.

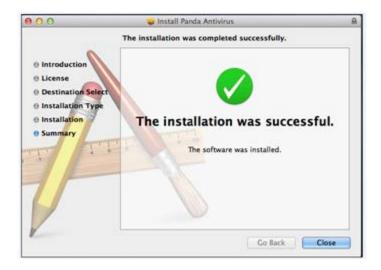


7. Click **Install** to start the installation process.





8. When the file copy is complete, the system will display a screen indicating that the installation process finished successfully.



9. Click Close to exit the wizard.



14.5. Installing the protection on Android devices

14.5.1 Introduction

The process to install Endpoint Protection on Android devices has the peculiarity that, once you have installed the protection, it is necessary to take the additional step of adding the Android device to a computer group in the Endpoint Protection Web console.

This way, the Web console will be aware of the existence of the device on the list of protected computers.

14.5.2 Installation methods

There are two ways to install the protection on Android devices:

From the Endpoint Protection Web console

You must download the installer for Android devices.

From the Android device itself

- Through the Endpoint Protection page on Google Play.
- Through the installation URL sent to you by email. This message will also include the necessary URL to add the device to the Web console, as previously explained.

Installing the protection from an Android for Work compatible EMM tool

14.5.3 Installing the protection from the Web console

Downloading the installer

Go to the Installation tab in the Web console, and select the option to download the installer for Android. There are two ways to install the protection:

- Installation using a QR code. This requires the user of the device to have access to the Endpoint Protection Web console. Also, they must have a QR Code reader installed on their device.
- Installation via Google Play. It's not necessary to have the device to protect at hand at the time of installation, but it is necessary to know the credentials of the Google account associated with the device.

In both cases, the user will be taken to the Endpoint Protection page in Google Play to install the protection.

Adding the device to a group in the Web console

Once the installation is complete, the next step is to add the device to a group. Follow these steps:

- 1. Open the protection you have just installed on your device.
- A window will be displayed indicating that the process to add the device to the list
 of computers and devices managed from the Endpoint Protection console is about
 to start.
- 3. Tap **Use QR code**. A window will be displayed indicating that you must access the Endpoint Protection Web console to scan the QR code.
- 4. In the console, go to the **Installation** tab and click the button to install the installer for Android
- 5. Select the group that you want to add the device to, and scan the QR code.
- 6. Select a name to identify the device in the Endpoint Protection Web console, click **Continue** and enable the necessary permissions to activate the anti-theft



protection.

After these steps are complete, you will have finished the installation and integration process. The device will appear in the list available in the **Computers** tab, in the group you selected.

14.5.4 Installing the protection from the device

Installing the protection from the Endpoint Protection Web page

- 1. Click Install.
- 2. Once installed, open the app. Go back to the Endpoint Protection Web console and select the group to install the protection on.
- Click Add this device to the group. The process to add the device to the console will start.
- 4. Select a name to identify the device in the Endpoint Protection console.
- 5. Click **Continue** and enable the necessary permissions to enable the Anti-Theft protection (only if you have Endpoint Protection Plus or Fusion licenses).

Sending the installation URL via email

In this case the protection is installed from the Android device, through an installation URL sent by email.

- 1. In the Endpoint Protection Web console, select the group to which you want to add the device (the Default group is selected by default). Click **Send by email**.
- End users will automatically receive an email message with two URLs. The first one is the installation URL. Clicking it will take the user to the Endpoint Protection page in Google Play to install the protection.

Adding the device to the console and enabling the Anti-Theft protection

Once you have installed the protection, open Endpoint Protection from your device and click the second URL included in the email.



Enter a name to identity the device in the Web console, click **Continue** and enable the necessary permissions to enable the Anti-Theft protection.



To use the Anti-Theft protection, you need to have <u>Endpoint Protection Plus</u> or <u>Fusion</u> licenses. If you don't have licenses of these products, contact your usual reseller.

After completing these steps, you will have finished the installation and integration processes. The device will appear on the list available in the **Computers** tab, in the group



you selected.

14.5.5 Installing the protection from an Android for Work compatible EMM tool

EMM (Enterprise Mobility Management) tools are used to, among other things, install apps, track, locate and manage mobile devices, and sync files on a device with those on a server. All operations are performed remotely regardless of the carrier or service provider.

In the case of Endpoint Protection, you can use an Android for Work compatible EMM tool to install the app and integrate it into the Android devices to protect.

To do that, you'll have to configure the following two parameters in your EMM tool:

Integration URL

Enter the URL displayed in the installation window (in Generate installation URL), after selecting the group that you want to integrate the device into:

Download installer for: Windows Linux OS X Android Generate installation URL Group computers will be added to: DEFAULT https://managedprotection.pandasecurity.com/PartnerConsole/cv17/Customers/Administration/Install/Installer/GetAgent.aspx?CUST= In Android, once you have installed the protection on your device, follow these steps: 1- Open the Endpoint Protection app you have just installed. 2- Tap the following link: https://managedprotection.pandasecurity.com/PartnerConsole/cv17/Customers/Administration/install/installer/GetAgent.aspx?CUST=

Copy the URL and launch it on the computers to be managed from Endpoint Protection.

Automatic name

The name assigned to the device will be different depending on the option you select (True or False). The default option is False.

- True

If you select this option, a name will be automatically assigned to the device. This name will be the one displayed in the Endpoint Protection Web console, and will have the following format:

<Device model>_<unique identifier>

- False

In this case, you will have to enter the name that you want to assign to the device.

Downloading the Endpoint Protection app

You can download the app here:

https://play.google.com/store/apps/details?id=com.pandasecurity.pcop





15. Configuring the protection for Windows/Linux computers

General profile settings for Windows/Linux computers

Device Control settings

Firewall protection settings

Antivirus protection settings

Exchange Server protection settings

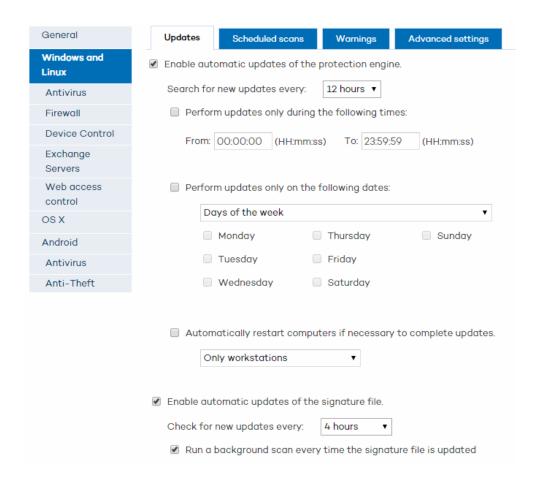
Web access control settings



15.1. General profile settings for Windows/Linux computers

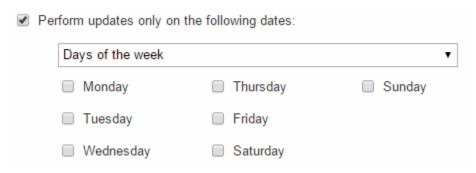
15.1.1 Update settings

To access the update settings, click **Settings** > **Add profile** > **Windows and Linux** > **Updates**. This tab lets you configure the automatic updates of the protection engine and the signature file.



Automatic updates of the protection engine (upgrades)

- 1. First, select the option to enable updates.
- 2. Select the frequency to search for new updates.
- You can also select a date and time for the automatic updates to take place. You can select:
- The days of the week for the update to take place.



The days of every month on which the update must take place.



₽ P	Perform updates only on the following dates:						
	Days of th	•					
	First day:	1 ▼ Last day: 31 ▼					

- The date range for the update to take place.

Perform updates only on the following dates:							
	Days of the month ▼			•			
	First day:	1 ▼ Last da	ıy: 31 ▼				

- 4. Finally, select the relevant checkbox if you want updated computers -workstations, servers or both to restart when the process is completed.
- Click OK

It is advisable to restart your computer right after the relevant restart message is displayed, although you may not need to restart it after several days have passed since the update.

Linux computers

In the case of Linux computers it is not possible to perform automatic updates. Therefore, when a new version of the protection is made available, it will have to be manually installed on computers.

Seven days after there is a newer version of the protection installed on computers, the Linux computers will appear as "out-of-date" in the **Status** window. The administrator can then proceed to install the new version on the network computers.

Automatic update of the signature file

- 1. Select the option to enable the automatic updates.
- 2. Select the frequency to search for updates.
- 3. Click OK.

Linux computers

In the case of Linux computers, you cannot configure the frequency of the automatic updates of the signature file.

These will always take place every 4 hours.

15.1.2 Configuring scheduled scans

Windows/Linux computers

To access the settings, click Settings > Add profile > Windows and Linux > Scheduled scans. Click the Scheduled scans tab to create periodic, scheduled or immediate scan tasks of the entire PC or certain parts of it.

You can schedule scans of your hard disks only, or indicate the specific paths of the files or folders that you want to scan.

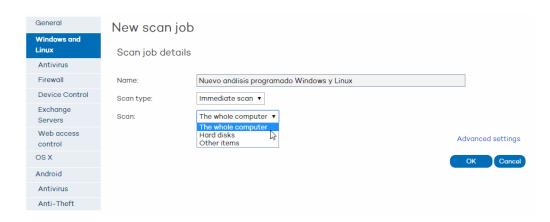
As you create scan tasks, these will be displayed on the Scheduled scans tab in the Edit



profile window, from which you will be able to edit them or remove them if desired.

How to configure scans

Click New to go to the Edit profile - New scan job window.



Follow these steps:

- 1. Name: Choose a name for the scan task.
- 2. **Scan type:** Select the type of scan that you want to create: immediate scan, scheduled scan or periodic scan.
- Immediate scan

Once configured, the immediate scan will take place when the computer connects to the Endpoint Protection server, and the solution checks that the protection settings have changed.

- Scheduled scan

The scan will take place at the time and date you set in Start date and Start time.

Periodic scan:

Set the Start date and start time, and select the scan frequency in the Repetition menu.

- 3. Scan: Select an option.
- The whole computer
- Hard disks

Other items: Use this option to scan specific items (files, folders, etc.). You'll have to enter the path of the item to scan. The format of the path must start with \\computer, \\IP address or (drive letter):\. Examples:

- * \\computer\folder
- * c:\folder1\folder

Depending on the permission that you have you'll be able to enter specific paths to scan. The maximum number of paths to scan for each profile is 10. For more information, refer to the Types of permissions section.

For Linux, you must specify the paths using the Linux format. Example: /root/documents

- 1. **Start date**: Specify the date of the scan.
- 2. **Start time:** Specify the time of the scan, bearing in mind whether the time is that of the local computer or the Endpoint Protection server.
- 3. **Repetition**: If the scan is periodic, here you can specify the frequency (daily, weekly or monthly).



15.1.3 Advanced scan settings

To access this window, click the **Advanced settings** link in the **Edit profile - New scan job** window.

General	New scan job		
Windows and Linux	Scan job details		
Antivirus			
Firewall	Name:	New scheduled scan	
Device Control	Scan type:	Scheduled scan ▼	
Exchange Servers	Scan:	The whole computer ▼	
Web access	Start date:	IIII	
osx	Start time:	Local v	
Android		Adv	ranced settings
Antivirus			1
Anti-Theft			OK Cancel

This window lets you configure complementary aspects of the scheduled scans.

Follow these steps:

- Click the Advanced settings link. You will be taken to the Advanced scan settings window.
- 2. Select the relevant checkbox to scan compressed files.
- 3. Select the malicious software you want to scan for.
- 4. You can scan all files or exclude certain folders or files with specific extensions from the scans. In the latter case, use the **Add**, **Delete** and **Clear** buttons to define the list of exclusions.

Linux computers

Not all of the above options are available for Linux computers.

These are the options available on Linux:

- Scan compressed files.
- Detect viruses (always enabled by default).
- Detect suspicious items.

The option to scan hacking tools and potentially unwanted programs (PUPs) is enabled by default. The exclusions, however, are disabled.



Please bear in mind that the solution does not provide real-time protection for Linux computers. To protect these computers you must run on-demand scans or schedule periodic scans.

15.1.4 Warnings settings

To access the settings, click Settings > Add profile > Windows and Linux > Warnings.

Here you can configure the warnings to be displayed when malware, intrusion attempts or unallowed devices are detected on the network computers. You can also indicate whether these warnings will be local, by email or both.

The difference is that local warnings are displayed on the computer or computers on which the detection occurs, while email warnings are sent to the selected computer users. Follow these steps:

1. First, select the Send email warnings checkbox.



- 2. Complete the Message subject field.
- 3. Enter an email address and specify the SMTP server to be used for sending warnings. If the server requires authentication, enter the relevant user name and password.
- 4. Click OK.

15.1.5 Advanced settings

Follow the steps below to access the advanced settings:

- 1. Click the **Settings** menu.
- Click the profile to configure.
 In the menu on the left, click Windows and Linux.
- 4. Click Advanced settings.

Here you can configure aspects related to the installation of the protection on computers, as well as the connection of these computers to the Internet and to the Endpoint Protection servers. You can also configure options related to the suspicious file quarantine.

Installation

Indicate in which directory you want to install the protection. Endpoint Protection will show a default path, which you can change if you want.

In this section you can also indicate if you want Endpoint Protection to automatically uninstall any competitor product detected on the computer, or if you want both products to coexist on the same computer.

For more information about the default behavior for the different versions of the protection (trial or commercial versions), go to Computers with other security solutions installed chapter.

Installing the protection on Linux computers

On Linux computers, the protection is installed in a default folder that cannot be changed.

Connection to Collective Intelligence

Administrators can disable scans with Collective Intelligence. It is advisable to keep this option enabled if you want to benefit from all the protection provided by Collective Intelligence.

Linux computers

On Linux computers it is not possible to disable the connection to Collective Intelligence. Therefore, as long as a Linux computer is connected to the Internet, the installed protection will leverage Collective Intelligence.

Server connection settings

Establish how often you want the computer to send information to the Endpoint Protection servers about the status of the protection installed.

You can change the default frequency, but it must be a value between 12 and 24 hours.

You can also specify the computer through which connections with the Endpoint Protection server are centralized.

To do this, select the relevant checkbox and click Select. In the Select computer window,



choose a computer or search for it using the Find button. Then click OK.

Check the requirements of the computer used to establish connections with the server:

- Internet connection.
- At least 128 MB of RAM.
- It must be a protected computer (it must be on the list of protected computers) and have version 5.04 or later of the agent.
- It cannot be an excluded computer, nor can it be a computer without a license.
- It must not go more than 72 hours without connecting to the server.

Quarantine settings

Files in quarantine are analyzed to determine whether they represent a threat or not.

If they do not represent a threat, you can restore them by using the Restore option in the Quarantine window and indicating the path to which they must be restored.

Uninstallation password



This option is not available for Linux or OS X computers.

The uninstallation password allows you to do uninstall tasks and configure local protection in administrator mode. That is, with the same password you can uninstall Endpoint Protection of the computers on which you have installed it or allow the user of such equipment who enable or disable protection from the local Endpoint Protection console. It is not exclusive choices, so you can choose to select both at the same time if you wish.

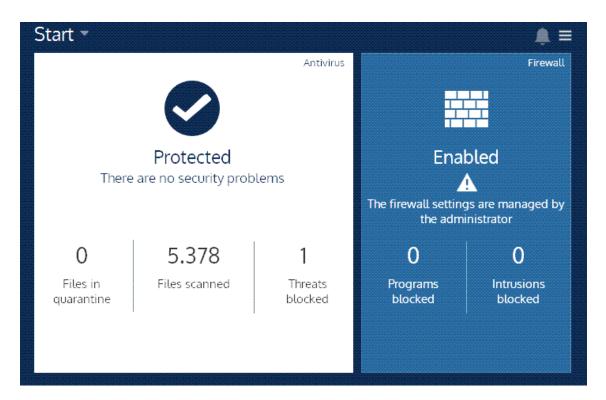
The administrator mode

The administrator mode allows administrators to change the settings of the protection installed on end users' computers from the computers themselves without having to access the Web console.

To use the administrator mode you'll have to enter an administrator password.

To access the administrator mode, click the **Administrator Panel** link and enter your administrator password.

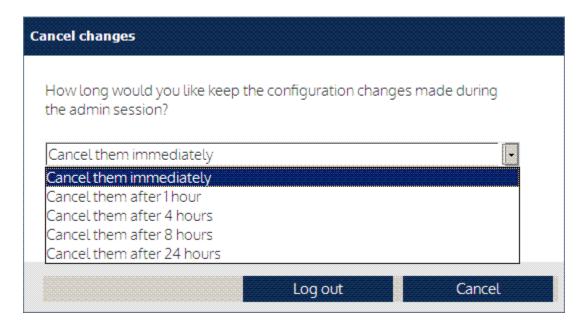




Evidently, if any of the computer users knows the administrator password, they will also be able to modify the protection settings and enable and disable the antivirus and firewall protections.

15.2. Changing the protection status

After you enter the administrator password, the administrator panel appears. This will show information about the protection installed on the computer and will let you enable and disable the different protection modules.



Any changes made to the protection settings will be temporary. When logging out, the administrator will have to select the time that these changes will be valid for. Otherwise, they



will be valid for a maximum of 6 hours if no other changes are made.

During that time, the endpoint protection will ignore any configuration changes it might receive from the Endpoint Protection servers. Alfer that time, the changes will be canceled, and the endpoint protection will once again abide by the configuration established for the relevant profile in the Endpoint Protection Web console.

15.3. Antivirus protection settings

15.3.1 Files, Mail and Web tabs

To access the settings, click Settings / Add profile / Antivirus.

The **Files**, **Mail and Web** tabs let you configure the general behavior of the antivirus protection for the profile you are creating.



Files tab

Here you can configure the basic operation of the antivirus with respect to file protection. Linux computers don't have permanent, on-access protection.

- 1. Select Enable permanent file protection.
- 2. If you want the protection to scan compressed files, select the relevant checkbox.
- 3. Select the malicious software to detect.



Detection of viruses will always be enabled if the file protection is enabled.

If you want the protection to block malicious actions and suspicious behaviors, select the relevant checkbox.

For more specialized antivirus settings, click **Advanced settings**. This will take you to the **Advanced antivirus settings** - **File protection window**.

Mail tab

In this window you can configure how the email antivirus protection will operate in the profile you are creating.

- 1. If you want more detailed settings, click Advanced settings. This will take you to the Advanced antivirus settings Mail protection window.
- Indicate if you want to enable the permanent email protection, as well as scanning compressed files.
- 3. Select the malicious software to detect. Select the relevant checkboxes.
- 4. Click OK.



Web tab

This tab lets you configure the Internet protection, which protects you against Internet-borne malware and phishing attacks.

This option is disabled by default. To enable it, follow the steps below:

- 1. Select the Enable permanent Internet protection checkbox.
- 2. Selet the option to detect phishing Web pages if you want to.

The virus detection option is enabled by default.

The Detections by type section in the Status window shows detections of phishing URLs in the Phishing category, and detections of malware URLs in the Other category.

These detections are also displayed in:

- The detection report.
- In reports.

Phishing URL detections will be included in the "Phishing" category, whereas malware URL detections will be included in the **Other** category. Any phishing or malware attacks detected by this protection will be blocked.

Malware and phishing detections reported by the Internet protection won't be counted as blocked categories.

15.3.2 Local scans

Panda Endpoint Protection is the name of the protection that Endpoint Protection deploys and installs on computers. Once installed, you can access different scan options through the Windows right-click menu or through the right-click menu of the protection itself.

Right-click scan of a selected item

Select a folder, drive, file or any other scannable item and right-click it. You will then see a Windows menu, giving you the option to **Scan with Panda Endpoint Protection**.

The scan will be launched immediately. You can pause the scan and restart it later. When it is finished you will see the result of the scan and you will also be able to print, export or save the report.

Local scans from Panda Endpoint Protection

Optimized scan

If you select this option, Panda Endpoint Protection will scan the computer folders that usually contain malware in order to detect and remove threats as soon as possible.

- Other scans

You have two options:

Scan all My Computer

This option carries out an in-depth scan of all items on your PC: all disk drives, memory, etc. The duration of the scan will depend on the amount of data stored on your computer, as well as the computer characteristics.



- Scan other items...

This is the option to use when you only want to scan a specific file, folder, etc. It lets you scan just the selected items rather than your entire computer. Once you select this option, indicate which folders or files you want to scan and click Start.



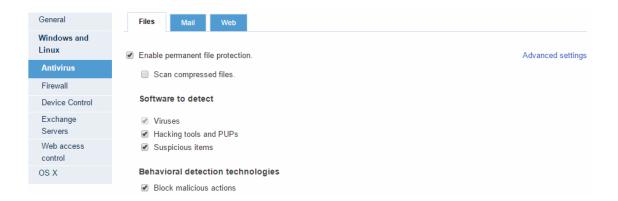
Important: Make sure your computer is connected to the Internet before starting the scan to ensure maximum detection capabilities.

Apart from these on-demand scans, Endpoint Protection also protects you permanently by scanning all the files that you open or run at any time, and neutralizing any possible threats.

15.3.3 Advanced antivirus settings - File protection

This window lets you configure detailed antivirus protection options for a profile, with respect to the file protection.

To access this window, go to Antivirus > Files tab > Advanced settings.



Scanning all files when they are created or modified

You can choose to scan all files regardless of their extension when they are created or modified.

This option does not improve your protection, actually it may negatively affect PC performance, but increases speed in the sense that it scans all files as soon as they are created or modified.

The alternative is to scan only files with certain extensions. To do that, you can exclude specific extensions, files and folders from the scans.

Exclusions

Use the relevant button (Add, Delete and Clear) to make up the list of items (extensions, folders, files) to exclude from scans.

When you have finished, click OK to save the changes.

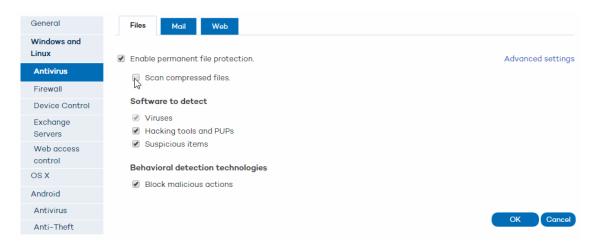
15.3.4 Advanced antivirus settings - Email protection

Endpoint Protection lets you enable the email protection (which is disabled by default). This protection ensures an optimum level of security on your computers, protecting them from

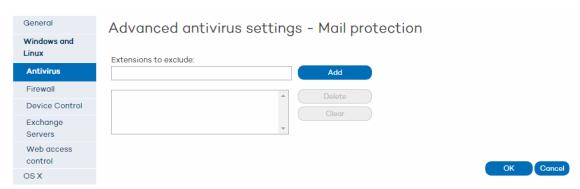


email-borne threats.

- 1. Click Antivirus > Mail tab.
- 2. Select Enable permanent mail protection
- Select whether you want the protection to scan within compressed files. Select the malicious software to detect.



4. Click Advanced settings. This will take you to the Advanced antivirus settings - Mail protection window.



Endpoint Protection lets you exclude certain file extensions from the scans. Use the **Add**, **Delete** and **Clear** buttons as appropriate.

When you have finished, click OK to save the changes.

15.4. Firewall protection settings

15.4.1 Introduction to the firewall settings

To access the firewall settings, click Settings / Profiles / Add profile / Firewall.

First, you must decide if the users to which the profile will be applied will be allowed to configure the firewall from their computers or if you, as the administrator, will do it.

Letting users configure the firewall

To do that, select the relevant option.

Refer to the Firewall administration by the client section.

Managing the firewall centrally

If, otherwise, you want the configuration to be available only from the Web console, you, as



the administrator, will establish the firewall restrictions, blocking, permissions, etc. to be applied to the computers you select.

Keep the default option selected: Apply the following settings to the firewall.

You must also choose to enable the firewall for Windows workstations and/or Windows servers. Select the relevant checkboxes.

Continue configuring the firewall through the General, Programs, Intrusion prevention and System tabs.

15.4.2 Firewall in user mode

If the firewall is running in user mode, the user will be able to access the firewall settings provided this has been authorized by the Endpoint Protection administrator, as explained in section Introduction to firewall configuration.

The firewall lets users filter inbound and outbound connections to the Internet, and also monitor connections between their computers and other network computers with which they may share files, folders, printers and other resources.

Any time a program tries to connect to the Internet from the user's computer (outbound connection), or there is an attempt to connect to their computer from the Internet (inbound connections), Endpoint Protection will ask the user whether to allow or deny the connection through a pop-up message on the screen.

To permanently allow or deny the connection in question, the user must select the relevant option in the pop-up message.



In the case of outbound connections, if the option Enable automatic assignment of permissions is selected, Endpoint Protection will not ask the user whether to authorize or not the connection. It will do so automatically.

By doing this, as the user assigns permissions and configures the settings, they will gain total control of the connections established to and from their computer.

For more information about how to configure the firewall, refer to the following sections:

- Connection of programs to the Internet
- Intrusion prevention
- System rules

Uninstalling Endpoint Protection

If the firewall is in user mode, it will be possible to uninstall the solution from the Windows Control Panel.

However, if the firewall is running in administrator mode, it will be necessary to enter the administrator password to uninstall the solution.

15.4.3 Firewall in administrator mode

Enabling the firewall in administrator mode

- 1. Click the Settings tab.
- 2. Click the Add profile (+) icon, and then click Firewall in the left menu column.
- 3. Select the Apply the following settings to the firewall checkbox.



- Select if you want to enable the firewall for Windows workstations and/or Windows servers.
- Select the type of network that you are connecting to. The configuration will be more restrictive in the case of a public network and more flexible if it is a trusted network.



Public network

This is the type of network you will find in Internet cafes, airports, etc. Visibility of computers is restricted on such networks, and there are restrictions on sharing files, resources and directories.

Trusted network

In this case we are generally talking about office or domestic networks. Your computer will be perfectly visible to the other computers on the network. There are no limitations on sharing files, resources or directories.

Click OK.

Additionally, it will display the link **Administrator Panel**. Clicking the link will prompt the user to enter the <u>administrator password</u> required to enable and disable the protection, change the protection settings, etc.

Connection of programs to the Internet/network

- 1. Click Settings > Profiles > Add profile > Firewall > Programs.
- 2. Enable the Panda rules. These are rules that have been established for the most common applications and are extremely helpful for administrators when configuring the protection. They can be edited, but not deleted.
- Add programs and assign communication permissions to them. To do this, click Add.
- 4. You can edit or eliminate the programs added through the Edit and Delete buttons.
- 5. Decide if you want to allow or deny communications of programs for which no rule is determined. Use the Action list.

Permissions can be:

- Allow inbound and outbound connections

The program can connect to the Internet and the local network and allows other programs or users to connect to it. There are certain types of programs that need these permissions to work correctly: file sharing programs, chat applications, Internet browsers, etc.

- Allow outbound connections

The program can connect to the Internet/network, but does not accept external



connections from other users or applications.

- Allow inbound connections

The program accepts connections from programs or users from the Internet/network, but will not have outbound permissions to connect.

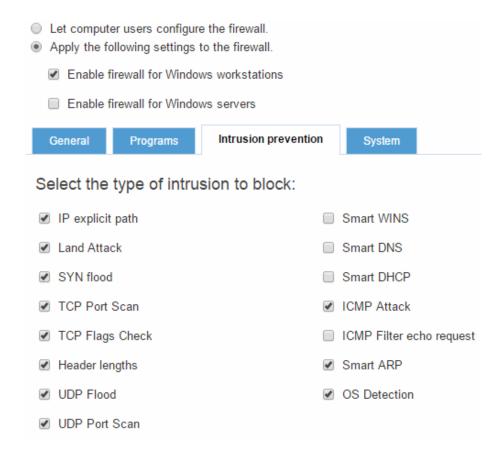
- No connection

The program cannot connect to the Internet/network.

Intrusion prevention

Click Settings > Profiles > Add profile > Firewall > Intrusion prevention.

Here you can configure the firewall settings for each profile with respect to intrusion prevention.



Select the relevant checkboxes and click OK.

System rules

Click Settings > Profiles > Add profile > Firewall > System.

What is a system rule?

System rules let you establish connection rules that will be applied to the whole system, and have priority over the rules configured previously for the connection of programs to the Internet/network.

As you create system rules, they will appear in the relevant list. The order of the rules in the list is not random. They are applied in descending order, and so if you change the position of a rule, you will also change its priority.



Creating system rules

Enable the rules. These are a series of predefined rules that facilitate configuration tasks.

To add system rules, click **Add**. You will access the **Edit profile - New system rule** window where you can select the action that you want to deny or allow, choose the communication direction, and the network.

You can also determine the protocol, the port and the PCs to which the rule applies, specifying their IP address, MAC address or both.

You can edit or eliminate the existing rules and permissions through the **Settings** and **Delete** buttons.

15.5. Device Control settings

15.5.1 Introduction

Popular devices like USB flash drives, CD/DVD readers, image devices, Bluetooth devices and modems can become an entry point for infections.

The Device Control settings allow you to configure the Device Control protection for the profile you are creating. Select the device or devices you want to authorize or block and specify their usage.

Notifications

The Device Control module shows different types of notifications.

- Unallowed devices

If the protection detects that a user connects a device that is not allowed according to the security profile applied to their computer, a warning will be displayed informing them that they do not have permission to access it.

- Read-only devices

The device will appear in the My Computer directory, but a warning message will be displayed if the user double-clicks it. The warning message will indicate that the user does not have permission to access it.

How to enable the Device Control feature

- 1. In the Settings menu, select one of the profiles in the Profiles section.
- 2. Select the Enable device control checkbox.
- 3. In the relevant menu, select the authorization level for each device type.

In the case of USB flash drives and CD/DVD drives you can choose between Block, Allow read access or Allow read & write access.

The options available for Bluetooth and image devices, USB modems and smartphones are Allow and Block.

4. Click OK to save the settings.



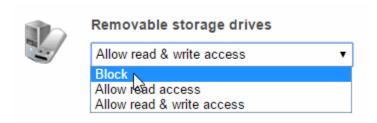
15.5.2 Setting up a list of allowed devices

There are cases where, despite blocking a certain category of devices, you may need to allow the use of some specific devices belonging to that category.

In that case you can create a whitelist, that is, a list of devices that will be allowed despite belonging to an unauthorized category.

You can also whitelist blocked devices so that they are not blocked ever again.

Example: Suppose you have blocked the use of USB devices but you need to allows the use of a specific USB key:



Go to Allowed devices

Allowed devices The following devices can be used without restrictions: Name Type Instance ID Add... Delete Clear Import... Export

- 1. Click Add.
- 2. In the list displayed, select the device that you want to authorize and click **OK**.

Once you have configured the list of devices to authorize, you can import it or export it into a .txt file. Use the relevant buttons to clear the list or delete a specific device from it.

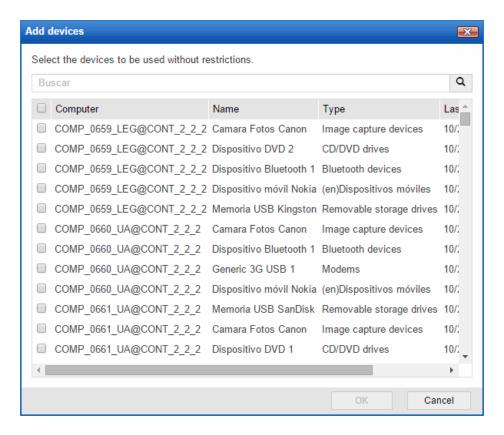
15.5.3 Allowing a blocked device

Every time that Endpoint Protection detects an unauthorized device, it blocks it and reports it in the detection details section.

To access the detection details section, go to **Status** > **Detection origin** > **Detection details** > **Detected threats** > **Devices blocked**.

There you'll see the button **Allow this device**. Click the button and select the protection profiles to authorize the device for, that is, the device will be included in the list of allowed devices in the selected profiles.





Click **OK** to save the changes.

15.6. Exchange Server protection settings

15.6.1 Introduction

Provided you have the necessary licenses, you can use the Web console to enable the protection for Exchange Server and apply it to any Exchange servers that you are managing.

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The protection for Exchange Server supports Exchange 2003, 2007, 2010 and 2013.

The protection for Exchange Server includes three protection modules: **Antivirus**, **Anti-spam** and **content filtering**.

Antivirus

Scans for viruses, hacking tools and suspicious/potentially unwanted programs sent to the Exchange Server mailboxes. Additionally, it monitors access to the Exchange Server mailboxes and public folders.

For more information about this protection, refer to the Exchange Server antivirus protection section.

Anti-spam

Detects and neutralizes spam.

For more information, refer to the Exchange Server anti-spam protection section.



Content filtering

This module lets you filter email messages based on the extension of the attached files. For more information, refer to the Exchange Server content filtering protection section.

15.6.2 Monitoring the protection for Exchange Server

As with the other protection modules included in Endpoint Protection Plus (antivirus, firewall, device control), you can monitor the status of the protection for Exchange Server in the Computers window, as well as in the reports generated by Endpoint Protection Plus.

The detections made by the protection for Exchange Server can be seen in:

- The Status window, **Detection origin** section, together with the other detections reported by the different Endpoint Protection Plus units.
- The list of detections.
- The detection, executive and extended executive reports.

15.6.3 Antivirus protection for Exchange Server

Mailbox protection

To access the settings of the antivirus protection for Exchange Server, click Settings / Profiles / Add profile/ Exchange Servers / Antivirus.

Here you can configure the basic operation of the antivirus with respect to the mailbox protection.

1. Select the Enable mailbox protection checkbox.

By enabling the mailbox protection you will keep the emails stored in your Exchange Server mailboxes malware-free. This will improve your security and prevent data theft and data loss.

2. In Malicious software to detect, select the items to detect.

In versions earlier than Microsoft Exchange 2013, there is a virus scanning API to check messages and protect mailboxes.

In Exchange 2013, a new interceptor has been developed to intercept the SMTP traffic that goes between mailboxes.

How the mailbox protection works

The mailbox protection acts on the specific malicious or suspicious item rather than on the entire message. That is, if malware is detected in an attached file, the protection will act on that file.

The protection works as follows:

- 1. The protection takes on the malicious file the action defined by our laboratory experts: Disinfect, Delete, Move to quarantine, etc.
- 2. A security_alert.txt notification is sent to the user.
- 3. If restored from quarantine, the email is restored to the recipient's mailbox. If a problem occurs during the restore process, the message is directly moved to the Lost&Found folder, where a file will appear with the name of the quarantined item.

How the mailbox protection works in Exchange 2013

The mailbox protection for Exchange 2013 works in the same way as the transport protection. It works as follows:

1. Should malware or suspicious files be detected, the entire email will be moved to



quarantine.

2. These messages will be kept in quarantine for a certain period of time.

Classification	Time	Action taken after this period of time
Malware	7 days	Delete
Suspicious	14 days	Restore
item		

- 3. If a message is moved to quarantine, a notification will be sent to the message recipient(s) with the original subject and a warning indicating that the message has been blocked and they must contact the administrator if they want to retrieve the message.
- 4. If restored from quarantine, the email will be restored to the recipient's mailbox. If a problem occurs during the restore process, the message is directly moved to the Lost&Found folder, where a file will appear with the name of the message subject. This file contains the whole message.

Transport protection

To access the settings of the antivirus protection for Exchange Server, click Settings / Profiles / Add profile / Exchange Servers / Antivirus.

Here you can configure the basic operation of the antivirus with respect to the transport protection.

- Select the Enable transport protection checkbox.
 By enabling this feature you will make sure that the email that circulates through your Exchange Servers is free from viruses and malware.
- 2. In Malicious software to detect select the items to detect.

How the transport protection works

The transport protection acts on the whole message, as follows:

- If the protection detects malware or a suspicious file in a message, it moves the whole messages to quarantine, regardless of the action to take. These messages are kept in quarantine for as long as is set by Panda Security.
- If a message is moved to quarantine, a notification will be sent to the message recipients with the subject of the original message and a warning indicating that the message has been moved to quarantine and they must contact their administrator if they want to retrieve it.
- If restored from quarantine, the email will be restored to the recipient's mailbox. If a problem occurs during the restore process, the message is directly moved to the Lost&Found folder, where a file will appear with the name of the message subject. This file contains the whole message.

Intelligent mailbox scan

The intelligent mailbox scan runs during periods of low server activity, scanning the email messages stored in the organization's Exchange Server.

In addition, it only scans messages that have not been previously scanned and contain attached files.

Disabling the mailbox protection also disables the intelligent mailbox scan.



How background scans work

Background scans work in the same way as mailbox scans.



Background scans are not available for Exchange Server 2013.

15.6.4 Anti-spam protection for Exchange Server

Eliminating junk mail -spam- from Exchange servers is a time-consuming task. Spam not only is a frequent source of scams, but also a huge time-waster.

To tackle these issues, Endpoint Protection Plus provides anti-spam protection for Exchange Server. This feature will help you make the most out of your time and increase the security of your Exchange servers.

Select or clear the **Detect spam** checkbox to enable or disable this protection.



Actions to perform on spam messages

The available actions are:

- Let the message through. The tag Spam will be added to the subject line of messages let through. This is the default option.
- Move the message to... You must specify the email address that the message will be moved to. In addition, the tag Spam will be added to the subject line of moved messages.
- Delete the message.
- Flag with SCL (Spam Confidence Level)

The Spam Confidence Level (SCL) is a value (from 0 to 9) assigned to a message that indicates, based on the characteristics of the message (such as its content, header, and so forth), the likelihood that the message is spam.

A value of 9 indicates a extremely high likelihood that the message is spam. 0 is assigned to messages that are not spam.

The SCL value can be used to configure a threshold in Active Directory above which you consider a message to be spam: The solution flags messages with the relevant SCL value and lets them through.

Then, it is the administrator who establishes, based on the threshold set in Active Directory, the action to be taken on the message.



Allowed/denied addresses and domains

Use the Add, Delete and Clear buttons to configure a list of addresses and domains whose messages will not be scanned by the anti-spam protection (*whitelist*), or a list of addresses and domains whose messages will always be intercepted and deleted by the protection (*blacklist*).

Keep in mind the following aspects when configuring these lists:

- If a domain is on the blacklist but an address in the domain is on the whitelist, the address will be allowed. However, all other addresses in the domain will be blocked.
- If a domain is on the whitelist but an address in the domain is on the blacklist, that address will be blocked. However, all other addresses in the domain will be allowed.
- If a domain (e.g.: domain.com) is on the blacklist and one of its subdomains (e.g.: mail1.domain.com) is on the whitelist, the addresses in the subdomain will be allowed. However, all other addresses in the domain or in any other of its subdomains will be blocked.
- If a domain is on the whitelist, all subdomains in the domain will also be whitelisted.

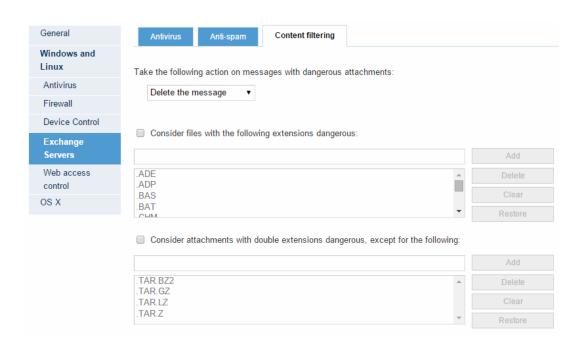
15.6.5 Content Filtering for Exchange Server

The Content Filtering feature allows administrators to filter email messages based on the extension of their attachments.

Once you have set a list of potentially suspicious files, configure the action to take on them.



You can also filter email attachments with double extensions.



Blocking dangerous files

Select the relevant checkbox to classify certain extensions as dangerous. Then, use the Add, Delete, Clear and Restore buttons to set the list of extensions to block.

Blocking files with double extensions

Use the Content Filtering feature to block messages containing files with double extensions,



except for the ones you allow. Use the Add, Delete, Clear and Restore buttons to configure the list of double extensions to allow.

Action to take

Select whether you want to delete files with dangerous attachments or move them to a specific folder. This can very useful to store and analyze those files in order to make the appropriate adjustments to the list of dangerous extensions.

Click OK. Your Exchange servers will be protected against dangerous attachments.

15.7. Web access control settings

15.7.1 Web access control settings

To access these settings, click **Settings** / **Profiles** / **Add profile** and select **Web access control**. You can enable this protection for workstations and servers separately.

If you are a new client and have just purchased the most current version of the product, this feature will be enabled by default for workstations. However, it will be disabled for servers by default.

If the version that you have is not the latest version, you will have to enable this feature in the Web console. To do this, select the **Enable Web access control** checkbox.

This protection allows you to limit access to specific Web categories, and configure a list of URLs to allow or deny access to. This feature allows you to optimize your network's bandwidth and increase your business productivity.

Denying access to specific Web pages

Web pages are grouped into categories. Select the URL categories that you want to deny access to. You can modify them at any time.

- Go to Settings and click the profile for which you want to configure the Web access control feature.
- 2. In the menu on the left, click Web access control.
- 3. Select the relevant checkbox to enable the Web access control feature for Windows workstations, Windows servers or both.
- 4. Then, select the categories you want to deny access to.

If a user tries to access a Web page belonging to a blocked category, an access denied notification will be displayed. Remember that you can enable or disable these warnings. For more information, refer to the Warning settings section.

Denying access to pages categorized as unknown

You can deny access to pages categorized as unknown simply by selecting the relevant checkbox.

However, bear in mind that internal (intranet) sites that connect on ports 80 or 8080 may be categorized as unknown, resulting in users not being able to access them.

Therefore, it is very important that you analyze those connections carefully before enabling this option. Alternatively, you can enable the option to block access to pages categorized



as unknown and later unblock any sites you might need to access by adding them to the list of allowed addresses and domains.

Changing allowed/denied categories and updating computers

After you change the list of allowed or denied categories, it can take up to 4 hours for your computers to receive the new settings.

During this time, the Web access control feature will behave in exactly the same way as it did before the modification.

Nevertheless, if necessary, you can force the update on each computer where the protection is installed. To do this, right-click the protection icon in the taskbar (next to the Windows clock), and select Update.

List of allowed/denied addresses and domains

Additionally, you can set a list of Web pages that will always be allowed (whitelist) or blocked (blacklist).

You can edit these lists at any time.

- 1. Enter the URL for the relevant address or domain in the text box.
- 2. Click Add.
- 3. Use the **Delete** and **Clear** buttons to edit the list according to your needs.
- 4. Finally, click **OK** to save the settings.

After completing these steps, go to the **Status** window to see a summary of the Web pages accessed.

Database of URLs accessed from computers

Each computer keeps a database of the URLs accessed from it.

This database can only be consulted locally, that is, from the computer itself, for 30 days.

The data collected in the database is:

- User ID.
- Protocol (HTTP or HTTPS)
- Domain.
- URL.
- Category (as returned by Commtouch)
- Action (Allow/Deny)
- Access date
- Access counter (by category and by domain).

15.7.2 Configuring time periods for the Web access control feature

Limiting Internet access can be very useful in order to increase productivity in the workplace. Additionally, it will allow you to get the most out of your bandwidth, which will have a positive impact on your business activity.

The Web access control feature can be enabled separately for workstations and servers. Once you have made your selection, the configuration options are very similar in both cases.





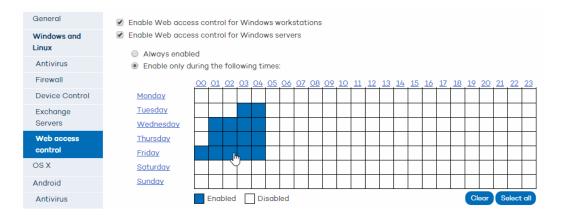
To configure time periods for the Web access control feature you need to have Endpoint Protection Plus licenses. If you don't have licenses of this product, contact your usual reseller.

The time restrictions will allow you to limit acces to certain Web page categories and blacklisted sites during working hours, and authorize it during non-working hours and on weekends.

To configure Internet access time limits, go to Settings / Web access control.

The Web access control feature is disabled by default. When you enable it, you can choose between two options:

- Keep it enabled it at all times.
- Select the times at which you want to enable it. To enable it only during certain times, select the relevant box and use the time grid to select the times that you want. You can also enable it for whole days.



Click OK to save the changes.

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Bear in mind that the system will use the local time on each computer, not the server time.



16. Configuring the protection for OS X computers

Introduction

Characteristics of the protection for OS X Configuring the protection for OS X computers



16.1. Introduction

The licenses of Endpoint Protection for OS X are different from those for Windows, Linux and Android computers and devices.

Therefore, you can purchase as many trial/release licenses of Endpoint Protection for OS X as you want, regardless of the number and type (trial /release) of licenses of Endpoint Protection for Windows/Linux/Android that you already have. Obviously, you can also contract trial/release licenses of Endpoint Protection for OS X only.

Additionally, the protection for OS X computers is configured separately from the options for other operating systems.

16.2. Characteristics of the protection for OS X

The protection for OS X has a series of unique characteristics that set it apart from the protection for Windows/Linux systems. These are as follows:

Configuring updates on OS X computers

In the case of OS X computers, it is not possible to configure the frequency of the automatic updates of the signature file. The signature file is updated every hour.

48 hours after a signature file newer than the version currently installed on a computer has been released, the computer will appear as out-of-date in the **Status** window.

Frequency of protection updates on OS X computers

The protection for OS X computers is updated with the following frequency:

- Signature file ==> Updated every hour
- Changes to the antivirus protection settings ==> Every 4 hours
- Detection information ==> Updated every 6 hours
- Computer status information ==> Updated every 12 hours

Automatic updates of the protection engine (upgrades)

The protection for OS X computers does not support automatic upgrades. Therefore, when a new version of the protection is released, it will have to be manually downloaded and installed on computers.

72 hours after a version newer than the version currently installed on a computer has been released, the computer will appear as out-of-date in the Status window.

You will have to uninstall the previous version and install the new one.

Configuring scheduled scans on OS X computers

The protection for OS X computers does not support scheduled scans. It only provides permanent on-access protection for files.

Installing the protection for OS X

You can install the protection for OS X computers in two ways: downloading the installer or generating an installation URL.

Refer to section Installing the protection on OS X computers for more information.



16.3. Configuring the protection for OS X computers

Endpoint Protection for OS X computers only provides permanent protection for files. For more information regarding other aspects of the protection for Mac computers, refer to section Specific characteristics of the protection for OS X.

The permanent antivirus protection is enabled by default. To change this setting, follow the steps below:

- 1. In the main window of the Endpoint Protection console, click **Settings**.
- 2. Click the name of the profile that you want to configure the antivirus protection for.
- 3. In the menu on the left, click the **Antivirus** option under OS X.



This protection is enabled by default, but you can disable it if you want. To do that, simply clear the **Enable permanent file protection** checkbox.

After the protection has been rolled out to all computers on the network, a local console will be installed on each computer. This console lets users do the following:

- Select the device to scan.
- Run a full computer scan.
- Run a quick scan.
- View detections.
- View suspicious files (quarantined files).
- View the date of the signature file.
- Schedule a real-time scan.
- Schedule a quick or full scan.



17. Configuring the protection for Android devices

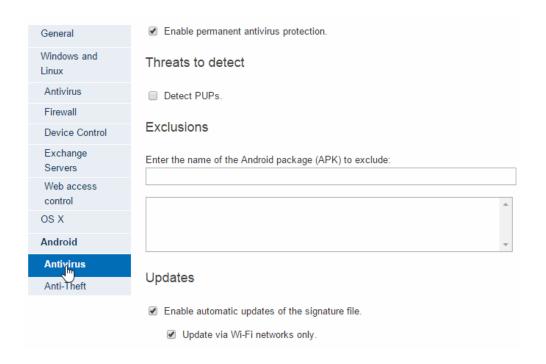
Antivirus protection settings Anti-Theft protection settings



17.1. Antivirus protection settings

In the **Settings** window, click the profile for which you want to configure the antivirus protection for Android devices.

Then, click the Antivirus option in the Android section:



17.1.1 Enabling the protection

- 1. Select the option to enable the antivirus protection.
- Select the relevant checkbox for the antivirus to detect potentially unwanted programs (PUP).

17.1.2 Exclusions

The Android protection allows you to exclude any of the apps installed from the scans.

- Enter the name of the Android package (.apk) that you want to exclude and click Add.
- Use the Delete and Clear buttons to clear or edit the contents of the list of exclusions.

17.1.3 Updates

You can choose to update the signature file automatically. Additionally, you can choose to update the protection exclusively through Wi-Fi networks.

17.1.4 Scheduled scans

- 1. To schedule a scan, click the New button.
- 2. Use the options in the **New scan job** window to configure the scan type: immediate, scheduled or periodic.



New scan job Scan job details Name: New Android scheduled scan Scan type: Immediate scan Scheduled scan Periodic scan

As you create scan tasks, these will appear on the list of scheduled scans for the profile whose antivirus protection you are configuring. You can edit or delete them from there.

Types of scheduled scans

- Immediate scan

Once you have configured the scan, it will take place as soon as the device connects to the Endpoint Protection server.

- Scheduled scan

The scan will take place at the configured date and time. For that to happen, you need to configure the scan sufficiently in advance. If there is no connection to the Endpoint Protection server at the scheduled date and time, the scan will take place as soon as the connection is re-established.

- Periodic scan

The scan will take place at the date and time that you set in the corresponding fields with the corresponding frequency.

As with scheduled scans, it is advisable to configure periodic scans sufficiently in advance to ensure there is connection with the Endpoint Protection server. Otherwise, the scan will take place as soon as the connection is re-established.

17.2. Anti-Theft protection settings

Important: To use the Anti-Theft protection, you need to have Endpoint Protection Plus or Fusion licenses. If you don't have licenses of these products, contact your usual reseller.

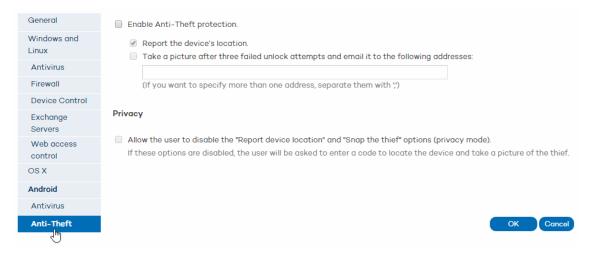
The Anti-Theft protection included in Endpoint Protection will give you total control over your Android devices, and will allow you to take a series of actions in the event of theft.

Namely, you will be able to locate, lock and wipe your device, take a picture of the thief, and send it by email to an address of your choice.



17.2.1 Enabling the Anti-Theft protection

- In the main window of the Endpoint Protection Web console, click Settings.
- Click the name of the profile that you want to configure the Anti-Theft protection for.
- 3. In the menu on the left, click the Anti-Theft option under Android.



- 4. Enable the Anti-Theft protection.
- If you want the protection to automatically report the device location, select the relevant checkbox. This way, it will be easy to find the device even if it runs out of battery.
- 6. If you want to receive an email when there is activity on your stolen device, select the relevant checkbox. Enter the email address(es) that the picture of the potential thief will be sent to. Use a semicolon (;) to separate them.

If, together with the option to snap a picture of the thief you select the option to report the device's location, the email you receive will include a photo plus a map showing your device's location.

Once you have finished configuring the protection, the Computer details window will track the location of the device, and will allow you to lock it, as well as change the email address for the **Snap the thief** feature.

17.2.2 Privacy mode

Administrators can allow users to use their devices in privacy mode. This allows the user to disable the options to automatically report the device's location and take a picture of the thief, which will be password-protected.

However, it will still be possible to use those options on demand, but only if you have the password entered by the user.

To re-enable the options to automatically report the device's location and snap the thief, it will be necessary to disable the privacy mode.



18. Remote access to computers

Viewing computers with remote access tools installed

How to use the remote access tools



18.1. Viewing computers with remote access tools installed

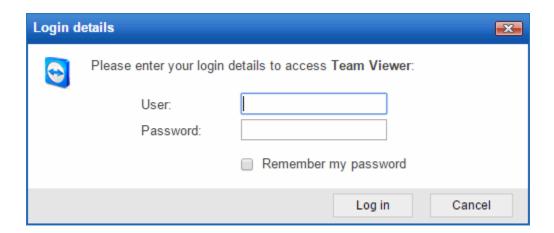
The remote access feature lets you access your network computers from the administration console without physically having to be in front of them.



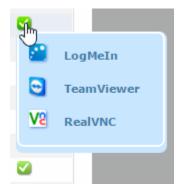
IMPORTANT: The remote control feature is only available for Windows computers.

Endpoint Protection lets you access your network computers using any of the following remote access tools: TeamViewer, RealVNC, UltraVNC, TightVNC and Logmeln.

A small icon will be displayed in the **Computers** window for any computer with any of these tools installed. If the computer has only one tool installed, click the icon to access it. Enter the relevant credentials and access the computer.



You can enter the credentials from the Computers window or in the <u>Preferences</u> window. If the computer has multiple tools installed, place the mouse pointer over the icon to display all of them. Select one to access the computer remotely.



Refer to the How to use the remote access tools section for more information about these tools.



If a computer has different VNC tools installed, you will only be able to access it through one of them, in the following order of priority: 1: RealVNC, 2:UltraVNC, 3:TightVNC

You will be able to access more or fewer computers depending on whether you have total control or administrator permissions. If you only have monitoring permissions you will not be



able to access any computers, and the Remote access icon will be disabled.

18.1.1 How to get remote access to another computer

Remote access from the Computers window

The first time that you access the Computers window a warning will be displayed indicating that your computers don't have any remote access tools installed. If you want to install a remote access tool on them, click the link in the warning.

Remote access from the Computer details window

You can also use the remote access feature from the Computer details window, provided the selected computer has a remote access tool installed. If so, click the icon belonging to the remote access tool that you want to use.

To access other computers remotely, install one of the supported remote access tools on them: TightVNC, UltraVNC, RealVNC, TeamViewer or LogMeIn.

If a computer has multiple VNC tools installed, remember that you will only be able to access it remotely using one of the tools in the above priority order.

18.2. How to use the remote access tools

18.2.1 VNC tools

These tools can only be used to access computers on the same local network as the client. Depending on the authentication settings established, you might be able to access them without having to enter any credentials in the console, or otherwise you may have to enter a user name and/or a password to establish a remote connection.

For an administrator to be able to access computers using VNC they must allow execution of a Java applet on their computer, otherwise, they will not be able to access them.

18.2.2 TeamViewer

This tool can be used to access computers outside the client's local network.

To access computers through TeamViewer you will only need to enter the computer password. The "user" field can be left blank.



The password you must enter to access a computer through TeamViewer is the computer's TeamViewer password or the password for unattended access to computers. It is not the client's TeamViewer account password.

It is advisable to have the same TeamViewer password on all computers, as each user of the Endpoint Protection console can only enter one password to access computers remotely through TeamViewer.

The administrator's computer (the computer from which the console is accessed) must have TeamViewer installed (it is not enough to have it in "run without installation" mode).



18.2.3 LogMeIn

This tool can be used to access computers outside the client's local network.

To access computers with LogMein, you need to enter the LogMeln account user name and password.



19. Computer monitoring

Introduction

Remote access

Computer details

Computer details (Android devices)

Task list (Android devices)

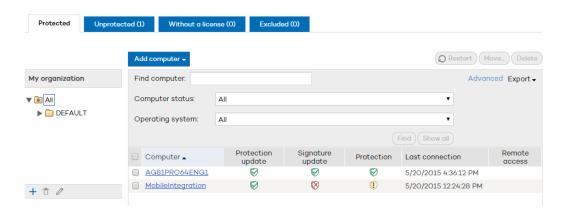
Viewing computers with remote access tools installed



19.1. Introduction

The Web console lets you monitor the status of your computers. You also can monitor the status of the protection distributed to your computers. The **Computers** window provides the following information:

- List of protected computers.
- List of unprotected computers.
- List of computers without a license.
- List of excluded computers.



Each list provides an overview of the protection status of the computers, and also details of whether the protection has been installed correctly, if an error occurred during installation, if it is pending restart and if the protection is up-to-date.

The group tree on the left-hand side of the window lets you move through the different group levels and see the computers included in each group.

To access the lists of protected and unprotected computers, click the **Computers** tab. The window displayed shows the following tabs: **Protected, Unprotected, Without a license** and **Excluded**.

Click the relevant tab. You can search for computers and export the list to Excel or CSV format. As a general rule, clicking a computer name on any of the four tabs will take you to the <u>computer details</u> window.

19.2. Remote access

19.2.1 Panda Remote Control

The lists that contain the protected and unprotected computers in your organization display an additional column (Remote access), whose icon indicates whether your computers have

Panda Remote Control installed or not

For more information about the Remote Control feature and how to configure visit the guide for the administrator:

http://www.pandasecurity.com/enterprise/downloads/docs/product/managedprotection/

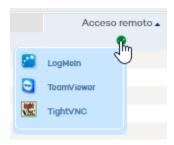


19.2.2 Other remote access tolos

If the column displays an icon, the computer will have at least one remote access tool installed different from Panda Remote Control. If the computer has only one tool installed, click the icon to access it. Enter the relevant credentials and access the computer



If the computer has multiple tools installed, place the mouse pointer over the icon to display all of them. Select one to access the computer remotely.



19.3. Computer details

If you want to access detailed information about a computer, click on it. You will be taken to the **Computer details** window, where you will find information about the computer's status regardless of whether it is protected or not.

The information displayed is the same for all computers -Windows, Linux or OS X- except for the domain information, which is not available for OS X computers.

In the case of Android devices, the **Computer details** window will display specific information for this type of device. Please, go to Computer details (Android devices).

Use the **Comment** field if you want to add additional information to identify the computer. If you are a user with monitoring permissions, you will not be able to use this field. For more information, refer to the Types of permissions section.

19.3.1 Remote access

If the computer has Panda Remote Control installed, you will be able to access it remotely by clicking the Access button. Next, select whether you want to open a remote desktop connection or use any of the available troubleshooting tools. For more information about the Remote Control feature and how to configure visit the guide for the administrator: http://www.pandasecurity.com/enterprise/downloads/docs/product/managedprotectio n/

If the computer has any other remote access tools installed, you will see different icons. Click any of them to access the computer.



19.3.2 Disinfecting the computer

If you want to disinfect the computer with the disinfection tool Panda Cloud Cleaner, click the **Disinfect computer** button.

You will see a window with the default tool settings. As an administrator you'll be able to select disinfection options other than the default ones.

You can also select if you want to disinfect the computer 'silently' or not. Please, go to Disinfecting computers.

19.3.3 Reporting computer problems

Use the **Report problem with this computer** option if you want to report a computer problem. In the form displayed, enter a brief description of the problem and send it to qualified technicians who will analyze it and contact you to resolve it. You will need to enter your email address.

19.3.4 Restarting computers

Use the **Restart option** to restart those computers which, for some reason, appear on the list of protected computers as requiring a restart. Please, go to Restarting computers.

19.3.5 Deleting and excluding computers

If you want to delete those computers that have not connected to the server for a long time, use the option **Delete from database**. You won't be able to manage them any longer. If you wanT to exclude computers from the database, use the **Exclude** option. Excluded computers will be shown in the list of excluded computers in the **Computers** window. You can undo these exclusions at any time. Please, go to Deleting and excluding unprotected computers

19.4. Computer details (Android devices)

In the case of Android devices, the **Computer details** window will display information about the device, and the status of its antivirus and <u>Anti-Theft</u> protection.

If the Anti-Theft protection is enabled for a device, a map will be displayed showing its location and the options provided by the Anti-Theft protection: wipe, lock, snap the thief and locate.

If any of the protections display an error, click the **How to fix errors** link to view a series of <u>troubleshooting instructions</u> to help you resolve the issue.

19.4.1 Wipe device

Use the **Wipe** button to erase all the data on the device and restore its original factory settings.



19.4.2 Lock device

Click the **Lock device** button to prevent access to it. Enter a four-digit unlock code.

19.4.3 Snap the thief

This feature automatically takes a picture of anyone interacting with a stolen device. Enter the email address to send the picture to. You can enter multiple addresses, separated with a semicolon (;).

By default, the feature will display the email addresses entered when configuring the Anti-Theft protection for the relevant profile.

19.4.4 Privacy mode

Administrators can allow users to use their devices in privacy mode. This allows the user to disable the options to automatically report the device's location and take a picture of the thief, which will be password-protected.

However, it will still be possible to use those options on demand, but only if you have the password entered by the user.

19.4.5 Task list

The window will show a list of the tasks run on the device from the Web console. For more information, refer to the **Task list** section.

19.5. Task list (Android devices)

The <u>Computer details</u> window shows a list of every task (theft alert, wipe and locate) sent from the Web console to be run on the Android device.





The list shows a status for each task. For example: If, as shown in the image, there are three theft alert tasks, one of them will appear as Run, another one will appear as Received and the third one will be Pending. As the first task finishes and is removed from the list, the Received task will change its status to Run and the Pending task will change to Received.

19.5.1 Task status

Pending

Tasks will appear as Pending during the time that elapses between the moment that the task is configured in the Web console and the moment that it is received at the device. Bear



in mind that, if the device is turned off or offline, the task will also appear as Pending.

Received

In this case, the device has received the task but has not run it yet or the task is in progress and has not finished. For example, in the case of a locate task, the task will appear as Received until the device is effectively located.

In the case of a snap the thief task, it will appear as Received as long as no picture is actually taken. That is because the task is not considered to be run until the thief triggers it, that is, touches the device screen.

Run

A task will appear as Run once the device reports that it has been completed (successfully or not).

19.6. Viewing computers with remote access tools installed

Both the Protected computers and Unprotected computers tabs show the computers with remote access tools installed, so that you, depending on the permissions that you have, can access them from your administration console.



You will not be able to remotely access unprotected computers whose status is "discovered" or "uninstalled".

If a computer has multiple remote access tools installed and you place the mouse pointer over the icon displayed in the **Remote access** column, you will see all of them. Click one of the icons to access the computer.

If a computer has different VNC tools installed (RealVNC, UltraVNC, TightVNC), you will only be able to access it remotely through one of them, in the following order of priority:

- 1. RealVNC
- 2. UltraVNC
- 3. TightVNC

For more information about how to install remote access tools on computers, click the link in the blue information panel.

Refer to the Remote access to computers section for more information.



20. Actions on protected computers

Adding and searching for protected computers

Moving and deleting protected computers

Restarting computers

Disinfecting computers

Troubleshooting protection errors

Troubleshooting signature file errors



20.1. Adding and searching for protected computers

The list of protected computers displayed in the **Computers** tab lets you know the status of the protection installed on all the computers on your network.



Remember that you will only be able to use some of the protections provided by Endpoint Protection if you have Endpoint Protection Plus licenses. For more information, refer to the Available protections section in this Help file.



Select, from the group tree, the group or subgroup that you want to explore. Select **All** to see all computers, regardless of the group/subgroup they are in.



The number of computers that you see will depend on the permissions that you have. Refer to the Types of permissions section.

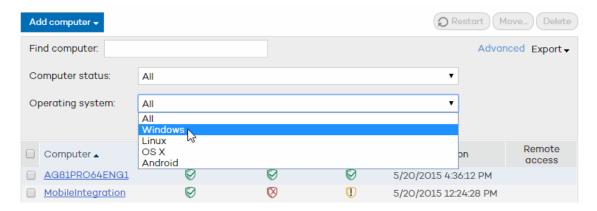
20.1.1 Adding computers

To add a computer, click **Add**. Refer to the <u>Installation methods according to the operating</u> <u>system</u> section for information about how to install the protection on computers depending on their operating system.

20.1.2 Computer search

You can display all protected computers by using the **Show all** button, or click the **Advanced** option to search for computers depending on the status of their protection or their operating system:





In the case of OS X computers, the information in the Protection column will only refer to the file protection: enabled, disabled or with errors.

In the case of Linux computers, the **Protection** column will show an icon indicating that the protection is OK.

The search tool is also very useful for finding out which computers do not have an up-todate version of the signature file, or getting a list of those computers which, for whatever reason, have not connected to the Endpoint Protection server in the last 72 hours.

Select a status from the Computer status drop-down menu and click Find.

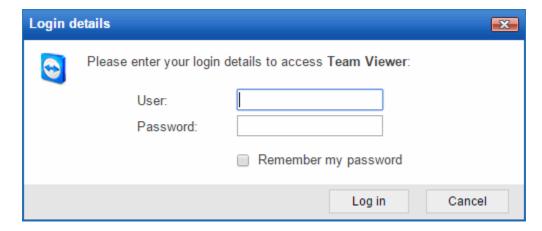
The search results are presented in five columns:

- The **Computer** column shows the list of protected computers, presented either by their name or by their IP address. If different computers have the same name and IP address, they will be displayed as different computers in the Web console provided that their MAC address and administration agent identifier are different.
- If you want to change the way they are presented, go to the Preferences section at the top of the Web console.



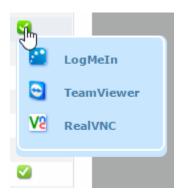
- The **Protection update**, **Signature update**, and **Protection** columns use a series of icons to indicate the update status of the protection and its general situation. Place the mouse pointer over each icon to view this information.
- In **Last connection** you can see the exact date and time at which the computer last connected to the update server.
- Remote access. If an icon is displayed in this column, it means that the computer
 has at least one remote access tool installed. If the computer has only one tool
 installed, click the icon to access it. Enter the relevant credentials and access the
 computer.





Bear in mind that the remote access feature is only available for Windows computers.

If the computer has multiple tools installed, place the mouse pointer over the icon to display all of them. Select one to access the computer remotely.



If you place the mouse pointer over a computer's name, a yellow tag will be displayed with the following information:

- IP address.
- Full path of the group the computer belongs to.
- Operating system installed on the computer.
- Protection installation date.
- Comment associated with the computer.
- Other information.

20.2. Moving and deleting protected computers

20.2.1 Moving computers from one group to another

You can select one or more computers and move them from one group/subgroup to another. If the group has restrictions assigned to it and the maximum number of installations allowed has been reached, when you try to move a computer to that group/subgroup an error message will be displayed.

To move a computer, select the checkbox next to it and click **Move**. Then, select the group/subgroup that you want to move it to and click **Move**.



Users with monitoring permissions cannot move computers from one group to another.

20.2.2 Deleting computers

You can select one or more computers and delete them simultaneously. This is very useful if, for example, you need to simultaneously delete various computers that have not connected to the server since a specific date.

To delete a computer, select the checkbox next to it and click **Delete**. Then accept the confirmation message. After you delete a computer, there will be no information about it in the console.

Users with monitoring permissions cannot delete computers.

20.3. Restarting computers

If you have administrator permissions, you will be able to restart any computer on the list of protected computers remotely from the Web console.

To do that, in the **Computers** window / **Protected tab**, select the checkbox next to the computer or computers that you want to restart and click **Restart**.

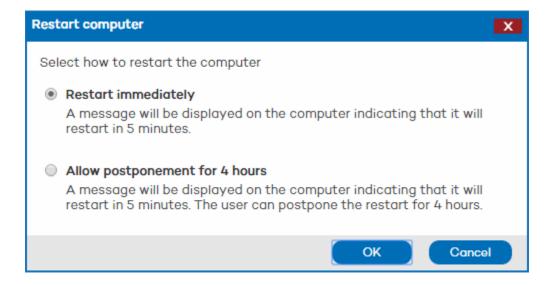
Alternatively, you can click a computer's name, access the **Computer details** window and click the **Restart** button.

Linux, OS X and Android computers and devices cannot be restarted remotely. This feature is only available for Windows computers.

20.3.1 Immediate restart

If you select the option to restart computers immediately, as soon as the selected computer receives the new configuration (a maximum of 15 minutes after changing the configuration in the console), a warning will be displayed on the end user's computer informing them that their computer will restart.

The end user won't be able to cancel the restart.





20.3.2 Postponing the restart

If, on the contrary, you select the option to allow users to postpone the restart, the message displayed on the end user's computer will let them postpone the restart for 4 hours.

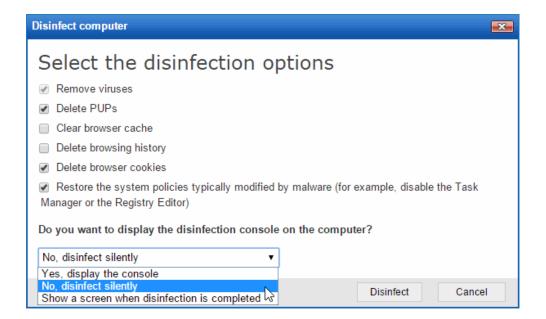
20.4. Disinfecting computers

If you have administrator permissions you'll be able to disinfect computers remotely from the Web console, using Panda Cloud Cleaner.

This is very useful as you won't have to physically go to an infected computer to disinfect it, saving time, legwork and money but keeping efficiency.

The option to disinfect computers can be found in the Computer details window.

Click **Disinfect computer** and select the disinfection options that you prefer as well as whether the disinfection process will be silent or not:



20.4.1 Visible disinfection

The computer to disinfect will show a Panda Cloud Cleaner window, with information about the disinfection progress and additional data.

20.4.2 Silent disinfection

The entire disinfection process takes place transparently to the user. The tool will only display a message informing that there is a disinfection task in progress and giving instructions to access a report after the disinfection task is completed.

If you have licenses of Cleaner Monitor or Fusion, you will also be able to access the disinfection report from the Cleaner Monitor icon in the Panda Cloud site.

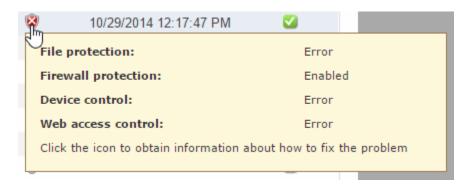
20.5. Troubleshooting protection errors

If an error arises with the protection installed on any of your computers, you'll be able to fix



it quickly and easily.

Simply click the error icon in the **Protections** column on the **Protected** tab. You will access a help article with detailed troubleshooting information.

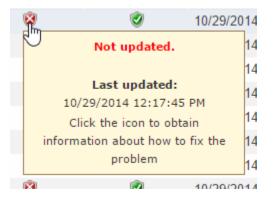


This information will also be available from the **Protection** section in the **Computer details** window.

20.6. Troubleshooting signature file errors

If any of your computers shows a signature file update error, you'll be able to fix it quickly and easily.

Simply click the error icon in the **Signature update** column on the **Protected** tab. You will access a help article with detailed troubleshooting information.



This information will also be available from the **Protection** section in the **Computer details** window.



21. Actions on unprotected computers

Introduction

Deleting and excluding unprotected computers Configuring searches for unprotected computers



21.1. Introduction

The Computers window lets you see the unprotected computers on your network.

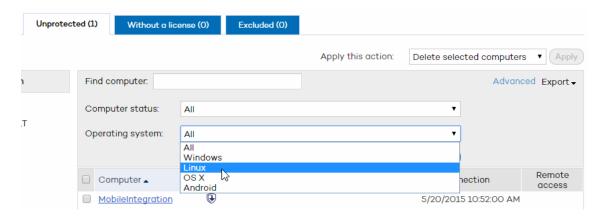
A computer may appear as unprotected when the protection is being installed/uninstalled, when there was an error installing/uninstalling the protection or when the computer has been discovered through a search.

The group tree on the left-hand side of the window lets you move through the different group levels and see the computers included in each group.

21.1.1 Computer search

When it comes to searching for unprotected computers, you can enter the name of a computer in the **Find computer** box and click **Find**.

Click Computer status to filter your search according to different criteria:



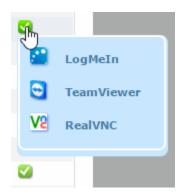
Select a status and click Find.

The search results are presented in five columns:

- The **Computer** column shows the list of computers found, presented either by their name or IP address. If the name of the computer is not known, you will see the word *Unknown*.
- The Status column shows the status of the protection through a series of icons. Click Key to see what each icon represents.
- The **Details** column specifies the reason for the computer status. For example, if the status is *Error installing*, in **Details** you will see the error code. If the **Status** column shows *Unprotected*, the **Details** column will display *Protection uninstalled*.
- **Last connection**. This shows the date and time of the last connection with the computer.
- Remote access. If an icon is displayed in this column, it means that the computer
 has at least one remote access tool installed. If the computer has only one tool
 installed, click the icon to access it. Enter the relevant credentials and access the
 computer.

If the computer has multiple tools installed, place the mouse pointer over the icon to display all of them. Select one to access the computer remotely.





OS X computers will appear as unprotected when discovered through a computer search launched from the Web console.

21.2. Deleting and excluding unprotected computers

21.2.1 Deleting computers

You can select one or more computers and delete them simultaneously. This is very useful if, for example, you need to simultaneously delete multiple computers that have not connected to the server from a specific date.

To delete a computer, select the checkbox next to it and click **Delete**. Then accept the confirmation message. After you delete a computer, there will be no information about it in the console.

Users with monitoring permissions cannot delete computers.

21.2.2 Excluding computers

If you exclude a computer, it will be moved to the **Excluded** tab in the **Computers** window. It won't appear anywhere else in the console and there will be no warnings about it either. Bear in mind that you can undo the exclusions at any time.

21.3. Configuring searches for unprotected computers

In order to improve monitoring of the protection installed on computers, Endpoint Protection lets administrators search for unprotected computers.

Administrators can even do this remotely, seeing at any time which computers are protected or unprotected, from a location outside the network.

(i)

It is not possible to search for unprotected computers from a Linux or OS X computer.





It is not possible to simultaneously search for unprotected computers and run remote uninstallation tasks. For more information, refer to the <u>Incompatibility between remote management tasks</u> section.

21.3.1 Creating a task to search for unprotected computers

In the main console window, click **Installation**. Then, select **Search** in the menu on the left. This will take you to the **Find unprotected computers** window.

To create a new search task, click New search.



In the **Edit search** window, use the **Select** button to choose the computer that will perform the search.

The scope of the search will be defined depending on whether you choose the subnet of the computer performing the search, certain IP address ranges or certain domains.

Requirements for the computer performing the search

The computer performing the search must meet a series of requirements:

- It must have the agent and the protection installed, and be correctly integrated into the Endpoint Protection server.
- It cannot appear in the Excluded computers tab (Computers window).
- It must have connected to the Endpoint Protection server in the last 72 hours.
- It cannot be performing an uninstall task. It cannot show any of the following statuses regarding an uninstall task: On hold, Starting, Uninstalling.
- It must have an Internet connection, either directly or through another computer ('proxy' feature).



Check that there are no remote uninstallation tasks configured on the computer. For more information, refer to the Incompatibility between remote management tasks section. s

21.3.2 Viewing searches

Searches created are listed in the **Find unprotected computers** window, from where you can also remove search tasks, using the **Delete** button.



Tasks with the status Starting or In progress cannot be deleted.

Information is organized into the following columns:

- **Name**: This shows the name given to the search when created.
- **Status**: The status icons indicate the status of the search task. Click **Key** to see what each icon represents.



- **Discovered**: This details the number of unprotected computers discovered.
- Date created: Date the search task was created.
- **Created by**: User that created the task.

Depending on your permissions, you will be able to create, view, or delete search tasks. For more information, refer to the Types of permissions section.

21.3.3 Search results

Click the name of one of the search tasks displayed in the **Find unprotected computers** window to go to the **Search results** window. This will display all the unprotected computers that have been discovered after running the relevant search.

In addition to the name of the search, its start and end dates and its status, the window will report any errors that might have occurred in the search process.





If the status of a search task is On hold, the start date will display a hyphen (-). The same applies to the end date if the task has not finished.

To view the settings of a search task, use the View settings link.



22. Quarantine

Quarantine
Searching for items in quarantine
Files excluded from the scan



22.1. Quarantine

Endpoint Protection sends to quarantine suspicious or non-disinfectable items, as well as spyware and hacking tools detected.

Once suspicious items have been quarantined for analysis, there are three possible scenarios:

- Items are determined as malicious: They are disinfected and then restored to their original location, provided that a disinfection routine exists for them.
- Items are determined **as malicious**, **but there is no disinfection routine**: They are eliminated.
- It is established that the items in question are not malicious. They are directly restored to their original location.

22.1.1 Quarantine on Linux computers

On Linux computers, neither suspicious items nor detected malware are sent to quarantine. Detected malware is either disinfected or removed, and suspicious items are reported, but no action is taken on them.

22.1.2 Quarantine on OS X computers

These computers only have local quarantine. After files have been sent to quarantine, you can choose to perform any of the available actions on them (mark as suspicious, repair or delete).

22.1.3 Quarantine on Windows computers

In the Web console main window, click **Quarantine**. The window is divided into two sections: a search area and a section displaying the list of results.

22.2. Searching for items in quarantine

In the search area you can filter the items you want to view. There are four filter parameters:

- Reason. In the **Reason** menu, select the type of files to find. Files are classified according to the reason they were put in quarantine.
 - By default, the window displays the items that have been sent to quarantine for being suspicious.
- Group. Once you have selected the type of file you want to find, select the group of computers you want to search.
- Date
- Select the period you want.
- Click Find.

If you want to restore any item, select the relevant checkbox, click **Restore** and respond affirmatively to the confirmation message. The item will disappear from the search list and you will be able to find it in the **Files excluded from the scan** window.

If you want to delete any of the items found, select the relevant checkbox, click **Delete** and



respond affirmatively to the confirmation message.

22.2.1 List of items in quarantine

If there are several items that contain the same type of malware, when restoring or deleting one of them, the others will also be restored or deleted.

When you place the mouse pointer on any of the items in the search list, a yellow tag will appear with information about the item.

The **Computer** column displays the name of the computer or its IP address, depending on what you selected in the Default view section, in Preferences.

The **Group** column indicates the group to which the computer belongs. The full path of the group is only displayed in the tooltip, and in the Excel and CSV files obtained after exporting the data displayed in the console.

Thanks to its Anti-Exploit technology, Endpoint Protection makes a copy of all items it sends to quarantine. If there is an error or the solution quarantines an item that should not be quarantined, Endpoint Protection can restore it to its original location.

22.3. Files excluded from the scan

If you select an item in the Quarantine window and choose to restore it, the item will disappear from the **Quarantined files** window and will appear as a file excluded from the scan (**Quarantine** / **Files excluded from the scan**).

Just as you can exclude items from quarantine, you can also return them to quarantine. To do this, select the checkbox corresponding to the item you want to return, and click **Undo exclusion**. Then accept the confirmation dialog box.

The item will disappear from the list of exclusions, and will reappear in the quarantine list when it is detected again.



23. Reports

Status report

Detection report

Generating reports

Viewing reports



23.1. Executive report

The Executive report includes the following information:

- Status of the protection installed, and items detected over the last 24 hours, the last seven days and the last month.
- Top 10 lists of computers with most malware detected and attacks blocked, respectively.
- Top 10 list of computers with most devices blocked.
- Information about the status of the licenses contracted.
- Number of computers on which the protection is being installed at the time of generating the report (including computers with installation errors).

If you have Endpoint Protection Plus licenses, the report will display the number of spam messages detected, as well as *top 10* lists of:

- Accessed categories.
- Computers with most Internet access attempts.
- Computers with most Internet access attempts blocked.

23.1.1 Linux computers

In the case of Linux computers, the Executive report indicates if the virus signature file and the protection are up-to-date or not.

23.1.2 OS X computers

In the case of OS X computers, the report shows information about the status of the licenses and the protection, detection information, etc.

23.1.3 Android devices

The report displays information about the status of your licenses and the protection installed on your Android devices (remember that to be able to enjoy the anti-theft protection you need Endpoint Protection Plus licenses).

23.2. Status report

The Status report includes the following information:

- Overview of the protection and update status of all computers (including OS X systems) at the time of report generation.
- Number of computers on which the protection is being installed at the time of generating the report (including computers with installation errors).

23.2.1 Linux computers

The Status report indicates if the virus signature file and the protection are up-to-date or not. It also shows the status of the different protection modules. As Linux computers do not have permanent protection, but the user must run on-demand and scheduled scans to protect



them, the protection status will always be OK and the status icon will be green provided the protection has been properly installed.

23.2.2 OS X computers

The status of the protection installed on OS X computers is included within the summary information for all computers. That is, there are no specific references to each type of operating system.

However, the detailed information section does indicate if a computer is a Mac OS X computer.

23.3. Detection report

The Detection report includes the following information:

- Detections made during the last 24 hours, the last 7 days, or the last month.
- Computer, group, type of detection, number of detections made, action taken and date when the detection took place.

23.3.1 Linux computers

The Detection report on Linux computers shows the detections made by the on-demand and scheduled scans.

23.3.2 OS X computers

The report includes the detections reported by the protection for OS X, both in the graph and in the detailed information section.

23.3.3 Android devices

The report includes the detections reported by the protection for Android, both in the graph and in the detailed information section.

23.4. Generating reports

Endpoint Protection lets you generate reports about the security status of your network and any detections made over a given period of time. You can also select the content that appears in the report, whether you want more detailed information and if you want graphs. All of these options are quick and simple to manage.

In the main window of the Web console, click **Reports**. The **Reports** window will open, which is divided into two sections: The first one lets you select the content and scope of the report, and the second one lets you schedule report sending tasks.



23.4.1 Report content

- 1. First, select the type of report that you want to generate.
- 2. In the Period menu, select the period you want to be covered in the report (last 24 hours, last 7 days or last month).

You can select different types of information depending on the type of report.

23.4.2 Report scope

- In the tree below Report scope, select the group or groups to be included in the report.
- 2. Select the All checkbox to select all existing groups.

If you don't need to schedule a report sending task but want to see the report immediately, click **Generate report**. The report will be immediately generated, and will appear on the report list in the left-hand side of the window.

23.4.3 Scheduling reports to be sent by email

You can schedule tasks to send reports by email to selected recipients and in different formats.

The frequency options to schedule reports are as follows: monthly, weekly, daily and the 1st of the month.



You can schedule up to 27 sending tasks. If you reach that limit, you will need to delete a previous task to create a new one.



To be able to schedule report sending tasks you must have the appropriate permission. Please refer to the Types of permissions section in this Help file.

The number of non-scheduled reports that you can save is limitless. To access a report, simply click its name on the list that appears on the left side of the **Reports** window.

Click **Save** when you have finished creating and configuring a report. The report will appear on the report list on the left side of the window, and will be sent on the established date.



23.5. Viewing reports

Once you have generated a report, you can move around its pages using a series of controls. You can also carry out searches and export it to a different format.

icon and select the relevant format from the 1. To export the report, click the drop-down list.



To export the reports in Internet Explorer, the option Do not save encrypted pages to diskmust be cleared in the Security section of the Advanced tab (Tools > Internet options).

- Click to refresh the report view.

 You must export a report prior to printing it. Once exported, you can print the downloaded file.
- The first time you want to print a report (only available in Internet Explorer) you will be asked to install an ActiveX control from the SQLServer.



24. Uninstallation

Types of uninstallation

Local uninstall

Centralized uninstallation

Remote uninstallation



24.1. Types of uninstallation

You can uninstall the protection in different ways:

Local uninstallation

If you want to uninstall the protection locally, you will have to do it manually from each computer, using the relevant option in the operating system's control panel.

Centralized uninstallation

This uninstallation method is only available for Windows computers.

Centralized uninstallation of the protection from several computers simultaneously can be performed using the distribution tool. This tool is downloaded and run on a computer from which the process for uninstalling the protection from selected computers is launched.

Remote uninstallation

This uninstallation method is only available for Windows computers.

Remote uninstallation is used to uninstall the protection from a Web console located in a different location from that of affected computers. You can configure the uninstallation tasks and specify which computers will be affected.



During the local and centralized uninstallation processes you may be requested to enter the password that you set when you created the configuration profile for the relevant protection. Bear in mind, however, that neither Linux nor OS X computers support password-protected uninstallation.

24.2. Local uninstall

Endpoint Protection can be uninstalled manually from the Windows Control Panel, provided the administrator has not set an uninstall password when configuring the security profile for the computer in question. If they have, you will need authorization or the necessary credentials to uninstall the protection.

24.2.1 How to manually uninstall Endpoint Protection

Windows 8 and later:

Control Panel > Programs > Uninstall a program.

Alternatively, type 'uninstall a program' at the Windows Start Screen.

Windows Vista, Windows 7, Windows Server 2003, 2008 and 2012:

Control Panel > Programs and Features > Uninstall or change a program.

Windows XP:

Control Panel > Add or remove programs

OS X

Finder > Applications > Drag the icon of the application that you want to uninstall to the recycle bin.

Android devices:

- 1. Go to Settings.
- 2. Security > Device administrators.
- 3. Clear the Endpoint Protection checkbox. Then, tap Disable > OK.



4. Back in the Settings window, tap Apps. Tap Endpoint Protection > Uninstall > OK.

24.3. Centralized uninstallation

This uninstallation method is only available for Windows computers.

In the main console window, click **Installation** and then **Uninstallation** from the menu on the left. Select **Centralized uninstallation**. You will see the **Centralized uninstallation** window.



IMPORTANT: Before downloading and installing the distribution tool, check the requirements for the computer where the tool is to be used.

24.3.1 Downloading and installing the distribution tool

- In the main console window, click Installation and then Uninstallation from the menu on the left. Select Centralized uninstallation (distribution tool)..
- In the download dialog box, select Save, then, once it has downloaded, run the file from the directory you have saved it to. A wizard will guide you through the installation process.

Once you have installed the distribution tool, you have to open it in order to uninstall the protection from your computers. You will see the main window from which you can uninstall the protection.

24.3.2 Uninstallation by domain

- 1. Open the distribution tool.
- 2. In the main window, click Uninstall.
- 3. In the tree, find the computers from which you want to uninstall the protection, and select the relevant checkboxes.
- 4. If required, you will be prompted to enter the password you set for the relevant configuration profile.
- 5. Enter the user name and password with administrator privileges that you set for the selected computers (if any).

If you want items removed from quarantine during the uninstallation process, and for the computers to be restarted after uninstallation, select the relevant checkboxes.

24.3.3 Uninstallation by IP address or computer name

- 1. Open the distribution tool.
- 2. In the main window of the distribution tool, click **Uninstall**.
- 3. Select the computers from which you want to uninstall the protection. You can indicate the computers' names, IP addresses or IP address range, separating this data with commas.
- 4. If required, you will be prompted to enter the password you set for the relevant configuration profile.
- 5. Enter the user name and password with administrator privileges that you set for the selected computers (if any).

If you want items removed from quarantine during the uninstallation process, and for the computers to be restarted after uninstallation, select the relevant checkboxes.



24.4. Remote uninstallation

24.4.1 Creating remote uninstallation tasks

This uninstallation method is only available for Windows computers.

The remote uninstallation feature allows administrators to uninstall the protection simply and effectively from the Web console, without having to physically go to each computer. This type of uninstallation therefore saves on costs and legwork.



This option is not available for Linux computers.

The first step is to create and configure an uninstallation task. To do that, the administrator must select the group and the computers in the group whose protection will be uninstalled. After the process is complete, they will be able to check the results of the uninstallation task.

24.4.2 Creating a remote uninstallation task

- In the main console window, click Installation and then Uninstallation in the menu on the left.
- 2. Select Remote uninstallation. This will take you to the Remote uninstallation window.



- To create uninstallation tasks the user must have total control or administrator permissions. For more information, refer to the Types of permissions section.
 - 3. To create a new uninstallation task, click New uninstallation.

In the **Edit installation** window, name the task and select the group of computers whose protection will be uninstalled. The groups displayed will be those on which you have permissions.



If you select the option Restart the computers on finishing uninstallation, remember to save all the information that is being used on the computers.

- If the selected group has a configuration profile for which an uninstallation password has been set, enter it in the Password field.
- Select the computers from the computer list available on the Available computers tab, and click Add. After you select them, they will appear on the Selected computers tab.

To see the results of any of the remote uninstallation tasks configured, go back to the **Remote**



uninstallation window.

24.4.3 Viewing remote unistallation tasks and their results

Viewing uninstallation tasks

Uninstallation tasks are listed in the **Remote uninstallation** window, from where you can also remove them by using the **Delete** button.

Information is organized into the following columns:

- **Name**: This shows the name given to the uninstallation task when created.
- Status: The status icons indicate the status of the uninstallation task.
- **Uninstalled protections**: Indicates the number of protections uninstalled.
- **Date created**: Date the uninstallation task was created.
- Created by: User that created the task.

Depending on your permissions, you can create, view, or remove uninstallation tasks. For more information, refer to the Types of permissions section.

To see the results of any of the uninstallation tasks, click on its name and you will go to the Results window.

24.4.4 Remote uninstallation results

Click the name of an uninstallation task in the **Remote uninstallation** window to see its **results**. In addition to the name and the start and end date of the task, this window also shows information about the computers affected and their status.



If the status of the uninstallation task is On hold, the start date will display a hyphen (-). The same applies to the end date if the task has not finished.

If you want to see the uninstallation task settings, use the View settings link.

24.4.5 Incompatibility between searches for unprotected computers and remote uninstallation tasks

- If a computer is involved in an uninstallation task (Waiting, Starting up, or In progress), it is not possible to create another uninstallation task for it or select it as the computer from which to launch searches of unprotected computers.
- If a computer is running a task for discovering unprotected computers, **it is not possible** to create an uninstallation task for it.



25. Key concepts



Network adapter

The network adapter allows communication between devices connected to each other, and also allows resources to be shared between two or more computers. It has a unique identifier.

Adware

Program that automatically runs, displays or downloads advertising to the computer.

Agent

The agent is responsible for communication between the administered computers and the Endpoint Protection servers, as well as managing local processes.

Genetic heuristic scan

The genetic heuristic scan analyzes suspicious items on the basis of "digital genes", represented by a few hundred characters in each scanned file.

This determines the potential of the software to carry out malicious or damaging actions when run on a computer, and whether it is a virus, spyware, a Trojan, a worm, etc.

Antivirus

Program designed to detect and eliminate viruses and other threats.

Signature file

The file that allows the antivirus to detect threats.

Broadcast domain

This is a logical division of a computer network, in which all nodes can reach each other by broadcast at the data link layer.

Web console

The Web console lets you configure, distribute and manage the protection across all the computers on your network. You can also see the security status of your network and generate and print the reports you want.

Quarantine

Quarantine is the place where suspicious or non-disinfectable items are stored, as well as the spyware and hacking tools detected.

Dialer

Program that redirects users that connect to the Internet using a modem to a premium-rate number. Premium-rate numbers are telephone numbers for which prices higher than normal are charged.

IP address



Number that identifies a device interface (usually a computer) on a network that uses the IP protocol.

MAC address

Hexadecimal, 48-bit unique identifier of a network card or interface. It is individual: each device has its own MAC address.

Excluded computers

Computers selected by the user which are not protected by the solution. Excluded computers are only displayed in the Excluded section, they are not shown anywhere else in the console. No warnings about them are displayed either. Bear in mind that you can undo these exclusions at any time.

Computers without a license

Computers whose license has expired or are left without a license because the user has exceeded the maximum number of installations allowed. These computers will be automatically removed from the list of computers without a license as soon as new licenses are purchased.

Firewall

This is a barrier that can protect information on a system or network when there is a connection to another network, for example, the Internet.

Peer to Peer (P2P) feature

A Peer-to-Peer network is a network without fixed client or servers, but a series of nodes that work simultaneously as clients and servers for the other nodes on the network. This is a legal way of sharing files, similar to sending them via email or instant messaging, but more efficient. In the case of Endpoint Protection, the P2P feature reduces Internet bandwidth consumption, as computers that have already updated a file from the Internet then share the update with other connected computers. This prevents saturating Internet connections.

Proxy feature

This feature allows Endpoint Protection to operate in computers without Internet access, accessing the Web through an agent installed on a computer on the same subnet.

Group

In Endpoint Protection, a group is a set of computers to which the same protection configuration profile is applied. Endpoint Protection includes an initial group - *Default group* to which the administrator can add all the computers to protect. New groups can also be created.

Distribution tool

Once downloaded from the Internet and installed on the administrator's PC, the distribution



tool lets the administrator remotely install and uninstall the protection on selected network computers. In Endpoint Protection, the distribution tool can only be used to deploy the protection to Windows computers.

Hacking tools

Programs that can be used by a hacker to carry out actions that cause problems for the user of the affected computer (allowing the hacker to control the computer, steal confidential information, scan communication ports, etc.).

Hoaxes

Spoof messages, normally emails, warning of viruses/threats which do not really exist.

Administration agent identifier

A unique number or GUID (*Globally Unique IDentifier*) which identifies each administration agent of Endpoint Protection.

Joke

These are not viruses, but tricks that aim to make users believe they have been infected by a virus

Malware

This term is used to refer to all programs that contain malicious code (MALicious softWARE), whether it is a virus, Trojan, worm or any other threat to the security of IT systems. Malware tries to infiltrate or damage computers, often without users knowing, for a variety of reasons.

Node

In computer networks, each computer on the network is a node, and if talking about the Internet, each server also represents a node.

The Cloud

Cloud computing is a technology that allows services to be offered across the Internet. In IT circles, the word 'cloud' (or 'the cloud') is used as a metaphor for 'the Internet'.

Profile

A profile is a specific protection configuration. Profiles are assigned to a group or groups and then applied to all computers that make up the group.

Phishing

A technique for obtaining confidential information fraudulently. The information targeted includes passwords, credit card numbers and bank account details.

Local process

The local processes are responsible for performing the tasks necessary to implement and



manage the protection on computers.

Potentially unwanted program (PUP)

A program that may be unwanted, despite the possibility that users consented to download it. They are usually installed legitimately as part of another program.

Protocol

System used for interconnection of computers. One of the most commonly used is TCP-IP.

Proxy server

A proxy server acts as an intermediary between an internal network (an intranet, for example) and an external connection to the Internet. This allows a connection for receiving files from Web servers to be shared.

Port

Point through which a computer is accessed and information is exchanged (inbound/outbound) between the computer and external sources (via TCP/IP).

Rootkit

A program designed to hide objects such as processes, files or Windows registry entries (often including its own). This type of software is not malicious in itself, but is used by hackers to cover their tracks in previously compromised systems. There are types of malware that use rootkits to hide their presence on the system.

Exchange Server

Mail server developed by Microsoft. Exchange Servers store inbound and/or outbound emails and distribute them to users' email inboxes. To connect to the server and download their email, users must have an email client installed on their computers.

SMTP server

Server that uses SMTP -simple mail transfer protocol- to exchange email messages between computers.

Spyware

A program that is automatically installed with another (usually without the user's permission and even without the user realizing), and which collects personal data.

Network topology

The communication structure of nodes on a network.

Trojans

Programs that reach computers disguised as harmless programs that install themselves on computers and carry out actions that compromise user confidentiality.



Public network

This is the type of network you find in Internet cafes, airports, etc. Visibility of computers is restricted on such networks, and there are restrictions on sharing files, resources and directories.

Trusted network

In this case we are generally talking about office or home networks. Your computer will be perfectly visible to the othe computers on the network. There are no limitations on sharing files, resources or directories.

Environment variable

This is a string of environment information such as a drive, path or file name that is associated with a symbolic name that Windows can use. You can use the System applet in the Control Panel or the 'set' command at the command prompt to set environment variables.

Viruses

Viruses are programs that can enter computers or IT systems in a number of ways, causing effects that range from simply annoying to highly-destructive and irreparable.



26. Appendix1: Performing basic operations using the Command Prompt (Windows)



26.1. Introduction

The basic operations you can perform using the Command Prompt window are:

- Install the protection remotely
- Remotely check whether the protection has installed correctly
- Uninstall the protection
- Update the signature files
- Update policies and settings
- Get the date of the latest signature file
- Get information about the status of the antivirus and firewall protection

26.2. Pre-install action. Downloading the installation package

Before installing the protection, you must get the Endpoint Protection installation package: WaAgent.msi. This installation package could be located in the Remote Desktop Management SaaS solution repository for the client in question.

26.2.1 Options for downloading the installation package

The installation package can be generic, specific for the client, or specific for the client and the security profile.

Depending on the option selected, the command-line arguments used may have to comply with certain specific parameters. The download options are:

- Download the package from any client account and with the DEFAULT profile. Then, during installation, pass as parameter the client ID and the group ID for the client in question. This will indicate to which client the protection belongs and the relevant security profile and group.
- Download the relevant installation package for each client. In this case, there is no need to indicate the client ID.
- Download the relevant installation packager for each client and for each group with its security profile. In this case there is no need to indicate the client ID or the group to which the computer belongs.

26.2.2 How to download the installation package (WaAgent.msi)

1. Access the specific client account through the Panda Cloud console.



2. Click the Endpoint Protection icon to access the Web console.



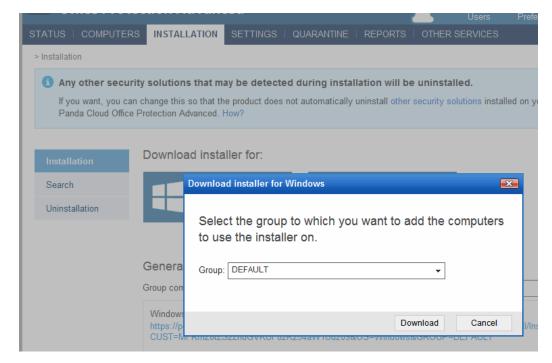


My services



Office Protection

3. Go to **Installation**. Download the installation package for this client for the Default group, corresponding to the Default security profile (i.e. antivirus enabled).



4. Download the installation package and save it locally.

26.3. Installation steps

26.3.1 Step 1.

Download the installation package to the desktops to protect.



26.3.2 Step 2.

Run the installation command in the directory where you have downloaded the installation package.

msiexec /i "WaAgent.msi" /qn <GROUP> <GUID> <ALLOWREBOOT>

The optional parameters are:

<GROUP> The group, and therefore the security profile of the computer in the client's network.

The .msi file will already have a value assigned in the download. This value can be overwritten, specifying the GROUP parameter.

<GUID> Client ID for the computer on which the protection is being installed.

The .msi file will already have a value assigned in the download. This value can be overwritten, specifying the GUID parameter.

The GUID can be found in the **Installation** section of the Web console, as the CUST parameter in the shortcut to the installation package

Download installer for:





Generate installation URL

Group computers will be added to: DEFAULT

Windows
https://pcop610momoconsole.cloudapp.net/PartnerConsole/cv9/Customers/Administration/Install/Installer/GetAgent.aspx?
CUST=MFRmZ0tZS2ZhdGVKUFozK254aW1Udz09&OS=Windows&GROUP=DEFAULT

Linux
https://pcop610momoconsole.cloudapp.net/PartnerConsole/cv9/Customers/Administration/Install/Installer/GetAgent.aspx?
CUST=MFRmZ0tZS2ZhdGVKUFozK254aW1Udz09&OS=Linux&GROUP=DEFAULT

<ALLOWREBOOT> Lets you specify if the protection installer can restart the computer once installation is complete.

ALLOWREBOOT=TRUE ==> Allows restart

ALLOWREBOOT=FALSE ==> Doesn't allow restart

Examples:

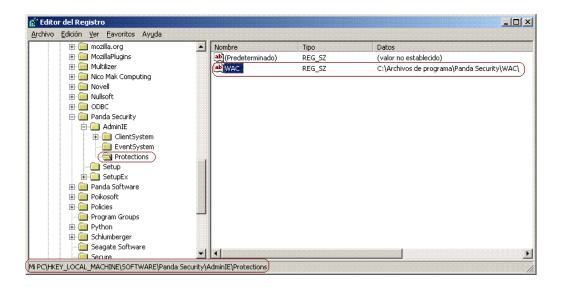
```
msiexec /i " WaAgent.msi" GROUP=GROUP_ONLYAV GUID={81729831} /qn
msiexec /i " WaAgent.msi" GROUP=DEFAULT ALLOWREBOOT=TRUE /qn
```

26.4. Remote verification of installation

You can check if Endpoint Protection is installed by checking the registry key.

HKLM\Software\Panda Security\AdminIE\Protections





26.4.1 Verification Steps

Step 1.

Check whether the following key exists:

HKLM\Software\Panda Security\AdminIE\Protections

If it does, go to step two. If it doesn't, then the protection is not installed.

Step 2.

Get the WAC value. The data associated with this value indicate the location of the protection installation.

If it exists and it is not empty, then the protection is installed.

If it does not exist or it is empty, then the protection is not installed.

26.5. Uninstalling Endpoint Protection

To uninstall Endpoint Protection from a computer you must first uninstall the agent and then the protection.

26.5.1 Uninstallation steps

Step 1

The command for uninstalling the protection is available by consulting the UnPath value in theLM\SOFTWARE\Panda Security\SetupEx\AdminIE registry key.

Step 2

The protection uninstallation is run silently:

<HKLM\SOFTWARE\PandaSoftware\Setup> Unpath value> /qn
XMLCONFIGFILE=c:\UninstallPassword.xml

Where the content of the xml file is as follows:

<?xml version="1.0" encoding="UTF-8"?>
<CloudAvBootstrap>



<Version>1</Version>

<InstallationConfiguration>

<UninstallationPassword>Uninstalla

tionPassword</UninstallationPassword>

</InstallationConfiguration>

<ProductConfiguration>

</ProductConfiguration>

</CloudAvBootstrap>

You will only need to use the PASS parameter if you have configured an uninstallation password in the profile.

Step 3

The command for uninstalling the agent is available by consulting the UnPath value in the HKLM\SOFTWARE\Panda Security\Setup registry key.

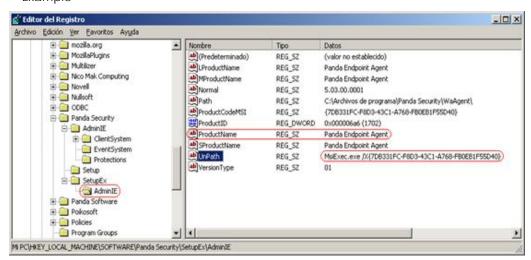
Step 4

The agent uninstallation is run silently:

<HKLM\ SOFTWARE\Panda Security\ SetupEx\AdminIE > /qn
PASS=<Password>

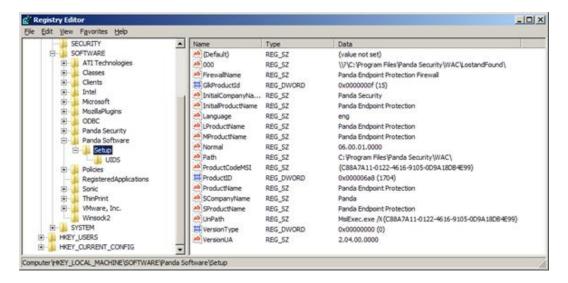
You will only need to use the PASS parameter if you have configured an uninstallation password in the profile.

Example



MsiExec.exe /X{7DB331FC-F8D3-43C1-A768-FB0EB1F55D40} /qn





MsiExec.exe /X{C88AtAA-0122-4616-9105-0D9A18D84E99} /qn

26.6. Updating the signature file

The signature file is updated through the WalUpd local process.

26.6.1 Steps for updating the signature files

Updating settings

If any changes are made to the security profile of the group to which the computer belongs, this will be deployed to the workstation the next time it consults the server. However, it is possible to force the update of the settings through the WalConf local process.

26.6.2 Steps for updating the settings

```
CD %ProgramFiles %\Panda Security\WaAgent\WasLpMng WAPLPMNG.exe WALCONF -force
```

```
CD %ProgramFiles %\Panda Security\WaAgent\ WasLpMng WAPLPMNG walscan -T:<FILENAME> -P:WAC -A:START
```

Getting the date of the signature files

The process to determine if the protection is updated with the latest signature files is carried out in the backend of Endpoint Protection.

The agent sends the server the date of the last update and this is checked against the date of the last signature files published.

In this section we explain the mechanism for getting the date of the last signature file update on the computer.



Remember that this information, along with other information about the protection status, is updated continually on the computer in a file called WALTEST.DAT.

This is an XML file, and can be treated as such in order to parse its content for such information.

In the <PavsigDate> section there is information relating to the date of the last signature file update.

You therefore need to get this file and process its content, searching for the <PavsigDate> tag

26.6.3 Obtaining the signature files date

Step 0

Prior to getting the information, it is advisable to launch an update of the signature files as detailed in Section 4. Then refresh the information in waltest.dat by launching the waltest local process.

```
CD %ProgramFiles %\Panda Security\WaAgent\WasLpMng
WAPLPMNG.exe WALUPD -force
WAPLPMNG waltest -force
(Update the file WALTEST.DAT)
```

Step 1

Go to the Waltest local process directory and get the waltest.dat file.

```
CD &ProgramFiles %\Panda Security\WaAgent\WalTest
(find the file: WALTEST.DAT)
```

Step 2

Look for the tag "<PavSigDate>". To do this, you can use a program for parsing XML files, so you'll have to rename the waltest.dat file to XML, or use the FindString DOS command for finding strings in files.

Here we explain how to get this information using the FindString command.

```
FindStr "<PavSigDate>" waltest.dat
(find tag <PavSigDate>)
```

The information will be similar to the following:

<PavSigDate>2012-03-23 12:25:43</PavSigDate>

In this example, the date of the last signature file is "2012-03-23 12:25:43".

Getting the status of the antivirus, the firewall and the device control modules

This information, along with other information on the real status of the protection, is continually refreshed in the WALTEST.DAT file.

As mentioned above, this is an XML file, and can be treated as such in order to parse its content for such information.

In the <AVSTATUSINFO> section there is information about the status of each of the antivirus



protections. Each <JOBID> section refers to each protection. The information available is as follows:

- IsInstalled> Protection installed
- <IsStarted> It is running.
- <IsActivated> It has been enabled in the configuration

The values and meanings of the JobIDs are:

JobID	Meaning
2	File protection (permanent file protection)
4	Email protection (permanent email protection)
64	Firewall protection
256	Device Control
512	Transport protection on Exchange Servers
1024	Inbox Protection of Exchange Servers
2048	Antispam Protection on Exchange Servers
4096	URL Monitoring.
8192	Antimalware Protection in Web browsing

26.6.4 Getting information on the status of the protection

Step 0

Previously, although it is not necessary, it is advisable to launch an update of the waltest.dat file by running the WalTest local process.

```
CD %Program Files %\Panda Security\WaAgent\WasLpMng
WAPLPMNG waltest -force
(Update the file WALTEST.DAT)
CD %ProgramFiles %\Panda Security\WaAgent\WalTest
```

Step 1

Go to the Waltest local process directory and get the waltest.dat file.

```
CD %Program Files %\Panda Security\WaAgent\WalTest
(find the file: WALTEST.DAT)
```

Step 2

Get the information you require.

```
FindStr "<JobID> <IsInstalled> <IsStarted> <IsActivated> "waltest.dat
```



(find info in the file WALTEST.DAT)

The information will be similar to the following:

- <AVStatusInfo><JobID>2</JobID>
- </JobInfo><JobStatus><IsInstalled>true</IsInstalled>
- <IsStarted>true</IsStarted>
- <IsActivated>true</IsActivated>
- </JobStatusInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo><JobInfo
 </td>
- </JobInfo><JobStatus><IsInstalled>true</IsInstalled>
- <IsStarted>true</IsStarted>
- <IsActivated>true</IsActivated>
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 Info
 <br/
- </JobInfo><JobStatus><IsInstalled>true</IsInstalled>
- <IsStarted>true</IsStarted>
- <IsActivated>true</IsActivated>

In this example, you will see the following:

Permanent file protection (JobID = 2): Installed, running and active.

Permanent email protection (JobID = 4): Installed, running and active.

Firewall (JobID = 64): Installed, running and active.

Device control (JobID = 256): Installed, running and active

WALTEST.DAT format. <AVSTATUSINFO>

<AVProducts><AVProduct><AVID><AVName>WAC</AVName>

<AVVersion>6.00.12.0000</AVVersion>

</AVID><PendingUpgrade>false</PendingUpgrade>

<PavSigDate>2012-03-23 12:25:43

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<AVStatusInfo><JobStatusInfo><JobInfo><JobID>2</JobID>



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27. Appendix 2: Deploying the protection



27.1. Introduction

Before going into detail on the files, registry keys and folders created on deploying the protection to your computers, we offer information about the administration agent, the P2P functionality or rumor, the proxy functionality and the protection installation times.

All these factors are important to have more in-depth knowledge of the deployment process.

27.2. The administration agent

The agent is responsible for communication between the administered computers and the Endpoint Protection servers. Effectively, it 'talks' with the agents on the computers in the same group and is responsible for downloading installation programs from the Internet.

When the agent installer is run, the Endpoint Protection installation process is launched, which involves a series of different tasks: downloading settings, installing the protection, updating the signature files, etc.

As a fundamental component in the dialogue between different computers, the agent is a key part of the P2P process described below.

27.3. Peer-to-Peer or rumor functionality

The Peer-to-Peer functionality (or 'rumor') reduces use of bandwidth for the Internet connection, as computers that have already updated a file from the Internet then share the update with other connected computers. This prevents saturating Internet connections.

The P2P functionality is very useful in the deployment of Endpoint Protection when it comes to downloading the installation program. When one of the computers has downloaded the installation program from the Internet, the others are informed by their communications agents.

Then, instead of accessing the Internet, they get the installation program directly from another computer and the protection is installed.

This functionality is also very useful when updating the protection engine and the signature files, and is implemented in the two local processes that need to download files from the Internet: Walupd and Walupg.

This function is activated in the configuration files of these processes.

WALUPD.ini
[GENERAL]

UPDATE_FROM_LOCAL_NETWORK=1

WALUPG.ini
[GENERAL]

UPGRADE_FROM_LOCAL_NETWORK=1

The P2P functionality works independently in each of these local processes. It could be activated in one of them but not in the other.

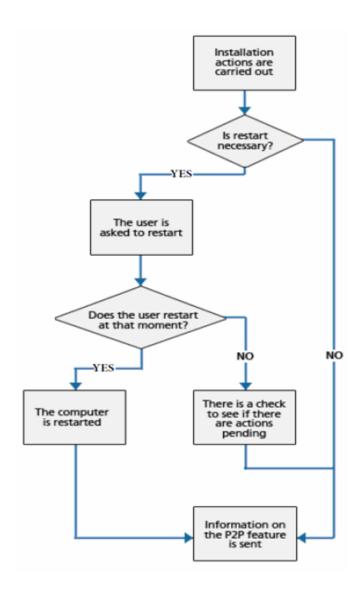


27.3.1 P2P functionality works as follows:

When a computer has updated its signature files or any protection (or the agent itself), it sends a broadcast message with the information about the files that it has to the other computers on the network.

With respect to the sending of information in WALUpg, if a restart is necessary after installing/upgrading the protection, if the user chooses to restart later, the information transmitted via the P2P functionality will be sent immediately instead of waiting for the restart.

This process is detailed in the following diagram:



- 1. The computers save the information, and use it when they need it.
- 2. If a computer needs any file, it will first check whether another computer has it before downloading it from the Internet. If so, it will request the file from the other computer. The file is received asynchronously and there is a maximum time that must elapse before retrying.
- 3. The computer with the file receives a request for the file and sends the message containing the file in response.
- 4. The computer that requested the file receives it, and continues with the update or upgrade.





For computers to send files to others through the P2P functionality they must have at least 128 MB of RA

27.3.2 Dynamic proxy

The agents contain a list with information about computers on the network with agents and which can send messages to the Internet. These agents are called proxies.



To act as a proxy for other agents, the computer must meet the following requirements: to have a direct connection to the Internet and to have at least 128 MB of RAM. Besides, the computer must not be blacklisted and the installation sequence must have finished.

When the list of proxies is empty or none of the agents in the list respond (availability = 0), the agent sends a message via broadcast to the subnet asking "Who is Proxy?" so that it can send a message to the Internet via a proxy.

When it is waiting for data from the list of valid proxies, the proxy module will not attend other requests.

The list of proxies has a value associated to each proxy with a maximum number of attempts to connect with another agent before it will be considered invalid. By default the number is three, and when this value reaches zero the agent will be considered invalid as a proxy. If at any time all the proxies in the list are invalid, the list itself will be considered invalid and the search for proxies is launched through the message "Who is proxy?"

It is possible that the message is sent correctly to the proxy in the list, but the proxy discovers it does not have an Internet connection. In this case, the remote agent will repeat the sequence described here, resending the message to a proxy in the list, but it will also send via TCP a message to the agent that sent the message saying "I am not Proxy", to indicate that it should be removed from the list as it does not have a connection to the Internet.

This process is repeated until the message is sent correctly to the Internet or it passes through a maximum number of proxies without managing to be sent, in which case the message is lost

You can configure the maximum number of proxies through which a message can pass. By default, it will only be sent to one and if the attempt fails the message is lost.

The message contains a list of the proxies through which it has passed, to avoid being sent twice to the same proxy without Internet connection.

27.3.3 Static proxy

If you want all access to the Internet to be made through a specific computer chosen by the administrator, instead of dynamically through certain computers, the communications agent offers the possibility to specify which computer you want to act as a proxy.

The computer that acts as a static proxy must meet the following requirements:

- It must have an agent installed (version 6.0 or later).
- It must have direct Internet access.



- It must have at least 128 MB of RAM.
- It must have established a connection to the server in the last 72 hours.
- The computer must not be blacklisted and the installation sequence must have finished.

If, at any time, the computer set to work as a static proxy ceases to meet some of the requirements to act as such, the proxy option will be disabled in the console, the name of the computer will disappear, and a message will be displayed indicating the requirement that was not fulfilled.

You can select another computer to work as a static proxy. If a computer stops acting as a static proxy because it has been blacklisted, but is then whitelisted, it must be configured again to work as a static proxy so that all communications with the server pass through it.



When the agent has to access the Internet, it will first try to communicate using the static proxy.

If communication with the static proxy is not possible, it will try to establish connection using the usual sequence of communication procedures.

- If a valid configuration is stored, it will try to communicate using this configuration.
- Otherwise, it will try to connect directly to the Internet.
 If it cannot connect directly, it will try through another computer acting as a 'dynamic proxy', as described in the previous section.

When the computer acting as a proxy receives a request to access the Internet, it will try to connect directly. If the connection is successful it will send a reply to the agent requesting the connection.

To configure a static proxy, go to the Server connection settings section on the Advanced settings tab (available from the Windows and Linux section).

27.4. Deploying Panda Endpoint Agent

Main architecture modules

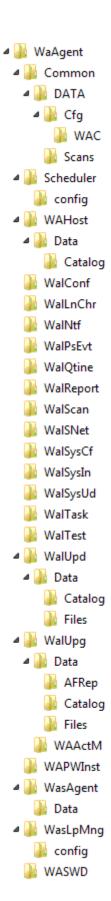
Panda Endpoint Agent comprises the following four main components:

- Administration agent
- Local processes
- Watchdog
- Task scheduler

27.4.1 Panda Endpoint Agent folder tree and registry entries

In the following diagram, AdminIEClientPath is the root path where the modules are installed.





WasAgent-Root installation folder of Panda Endpoint Agent.

Common - Folder with the common files, such as WalAgApi.dll, kernel libraries, etc. A subfolder called "Data" is created in this folder during execution of local processes.

Scheduler - Folder where the task scheduler files will be saved.



Scheduler\Config - Folder where the task scheduler tokens will be saved.

WaHost – Folder where the administration agent service files will be saved. A subfolder called "Data" will be created in this folder during execution of local processes.

WalConf - Folder where the WalConf local process files will be saved.

WalTest - Folder where the WalTest local process files will be saved.

WalLnChr - Folder where the WalLnCh local process files will be saved.

WalNtf - Folder where the WalNtf local process files will be saved.

WalPsEvt - Folder where the WalPsEvt local process files will be saved.

WalQtine - Folder where the WalQtine local process files will be saved.

WalReport - Folder where the WalReport local process files will be saved.

WalScan - Folder where the WalScan local process files will be saved.

WalSNet - Folder where the WalSNet local process files will be saved.

WalSysCf - Folder where the WalSysCf plugin files will be saved.

WalSysIn - Folder where the WalSysIn plugin files will be saved.

WalSysUd – Folder where the WalSysUd plugin files will be saved.

WalTask - Folder where the WalTask plugin files will be saved.

WalTest - Folder where the WalTest local process files will be saved.

WalUpd – Folder where the WalUpd local process files will be saved. A subfolder called "Data" will be created in this folder during execution of the local process.

WalUpd – Folder where the WalUpd local process files will be saved. A subfolder called "Data" will be created in this folder during execution of the local process.

WAPWInst - Folder where the files of the installation supervision process will be saved.

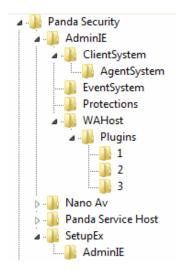
WasAgent - Folder where the communications agent files will be saved. When run, the agent creates a subfolder called "Data".

WasAgent – Installation root directory of the administration agent. When run, the agent creates a subfolder called "Data".

WasLpMng - Folder where the local process manager files will be saved.

WasLpMng\Config - Folder where the local process manager tokens will be saved.

27.4.2 Windows registry entries tree





Panda Security refers to the Windows registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\Panda Security\

AdminIE

Folder where all Endpoint Protection registry entries are created.

ClientSystem

Registry key containing the Panda Endpoint Agent entries. These entries are:

- InstallPath This contains the root directly in which Panda Endpoint Agent has been installed ("AdminIEClientPath").
- EventSystem Contains the event system settings.
- Protections Contains information about the protection.

WAHost

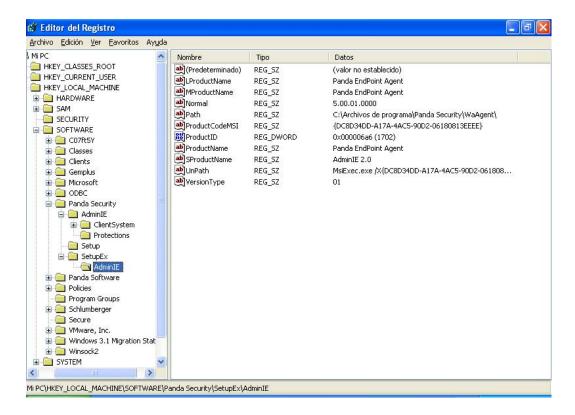
Contains the administration agent service settings.

SetupEx

Folder in which the registry entries are created which will be used by the Agent installers.

AdminIE

Registry key containing the Panda Endpoint Agent entries used by the installers. These entries are illustrated in the following diagram:



When run, the agent creates the "AgentSystem" key under "ClientSystem". Within this key several entries are created. All the installer has to do is delete the "AgentSystem" key and its



entries in the uninstallation process.

27.4.3 Distribution of files

All administered computers have the administration agent installed. Along with the agent, local processes are also installed.

Below we list all the agent paths and files of the administration agent and their local processes:

Administration agent

The agent is installed in <AdminIEClientPath>\WasAgent

- WasAgent.conf
- WasAgent.dll
- WaPIRes.exe
- WAInterface.dll
- Wa AGPRX.dat
- LPTokens.dat
- INTEGRA.dat
- INTEGRA.bak (generated during installation but not distributed)
- INTEGRA.start (generated during installation but not distributed)
- AgentSystem.DAT
- Proxy.dat (generated during installation but not distributed)

During execution of the agent the "Data" subfolder is created with the following files:

- MsiExec.log
- WasAgent.log
- WaHost.log
- WapWinst.log
- Counters.ini

The "AgentSystem" registry key is also created under "ClientSystem". Within this key several entries are created:

- Value1
- Value2
- Value3

If the Internet connection is via proxy, the connection details requested from the user are stored in AgentSystem.dat in the folder <AdminIEClientPath>\WasAgent.

All must be deleted during uninstallation.

WalConf local process

Installed in < AdminIEClientPath >\WalConf

- WalConf.ini
- WalConf.dll

The following file is created during the execution of this local process:



Walconf.log

WalLnChr local process

Installed in < AdminIEClientPath >\WalLnChr:

- Wallnchr.dat
- Wallnchr.dll

The following file is created during the execution of this local process:

WalLnchr.log

WalNtf local process

Installed in < AdminIEClientPath >\WalNtf

- WalNtf.dat
- WalNtf.dll
- WalNtf.ini

The following file is created during the execution of this local process: WalNtf.log

WalQtine local process

Installed in < AdminIEClientPath >\WalQtine

- WalQtine.ini
- WalQtine.dll

The following file is created during the execution of this local process: WalQtine.log

WalReport local process

Installed in < AdminIEClientPath >\WalReport

- WalReport.dll
- WalReport.ini

The following file is created during the execution of this local process:

- WalReport.log

WalScan local process

Installed in < AdminIEClientPath >\WalScan

- WalScan.dll
- WalScan.ini

The following file is created during the execution of this local process: WalScan.log

WalTest local process

Installed in < AdminIEClientPath >\WalScan

- WalTest.dll
- WalTest.in

The following files are created during the execution of this local process:

- WalTest.dat



- WalTest.log
- Waltestlt.dat
- Waltestdf.dat

WalUpd local process

Installed in < AdminIEClientPath >\WalUPd

- WalUpd.dll
- WalUpd.ini

The following files are created during the execution of this local process:

- Counters.ini
- WalUpd.log

The subfolder Data is created and contains the Catalog subdirectory which can have the following files:

- WEB_GUID
- WEB_CATALOG
- LAST_GUID
- LAST_CATALOG
- LOCAL_CATALOG
- RUMOR_TABLE
- LOCAL_CATALOG.TMP

and the Files subdirectory is created which temporarily holds the files needed for updates.

WalUpg local process

Installed in < AdminIEClientPath >\WalUPg

- WalUpg.dll
- WalUpg.ini
- PavGenUn.exe
- Settings.ini
- UpgradeDialog.exe
- WALPCSMInst.dll
- WAPILnchr.exe

The following files are created during the execution of this local process:

- Counters.ini
- WalUpg.dat
- WalUpg.log
- WAUPGTD.dat
- WAC_Installer.log
- Agent_Installer.log
- WAC_Installer_YYYY-MM-DD_HH.mm.SS.log
- Agent_Installer_YYYY-MM-DD_HH.mm.SS.log
- WAActions.DAT
- WAActM.DAT
- WAAdmR.dat



- WAAdmR.ini
- WAAFREP.DAT

The folder WAActM may be created here to store the files downloaded by the local process to perform certain actions.

The subfolder Data is created and contains the Catalog subdirectory which can have the following files:

- WEB_GUID
- WEB_CATALOG
- LAST_GUID
- LAST_CATALOG
- LOCAL_CATALOG
- RUMOR_TABLE
- LOCAL_CATALOG.TMP
- INSTALLED_PRODUCTS.TMP

and the Files subdirectory is created which temporarily holds the installers needed for product installations/updates.

The AFRep subfolder will store a repository of files downloaded to take protection-related actions.

WalSNet local process

Installed in < AdminIEClientPath >\WalSNet

- WalSNet.dll
- WalSNet.ini

The following files are created during the execution of this local process:

- WALSNet.log
- WALSNET.dat

WalTask plugin

Installed in < AdminIEClientPath >\WalScan

- WalTask.dll
- WalTask.ini

The following files are created during the execution of this local process:

- WalTask.log
- SCAN_TASKS.DAT

WalSysCf plugin

Installed in < AdminIEClientPath >\WalSysCf

- WalSysCf.dll
- WalSysCf.dat

The following file is created during the execution of this local process:

- WalSysCf.log



WalSysUd plugin

Installed in < AdminIEClientPath >\WalSysUd

- WalSysUd\WalSysUd.dll

Local process manager

Installed in < AdminIEClientPath >\WasLpMng

- WapLpMng.exe
- WasLpMng.dll
- Config\Plugins.tok (in the config subdirectory)
- WapLpmng.ini
- WasLpmng.ini

The following files are created during the installation process:

- WapLpmng.log
- WasLpmng.log

Task scheduler

Installed in < AdminIEClientPath >\Scheduler

- PavAt.exe
- PavSched.dll
- PavAt3Api.dll
- Config\Plugins.tok (in the config subdirectory)

The following files are created during the execution of this local process:

- -Pavsched.cfg (generated during the installation process)
- Tasklist.lst (generated during installation but not distributed)

Main service

Installed in < AdminIEClientPath >\WAHost

- WAHost.exe
- WAHostClt.dll

Common libraries

Installed in < AdminIEClientPath >\Common

APIcr.dll

AVDETECT.INI

DATA

libxml2.dll

MiniCrypto.dll

msvcr100.dll

PavInfo.ini

pavsddl.dll

Platforms.ini

PSLogSys.dll

pssdet.dll





psspa.dll

putczip.dll

puturar.dll

putuzip.dll

WalAgApi.dll

WalCount.dll

WALExchInf.dll

WALLMIInf.dll

WALMNAPI.dll

WALOSInf.dll

WALRVNCInf.dll

WALTVNCInf.dll

WALTVWRInf.dll

WALUtils.dll

WalUtils.ini

WALUVNCInf.dll

WaPrxRepos.dll

WaPrxRepos.Ini

WCheckReq.dll

The "Data" subfolder is created during execution, which contains the protection policies so that they are available when the protection is installed.

The following files are created:

- PavInfo
- WALExchInf.log
- WalUtils.log
- WALMNAPI.log
- WALLMIInf.log
- WALRVNCInf.log
- WALTVNCInf.log
- WALUtils.log
- WALTVWRInf.log
- WALUVNCInf.log

Services

Panda Endpoint Agent creates the following service:

- WAHost.exe

Services are installed by calling the executable file through the option "-RegServer", and are uninstalled through the option "-UnregServer"

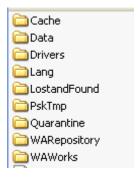
Deployment of EndPoint Protection

EndPoint Protection directory structure

Users can choose the path where they want to install the product, however, the default installation path is:



%allusersprofile%\Datos de programa\Panda Security\Panda Endpoint Protection\Quarantine



InstallPath: EndPoint Protection installation path. This contains the files needed for EndPoint Protection to operate.

Cache: Contains the local signature files.

Data: Contains the behavior analysis technology data files.

Drivers: Contains the binaries used to install/uninstall the units.

NNSNahs: Binaries used to install the firewall intermediate driver.

PSINDvct: Binaries used to install the Device Control technology driver.

Lang: Contains the dictionaries with the strings in the various languages.

LostandFound: Contains the items restored from quarantine when they've been moved by

the email protection or when they couldn't be restored to the original path.

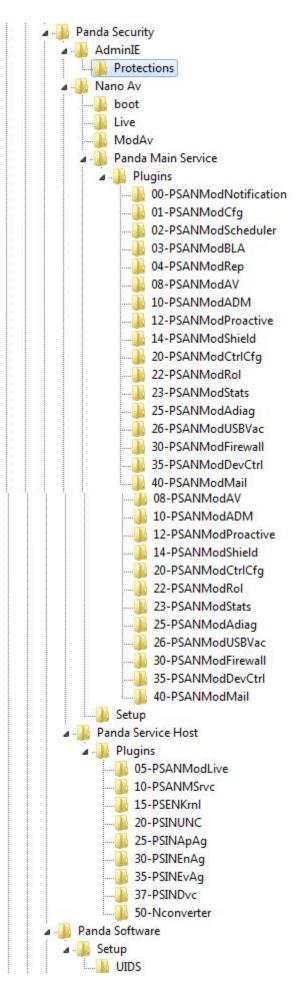
Quarantine: Contains quarantined items.

PskTmp: Temporary configuration files created during the scan.

Registry entries

Registry entries in Panda Software







module.

Panda Security: Key in https://html/key_local_machine\Software\Panda Security that contains the protection keys and values.

AdminIE\Protections: Key that contains the WAC value indicating where the client is installed.

Nano Av\Boot: Kept to maintain compatibility with previous versions. Not currently used.

Nano AV\ModAV: Kept to maintain compatibility with previous versions. Not currently used.

Nano Av\Live: Contains the DownloadFolder value indicating the client's downloads folder

Nano Av\Panda Main Service: Contains the plug-in loading values for the antivirus main

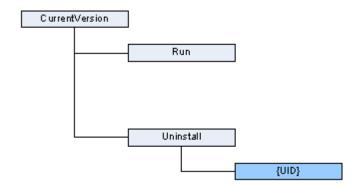
Nano Av\Setup: Contains the protection installation path.

Panda Service Host: Contains the plugins loaded in the service: update system, antivirus main system, engine, file and process interception system, device control configuration system, firewall.

Panda Software\Setup: Product information (name, version, ID, installation path, etc.)

Registry entries in Windows\CurrentVersion

This section deals with the registry entries Panda EndPoint Protectioncreates in the $\mbox{HKEY_LOCAL_MACHINE}\SOFTWARE\Microsoft\Windows\CurrentVersion key.$



CurrentVersion:

HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion

Run: System key that indicates the path of the applications launched at the beginning.Uninstall: System key with information about uninstallers of products installed on the system.Panda Universal Agent Endpoint: Key with the information needed to uninstall the product.

Registry entries in Services

Services: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services

NNSALPC: Firewall driver
NNSHTTP: Firewall driver
NNSIDS: Firewall driver
NNSNAHS: Firewall driver
NNSPICC: Firewall driver
NNSPIHS: Firewall driver



NNSPOP3: Firewall driver
NNSPROT: Firewall driver
NNSPRV: Firewall driver
NNSSMTP: Firewall driver
NNSSTRM: Firewall driver
NNSTLSC: Firewall driver

PRKPAVPROC: Driver used in rookit scanning. **PSBOOT.SYS:** Driver for operations at boot.

PSINAflt: Intercepting filter.

PSINDvct: Device Control driver.

DVCTPROV.sys: Device Control driver.

PSINFile: File intercepting driver.

PSINKNC: Kernel intercepting driver.
PSINProc: Process intercepting driver.
PSINProt: Protection driver (shield, KRE).
PSKMAD: Memory scanner driver.

Services

PSUAService: Task control and management service in sessions.

NanoServiceMain: Client's main service for all protection modules.

CLOUDUPDATEREX: Upgrade tasks service.

Processes

Apart from the services mentioned above, the following processes can be run on the system:

bspatch.exe

Process used to patch signature files.

PAV2WSC.exe

Process used to update the antivirus status in Windows Security Center.

PSANCU.exe

Process used to perform configuration tasks during client installation and upgrades.

PSINanoRun.exe

Process used to install and upgrade the client.

PSNCSysAction.exe

Process used to enable/disable the firewall's NNSNahs intermediate driver.

PSUAMain.exe

Traybar process.

PSUNMain.exe

Client interface process.

Setup.exe

Installation and upgrade tasks process.

WAScanner.exe

Process that manages the background scanning tasks configured from the Web console.



28. Appendix 3: Automatic computer search (Windows)



28.1. Introduction

Endpoint Protection includes a computer search system that gives administrators a global vision of the unprotected computers on the network.

This system is based on configuring and running search jobs performed by a computer that must meet a series of requirements.

Aspects to bear in mind when creating a search job

- Searches run once per job.
- The search job starts once the computer that must perform the search downloads the search command from the Endpoint Protection server. There is then a time period between the creation and running of a job.
- You can start search jobs immediately through the **Update** option in the right-click menu of the protection installed on the computer that performs the search.
- Otherwise, a maximum of 4 hours may pass before the job is run.
- You can define several search jobs for the computer that must perform them. In this case, the jobs will take place sequentially, in the established order.
- If the computer is restarted during a computer search job, the job will start again 5 minutes after restart. Before this, the computer will query the server to find out if the job is still valid.

Information to provide on configuring a search job:

- Job name (a maximum of 50 characters).
- You cannot give two jobs the same name for the same client.
- You cannot use the following characters: <, >, ", ',
- Computer from which to launch the search job. This computer must be selected from the list of protected computers.

Finally, the administrator must select the scope of the search, among the following options:

- The **subnet of the computer** that performs the search (the default option).
- One or several ranges of **IP addresses (IPv4)**. If ranges are entered that contain some common **IP** addresses, the relevant computers will be found only once.
- One of several **domains** entered by the user.

28.1.1 Requirements for the computer that performs the search

- To have the agent and the protection installed, and be correctly integrated into the Endpoint Protection server.
- The agent must be version 5.05 or later.
- It cannot be blacklisted.
- It must have established a connection to the Endpoint Protection server in the last 72 hours.
- It cannot be carrying out an uninstallation job, that is, it cannot show any of the following statuses regarding an uninstallation job:
 - On hold
 - Starting
 - Uninstalling

It must have an Internet connection, either directly or through other computers ('proxy'



feature)

As the search job progresses, Endpoint Protection will show the relevant status.

Search jobs: Sequence of actions and status

The user launches the search job through the Client Console (from a computer with the protection installed).

28.1.2 Job status

Job status: On hold

The computer that performs the search downloads the search command from the server.

The server becomes aware of the action and changes the job status.

Job status: Starting

The computer that performs the search calculates the priority of the new job in relation to other jobs that might also be waiting to be run. The new job waits its turn according to the priority queue.

Job status: Starting

The computer that performs the search checks to see if it fulfills the requirements to run the iob.

Job status: Starting

A message is sent to the server indicating that the job has started running.

Job status: In progress

The computer that performs the search starts scanning the network for the relevant computers.

28.1.3 Search job action sequence

Getting a list of computers:

By IP address (Ranges of IP addresses and subnet)

- The system pings each IP address using the ICMP protocol
- It waits for a response to the pings
- It tries to resolve the names of the IP addresses that respond

By domain

- A list is made of all the computers that belong to the domain
- Checking to see if the computers on the list have the agent installed
- A message is sent to the agent
- The system waits for the response
- Generating a computer list and sending the results to the server.

28.1.4 Search job results

The computer that performs the search sends the server a list of all the unprotected computers on the network, even though the list may not have changed from the one



previously sent from the same computer.

This list contains:

- Computers without an agent installed.
- Computers integrated into another client.

It is not possible to communicate with agents from other clients, therefore no response is received and the system understands the computer is unprotected.

Computers with an agent version prior to 5.05.

The agent on these computers cannot respond to search messages, and so they are considered unprotected.

Computers with an agent version 5.05 or later, which haven't responded to the search message in due time. The wait time for a response is = 3 sec (wait factor)* Number of computers that responded to the ICMP ping+30 sec (security margin).



Blacklisted computers (provided they have an agent version 5.05 or later and are integrated into the client's console) are not considered as unprotected computers and will NOT appear as the result of the search job.

28.1.5 Details of unprotected computers

The following information is obtained about each unprotected computer found:

- IP address.
- Computer name, if the computer that performed the search could resolve it.

28.2. Cases in whic the server may NOT be aware that a computer search job has finished

28.2.1 Case 1

The job status is "On hold", "Starting" or "In progress", and the protection of the computer that performs the search is uninstalled, the computer disappears from the database or is blacklisted while the job is running.

28.2.2 Consequences

The computer that performs the search will not be able to inform the server of the job result. As soon as the server is aware that the computer that performs the search has been eliminated, blacklisted or its protection has been uninstalled*, the status of the search job will change to "Finished with error".



It is considered that the protection has been uninstalled from the computer that performs the search as soon as it sends an 'uninstallation complete' message.

Also, if the computer that performs the search is eliminated:

1. Its name is removed from the search job settings screen, and an error message is



- displayed indicating that the computer has been eliminated.
- 2. Once the computer is eliminated, the information about the group that the computer belonged to is also deleted. Therefore, monitoring users and administrators with permissions over that job (that is, with permissions over the group that the computer that performed the search belonged to), will not be able to view it.

28.3. Case 2

The job status is "On hold", "Starting" or "In progress", and the computer that performs the search is blacklisted and restored later on.

28.3.1 Consequences

The computer will continue with the job it was running, and therefore the job status may change from 'Finished with error' to 'Finished'. This is the only possible change of status.

- If the computer that performs the search has communication problems while running it, it will not be able to inform the server of the job status and results.
- The job status will remain unchanged ("On hold" "Starting" or "In progress") until it is eliminated.
- If an error occurs while the job is being run (status "On hold", "Starting" or "In progress"):
- The job status will remain unchanged ("On hold" "Starting" or "In progress") until it is eliminated.

If the **job is interrupted**, the following happens:

If the computer that performs the search is turned off before the search is complete (either on purpose or for any other reason), the agent will behave as follows on restarting the computer:

- 1. It gueries the server to check if the job is still valid:
- 2. If it is valid, it will perform the search from the start again.
- 3. If it is not valid as the job has timed out, the search is canceled.
- 4. It waits 5 minutes after the computer has restarted to launch the search job again.



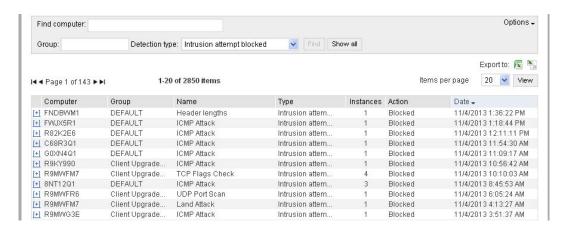
29. Appendix 4: Detecting the origin and type of the attacks



29.1. Detecting the origin of the attacks

The Endpoint Protection Web console allows you to obtain information about the source of the IDS attacks blocked (except in the case of the Drop Unsolicited Responses, SMURF, SYN Flood and UDP Flood attacks).

To do so, use the **Detection type** filter available in the **List of detections** window.



Additionally, clicking the (+) symbol next to each computer name on the list will take you to the Detection details window, where you can find the following information:

Detection details

Computer:	R9MWFM7
IP address:	183.83.204.142
Group:	All\Client Upgrade Enabled
Detection	
Name:	TCP Flags Check
Type:	Intrusion attempt detected
Local IP:	183.83.204.142
Remote IP:	112.198.79.174
Remote MAC:	00-30-88-14-fc-ba
Local port:	28988
Remote port:	39322
Action:	Blocked
Notified by:	Firewall protection
Date:	11/4/2013 10:10:03 AM

Refer to the Detected threats and detection origin section.

For more information about the different types of IDS attacks and the protection provided by Endpoint Protection, refer to the Types of IDS attacks and Description of the IDS protection mechanisms sections.

29.2. Types of IDS attacks

DoS (Denial-of-Service) attacks

Denial-of-service attacks are designed to make a device or service unavailable to its intended users. They rely primarily on brute force, flooding the target with an overwhelming flux of packets, or exploiting known vulnerabilities in an application, operating system or device.



These attacks include:

- LAND attack
- SYN flood
- UDP flood
- ICMP attack
- Fragmentation control

Protocol or application security

Protocol security mechanisms protect certain protocols against known vulnerabilities. They rely on the knowledge of protocols and their context to reject unsolicited requests.

These include:

- Smart WINS
- Smart DNS
- Smart DHCP
- Smart ARP
- Header lengths
- ICMP attack
- Fragmentation control

Tracking and discovery

These protection mechanisms detect deviation from known legitimate behavior in order to track devices and discover vulnerabilities.

These include:

- TCP flags check
- TCP port scan
- UDP port scan
- ICMP filter echo request
- OS detection
- IP explicit path
- Fragmentation control

Description of the IDS protection mechanisms

IP explicit path

Rejects IP packets with an explicit source route.

Land Attack

Detects denial-of-service attacks by stack loop by detecting packets with identical sender and destination addresses.

SYN Flood

Monitoring the status of each connection and the response times means we can detect the number of inbound connections that are never resolved and create an increase in status controls until exceeding certain limits, thereby creating a SYN flood. In this case new connections are denied. Although it is possible that we might deny legitimate new connections, at least the integrity of those already established and outbound connections



is protected.

UDP Flood

Rejects UDP streams to a specific port if the number of UDP packets exceeds a preconfigured threshold in a specific time period.

TCP Port Scan

Port scanning detector for TCP ports, i.e. it detects if a host tries to connect to several ports in a specific time period. It blocks the attack preventing replies to the suspicious host. In addition, it filters the replies so the sender doesn't even get closed port replies.

TCP Flags Check

Detects TCP packets with invalid flag combinations. It acts as a complement to the protection against "Port Scanning" by blocking attacks of this type such as "SYN&FIN" and "NULL FLAGS"; and also complements the protection against "OS fingerprinting" attacks as many of these are based on replies to invalid TCP packets.

Header Lengths

- IP: Rejects inbound packets with an IP header length that exceeds a specific limit.
- TCP: Rejects inbound packets with a TCP header length that exceeds a specific limit.
- Fragmentation control: Checks the status of packet fragments to be reassembled at the destination, protecting the system against memory overflow attacks due to missing fragments, ICMP redirects masked as UDP and computer scanning.

UDP Port Scan

Protects the system against UDP port scanning attacks.

Smart WINS

Rejects WINS replies that do not correspond to requests sent by the administrator.

Smart DNS

Rejects DNS replies that do not correspond to requests sent by the administrator.

Smart DHCP

Rejects DHCP replies that do not correspond to requests sent by the administrator.

Smart ARP

Rejects ARP replies that do not correspond to requests sent by the administrator.

ICMP Attack

This filter performs various checks.

- Small PMTU: By inspecting ICMP packets, the solution detects invalid MTU values used to generate denial of service or slow down outbound traffic.
- SMURF: Rejects unsolicited ICMP replies if they exceed a certain threshold in a



specific time period.

- Drop unsolicited ICMP replies: Rejects all unsolicited ICMP replies and ICMP replies that have expired due to timeout.

ICMP Filter Echo Request

Rejects incoming pings.

OS Detection

Falsifies data in replies to the sender to trick operating system detectors. This protection complements the TCP Flags Check.



30. Appendix 5: The installation, deployment, running processes and reports of the protection for Linux



30.1. Requirements

Please, go to Requirements for Linux systems for up-to-date information about the installation requirements for Endpoint Protection on Linux systems.

30.2. Installation

To install the protection so that it integrates seamlessly with the PCOP Server, you must download the installer from the console as indicated in <u>Installing the protection on Windows/Linux computers</u> section.

The name of the downloaded installer is "LinuxWAAgent.run".

After downloading the installer, you must assign execute permissions to it through the file manager or running the following command:

chmod +x LinuxWAAgent.run

Then, run the installer. Run it as the 'root' user for the installation to run correctly. To do so, double-click the installer from the file manager or run the following command from the command-line terminal:

./LinuxWAAgent.run

The installer decompresses the files and runs a shell script, post_install.sh, which takes care of post-installation tasks, such as writing configuration files, launching processes, etc.

After installation is complete, the following processes must be running:

- PCOP_AgentService
- PCOPScheduler

You can check the process status by running the following command:

ps aux | grep PCOP

Deployment

After the product is installed, the following folders and files are created on disk:

- Agent folder "/opt/PCOPAgent"
- Settings folder "/etc/PCOPLinux"
- File "pcopagent" in folder /etc/init.d

Processes

As previously said, when Endpoint Protection is installed on a computer, the following processes will usually be running:

- PCOP_AgentService
- PCOPScheduler

These are daemon processes which are automatically launched when the operating system boots up.

It has been checked that, when sending the integration message, if integration fails either



because the message could not be sent or the server returns an integration error, the PCOP_AgentService process stops and there are no new integration attempts until the process starts again.

Run the following command to stop the processes manually:

/opt/PCOPAgent/Stop-PCOP-Agent

Run the following command to restart the processes:

/etc/init.d/pcopagent start

In order to work properly, the product must be able to access the following Internet domains, over HTTP and HTTPS:

- mp-agents-inst.pandasecurity.com
- mp-agents-sync.pandasecurity.com
- mp-agents-async.pandasecurity.com

These domains might change in future versions of the product.

Bear in mind the requirements the different computers must meet, and the external URLs they must be able to access. Refer to the Requirements and external URLs section.

30.3. Communication via proxy server

If the computer uses a proxy server to connect to the Internet, you must configure the product to use the right proxy server. To do so, edit the proxy.conf file, entering the proxy server information using the following format:

proxy:port:user:password

There are two instances of this file:

- /opt/PCOPAgent/proxy.conf
- Contains the settings used by the agent to send messages to the Endpoint Protection server.
- /opt/PCOPAgent/Common/Binaries/PcopSigUpdater-bin/proxy.conf

Contains the settings used by the process that takes care of updating the signature files.

You can also establish the configuration in a more visual way, by running the proxyConf.sh script from the /opt/PCOPAgent or /opt/PCOPAgent/Common/Binaries/PcopSigUpdater-bin folders, depending on the proxy configuration file to edit.

Only basic authentication is supported in communications via a proxy server.

30.3.1 User validation

If the user is invalid or the computer is blacklisted, Endpoint Protection won't be able to work normally, that is, it won't be possible to send messages to the server or update signature files.



30.3.2 Signature file updates

To update the signature files, access must be granted to the following domains:

- http://acs.pandasoftware.com
- http://cloudav.downloads.pandasecurity.com
- http://cloudav.updates.pandasecurity.com

Please, go to Requirements for Linux systems

30.4. Scans

Endpoint Protection lets you configure on-demand, scheduled and periodic scans for each profile on Linux computers just like on Windows computers. On Linux, however, email scanning is not yet available.

30.4.1 On-demand scans

The profile settings let you configure on-demand (immediate) scans of the following items:

- The whole computer
- Hard disks
- Other items

Select "Other items" to specify a path to scan using the Linux path syntax.

New scan job Scan job details Nuevo análisis programado Scan type: Immediate scan The whole computer Hard disks Email Other items

On-demand scans will be launched immediately after the relevant configuration has been downloaded, which takes a maximum of 4 hours by default.

30.4.2 Scheduled scans

The profile settings let you create scheduled scans of the following items:

- The whole computer
- Hard disks
- Other items

You can also set the date and time for the scan (local time).



Select "Other items" to specify a path to scan using the Linux path syntax.

Scheduled scans will run automatically on the scheduled date and time, provided the relevant configuration has been downloaded, which takes a maximum of 4 hours by default.

30.4.3 Periodic scans

The profile settings let you create periodic scans of the following items:

- The whole computer
- Hard disks
- Other items

Select "Other items" to specify a path to scan using the Linux path syntax.

You can also set the date and time for the scan (local time). Finally, you can set the frequency of the scan:

- Daily
- Weekly
- Monthly

Periodic scans will be automatically launched on the scheduled date and time, at the scheduled frequency, provided the relevant configuration has been downloaded, which takes a maximum of 4 hours by default.

30.4.4 Launching scans manually

You can launch scans manually from the computer using the PAVSL protection.

Use the following parameters to scan and disinfect files:

Pavsl.sh -cmp -heu -rpt [log] -noglk -prx [http(s)://user:password@computer:port] [samples_path]

Where:

cmp parameter: Indicates whether to parse compressed or package files to scan their contents.

heu parameter: Indicates whether to use heuristic technologies in the scan.

rpt parameter: Indicates the directory (path) where a log file with the scan results will be placed.

noglk parameter: Indicates the scan will be carried out without querying the cloud.

prx parameter: Contains the proxy server settings should a proxy server be used to connect to the Internet.

The format should be as follows:

http://user:password@computer:port

or

https://user:password@computer:port

samples_path parameter: Indicates the path of the file or directory to scan (and any subdirectories it may contain). If you want to scan multiple paths, enter them enclosed in double quotes and separated by commas ("path","path"). In the case of paths with blank



spaces, use the escape character (\) and enclose the path in double quotes ("), both whether you want to scan a single path or more than one.

For example:

- pavsl.sh -cmp -heu -rpt /tmp/log /home/user/files
- pavsl.sh -cmp -heu -rpt /tmp/log "/home/user/files","
 /home/user/files2"
- pavsl.sh -cmp -heu -rpt /tmp/log "/home/user/dummy\ files"
- pavsl.sh -cmp -heu -rpt /tmp/log "/home/user/dummy\ files","/home/user/malware"

If you want the scan results to be sent to the server, the log file must be generated in folder /opt/PCOPAgent/Common/DATA/ScansLogs. Also, the file name must be SCAN_XXXX.log, where XXXX is a 4-digit number.

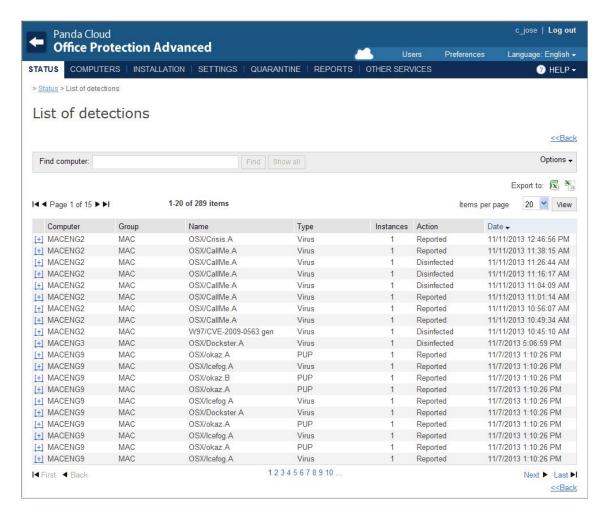
For example:

pavsl.sh -cmp -heu -rpt /opt/PCOPAgent/Common/DATA/ScansLogs/SCAN_2000.log /home/user/files

30.5. List of detections

This window displays information about the items detected on the network computers.





Detection reports are sent every 6 hours by default (provided there are detections to report), and are displayed in the Web console, in the **Status** >**List of detections** window, just like for Windows systems.

30.6. Upgrading Endpoint Protection

Endpoint Protection doesn't have an automatic upgrade feature.

If you want to upgrade your Endpoint Protection version, you must access the console to download the new version and run the installer manually on the computer.

You don't need to previously uninstall your current Endpoint Protection, as the new version installs over the previous one.

30.7. Uninstall

Endpoint Protection doesn't have an uninstallation script, so you need to take the following steps to uninstall it manually:

Stop the processes

To do so, run the following command:

/opt/PCOPAgent/Stop-PCOP-Agent

Delete the /opt/PCOPAgent folder and all its contents.



Delete the /etc/PCOPLinux folder and all its contents.

Delete the service. Run the following commands depending on the distribution.

SUSE

chkconfig -del pcopagent

Debian / Ubuntu

update-rc.d -f pcopagent remove

Delete the /etc/init.d/pcopagent file.



31. Appendix 6: The installation, deployment, running processes and reports of the protection for OS X



31.1. Requirements

Visit Requirements for OS X systems for up-to-date information about the installation requirements for Endpoint Protection on OS X systems.

31.2. Installation

To install the protection so that it integrates seamlessly with the Endpoint Protection server, you must download the installer from the console.

The name of the downloaded installer is MacWAAgent. dmg. Double-click the file on the OS X computer to show its content:

MacWAAgent.pkg

The MacWAAgent.pkg file is the actual installer. Click this file to install the product.

generalInformations.plist

The generalInformations.plist file is a configuration file that contains the necessary information for the product to integrate with the Endpoint Protection server.

31.3. Installation process

Double-clicking the MacWAAgent.pkg file displays a wizard that will guide you through the installation process.



When the wizard is finishing the installation, a window will be displayed with the steps to be taken to integrate the system with the Endpoint Protection server.





These steps are checked off as they are completed:

- Connecting to server Sends an integration message to the server.
- Getting configuration data Sends a message to obtain the configuration policies.
- Downloading Signature File Updates the signature files.
- Sending information to server Sends a status message with up-to-date information.

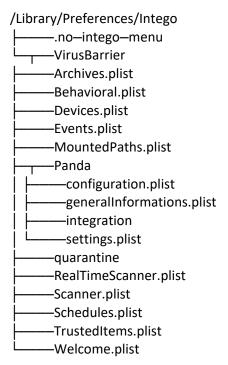
31.4. Deployment

After the product is installed, the following folders and files are created in the file system:

Applications

The Panda Antivirus application is created.

• /Library/Preferences/Intego folder





/var/log/intego folder



If the option is enabled to save messages to disk (to the /var/log/intego/panda folder), a number of subfolders will be created with names following the format YYYY-MM-DD hh.mm.ss.

31.5. Processes

31.5.1 Communication via proxy server

If the computer uses a proxy server to connect to the Internet, you must configure the product to use the right proxy server.

This configuration is established in the Endpoint Protection console and is downloaded together with the installer, in the generalInformations.plist file.

31.5.2 Messages sent to the Endpoint Protection server

The agent can send the following types of messages to the Endpoint Protection server:

- Integration message
- Message to obtain configuration policies
- User validation
- Status information
- Detection reports

Additionally, the solution connects to its own file server to download the signature files required by the protection.

31.6. Protection installed and running: Running processes

When Endpoint Protection is installed and running, the following processes will be running:

 /Library/Intego/virusbarrier.bundle/Contents/MacOS/VirusBarrier Alert.app/Contents/MacOS/VirusBarrier Alert

This process displays the graphical interface of the scans performed by the permanent file protection and the scheduled scans.

 /Library/Intego/virusbarrier.bundle/Contents/MacOS/virusbarrierpalert.app/Contents/Mac OS/virusbarrierpalert

This process shows the "Installing Panda Endpoint Agent" window during installation. This window displays the following steps and checks them off as they are completed: connect



to the server, obtain configuration, download signature files and send information to the server.

- /Library/Intego/virusbarrier.bundle/Contents/MacOS/virusbarrierb This process handles the permanent file protection scans.
- /Library/Intego/virusbarrier.bundle/Contents/MacOS/virusbarriers
 This process detects malware items.
- /Library/Intego/virusbarrier.bundle/Contents/MacOS/virusbarrierl This process manages log files.
- /Library/Intego/TaskManager/TaskManagerDaemon
 This process manages background tasks, such as scheduling.
- /Library/Intego/virusbarrier.bundle/Contents/MacOS/virusbarrierp This process manages communications with the server.
- /Library/Intego/virusbarrier.bundle/Contents/MacOS/virusbarrierd
 This process manages product configuration.

31.7. Integration

The integration message is sent after product installation, when the install sequence starts. If there are any problems that prevent computer integration, the server will return an error code, and the integration progress window will display one of the following errors.

- 1300 The specified client does not exist
- 1301 The client's licenses have expired
- 1302 The client does not have sufficient licenses
- 1303 The administration agent version is no longer supported
- 1304 The group of computers no longer exists
- 1305 The maximum number of installations per group has been exceeded
- 1298 Integration error

31.8. Status information

Every 12 hours, the system checks to see if the status information has changed. If it has, it will send the report. Even if the information hasn't changed, the solution will send at least a status message every day.

The solution sends full status reports only, not reduced reports.

The format of the status message is the same as for the protection for Windows and Linux



computers.

31.9. User validation

User validation follows the same logic as with Windows computers. The frequency of checks against the server depends on the computer situation:

- Every 15 days, when there are over 30 days left before license expiration.
- Every time the validation process is run, during the 30 days before and after the license expiration date.
- Every 5 days if more than 30 days have passed from the expiration date and during 165 days after the expiration date.
- Every 5 days if the computer is on the blacklist.
- There is no user validation if more than 165 days have passed since the expiration date.

If the user is invalid or the computer is on the blacklist, Endpoint Protection won't be able to operate normally, that is, it won't be possible to send messages to the server or update the signature files. Only if the user becomes valid again will the system be able to recover normal operation.

31.10. Configuration

The solution checks to see if there has been a change in the policies every 4 hours by default.

31.11. Signature file updates

The protection for OS X uses its own signature file system. The product updates the signature files it needs automatically.

The solution checks to see every hour if the signature files need updating.

31.12. Scans

The protection for OS X computers only allows you to enable and disable the permanent file protection. You cannot run on-demand scans on all computers in a profile.

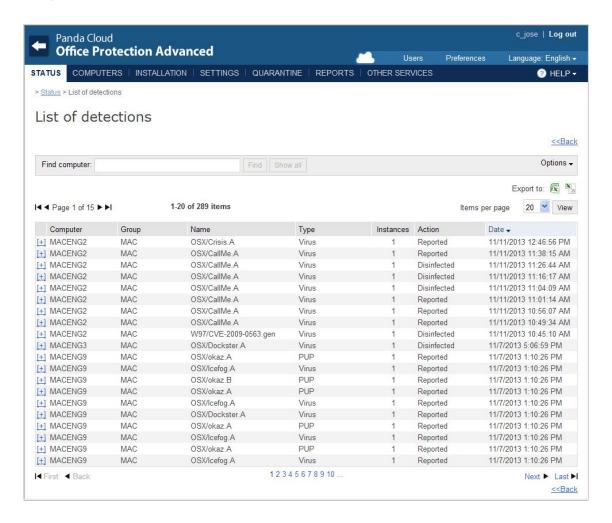
Nevertheless, you can configure scheduled scans from the local console. Detections made by these scans are reported to the server in the same way as detections made by the permanent protection.

31.13. List of detections

The solution checks to see every 6 hours by default if there are new detection reports to send to the server.

Reports are sent to the server in messages with a maximum of 20 items. These reports are displayed in the Web console, in the **Status** menu > **List of detections** window, just as the reports generated by the protection for Windows computers.

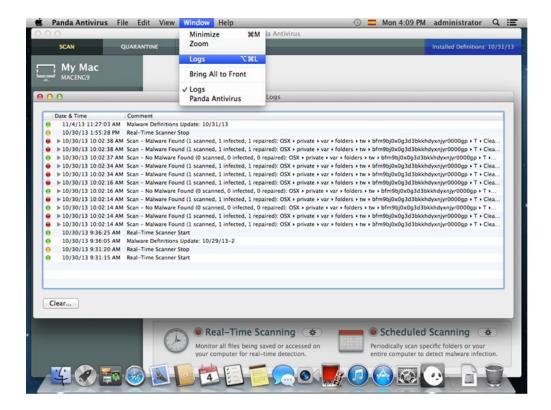




31.14. Detection log file

The local console allows you to check a log file with all the detections made by the product. To access it, go to the Window menu and select Logs.





31.5.3 Version upgrades

The product doesn't upgrade automatically.

If you want to upgrade your Endpoint Protection version, you must access the console to download the new version and run the installer manually on the computer.

You don't need to previously uninstall your current Endpoint Protection, as the new version installs over the previous one.

31.15. Uninstall

The product includes an uninstallation script to remove the protection from the system. This is launched from the Terminal, using the following command:

sudo /bin/sh

/Library/Intego/virusbarrier.bundle/Contents/Resources/Uninstall.sh

You can also uninstall the application by going to the *Applications* folder and dragging the relevant icon to the recycle bin.



32. Appendix 7: Systems Management & Endpoint Protection



32.1. Introduction

Systems Management (http://www.pandasecurity.com/uk/enterprise/solutions/cloud-systems-management/) lets you monitor the software installed on your network computers at all times, resolve problems remotely and configure alerts for all your devices.

From Panda Cloud you will be able to:

- Activate a trial version of Systems Management for clients who still don't have licenses of the product. This lets you activate a trial version of Systems Management and install it on clients' computers with Endpoint Protection/ Endpoint Protection Plus installed.
- Offer clients with Systems Management licenses the opportunity to install Systems Management on their network simply and quickly.

32.2. Activating your trial version of Systems Management

For the option to **try** Systems Management to appear on the Panda Cloud screen, you must meet the following requirements:

- You must have Endpoint Protection/ Endpoint Protection Plus licenses (either trial or commercial licenses).
- You must have version 6.70 or later.
- You must not have Systems Management licenses of any kind.

Go to Panda Cloud (https://www.pandacloudsecurity.com)

Click **Try now**. The following may happen:

If you logged in to the Panda Cloud console with the default user (that is, the user whose credentials were sent to you in the welcome email, in the following format: 'user@pandamanagedprotection.com'), you will see a screen prompting you to install the agent on your computers. By default, this agent will install on every existing profile in Endpoint Protection/ Endpoint Protection Plus.

To select the profiles on which you want to install the Systems Management agent, click **Settings**.



You must select at least one profile, otherwise, the OK button will be grayed out.

Click the **Start trial** button to activate your trial version of Systems Management (to make sure you have activated it successfully, check that the Systems Management icon is displayed in the **My services** section).

Then, the system will start installing the Systems Management agent on the selected profiles. This process may take up to 12 hours.



The trial version of Systems Management will provide you with 500 Systems Management licenses valid for 30 days.

If you logged in to the Panda Cloud console with a user other than the default user, you'll



see a message informing you that only the default user can activate the trial version.

32.3. Ending the Systems Management trial period

Ending the trial period automatically

30 days after the trial expiration date, Systems Management will automatically uninstall from every computer it was installed on.

Technical information about the automatic deployment of Systems Management

In addition to the installation aspects that you can control from the Panda Cloud console and which were mentioned earlier in this document, below are the details of the procedure and processes for deploying Systems Management to the computers on which Endpoint Protection is already installed and which meet the minimum requirements. Please, go to Requirements and external URLs .

32.3.1 Deployment process

As soon as you select the profile, the client's policy is modified with the details of Systems Management on the computers on which it is going to be installed.

Running a Walconf process on the client's computers downloads this policy, which, in turn, modifies the Walupg.ini file, adding the necessary entries to deploy the Systems Management agent automatically the next time a Walupg is launched.

The entries added to the walupg.ini file are:

- A new field PCSM=NOT is added to the [INSTALLED] section, which will install PCSM
- A new section [PCSM] is added, which will be used to enter the information on the PCSM profile and the corresponding client ID

The next time a Walupg is launched, it will detect that the *PCSM [INSTALLED]* entry has changed to *NOT*, and will start the installation process.

During this process, firstly, it checks whether the Systems Management agent is already installed. It does this by creating a new DLL called (WALPCSMInst.dll).

The agent is already installed

If the agent is already installed, the value of the *PCSM* entry will be changed to *Installed* and therefore, it will not be necessary to install it again.

The agent is not installed

If the agent is not installed, the normal installation process is performed, that is, the installer (GenericPCSMInstaller.exe) will be downloaded from the PCSM website.

This installer is customized for the client's Systems Management profile. Therefore, once it has been downloaded it will be installed using the parameters obtained from the aforementioned policy that contains the details of the Systems Management profile and the client ID.

If the connection is established via Proxy, the data configured from the Endpoint Protection console for this client or of Internet Explorer on the computer will be used.



End of installation

Once installation has been completed correctly, the *PCSM* value of walupg.ini must be changed. The value that will be allocated will be that of the latest version of Endpoint Protection (which does not necessarily have to coincide with the real version of Systems Management).

As usual, a copy of the installer will be made in a new folder, called *Installers*, in the WalUpg directory.

Finally, the rumor information, if configured is sent.

Rumor

To distribute the PCSM installer, the rumor will work in exactly the same way as with the agent or protection installer.

Re-deploy the PCSM agent to the computers to which it has previously been deployed automatically

If the Systems Management agent is uninstalled manually - via Control Panel - from a computer to which it had been automatically deployed, it will not be re-deployed, as the *PCSM* entry in Walupg.ini will have the corresponding value (*Installed* or the version number). To re-deploy the agent to the computers assigned to a profile for which it has previously been deployed, you will have to delete the automatic deployment option from this profile through the Panda Cloud console.

In this way, when the settings of all the computers containing the agent are updated, the automatic deployment entries will be deleted from the walupg.ini file. Then, if this profile is selected for automatic deployment, the process will re-start.

32.4. How to install the solution if you ALREADY have Systems Management licenses

If you already have Systems Management licenses (either trial or commercial licenses), you can deploy Systems Management across your network quickly and simply from the Panda Cloud console, provided you meet the following requirements:

- You must have Endpoint Protection/ Endpoint Protection Advanced licenses (either trial or commercial licenses).
- You must have version 6.70 or later.

The Panda Cloud screen will display a button called **Settings** under the product icon. Click it to select the profile(s) to install Systems Management on.

Bear the followind in mind:

- All profiles will be selected by default. Select the profiles that you want.
- If you edit a profile's configuration and select <u>NOT to automatically install</u> Systems Management, Systems Management won't install on any new computer you might add to the profile; Additionally, Systems Management won't be uninstalled from any existing computers which already had it.
- The installation process may take up to 12 hours.





You must select at least one profile, otherwise, the OK button will be grayed out.

Systems Management installation permissions

- Users with total control permissions can install Systems Management on any profile.
- Users with administrator permissions can only install the solution on computers
 assigned to profiles on which they have edit permissions. An administrator user has
 edit permission on a profile only if they have edit permissions on every computer
 group associated with the profile.
- Users with monitoring permissions cannot install the solution.



33. Appendix 8: Uninstaller list



33.1. Computer Associates

eTrust AntiVirus 8.1.655, 8.1.660, 7.1* eTrust 8.0

33.2. Avast

Avast! Free Antivirus 2014

Avast! 8.x Free Antivirus

Avast! 7.x Free Antivirus

Avast! 6.x Free Antivirus

Avast! 5.x Free Antivirus

Avast! 4 Free Antivirus

Avast! 4 Small Business Server Edition

Avast! 4 Windows Home Server Edition 4.8

33.3. AVG

AVG Internet Security 2013 (32bit-Edition)

AVG Internet Security 2013 (64bit- Edition)

AVG AntiVirus Business Edition 2013 (32bit-Edition)

AVG AntiVirus Business Edition 2013 (64bit- Edition)

AVG CloudCare 2.x

AVG Anti-Virus Business Edition 2012

AVG Internet Security 2011

AVG Internet Security Business Edition 2011 32bits*

AVG Internet Security Business Edition 2011 64bits (10.0.1375)*

AVG Anti-Virus Network Edition 8.5*

AVG Internet Security SBS Edition 8

Anti-Virus SBS Edition 8.0

AVGFree v8.5, v8, v7.5, v7.0

33.4. Avira

Avira AntiVir PersonalEdition Classic 7.x, 6.x

Avira AntiVir Personal Edition 8.x

Avira Antivir Personal - Free Antivirus 10.x, 9.x

Avira Free Antivirus 2012, 2013

Avira AntiVir PersonalEdition Premium 8.x, 7.x, 6.x

Avira Antivirus Premium 2013, 2012, 10.x, 9.x

33.5. CA

CA Total Defense for Business Client V14 (32bit-Edition)

CA Total Defense for Business Client V14 (64bit-Edition)



CA Total Defense R12 Client (32bit- Edition)
CA Total Defense R12 Client (64bit- Edition)

33.6. Bit Defender

BitDefender Business Client 11.0.22
BitDefender Free Edition 2009 12.0.12.0*
Bit Defender Standard 9.9.0.082

33.7. Check Point

Check Point Endpoint Security 8.x (32 bits) Check Point Endpoint Security 8.x (64 bits)

33.8. Eset

ESET NOD32 Antivirus 3.0.XX (2008)*, 2.70.39*, 2.7*

ESET Smart Security 3.0*

ESET Smart Security 5 (32 bits)

ESET NOD32 Antivirus 4.X (32 bits)

ESET NOD32 Antivirus 4.X (64 bits)

ESET NOD32 Antivirus 5 (32 bits)

ESET NOD32 Antivirus 5 (64 bits)

ESET NOD32 Antivirus 6 (32 bits)

ESET NOD32 Antivirus 6 (64 bits)

ESET NOD32 Antivirus 7 (32 bits)

ESET NOD32 Antivirus 7 (64 bits)

33.9. Frisk

F-Prot Antivirus 6.0.9.1

33.10. F-Secure

F-secure PSB Workstation Security 10.x

F-Secure PSB for Workstations 9.00*

F-Secure Antivirus for Workstation 9

F-Secure PSB Workstation Security 7.21

F-Secure Protection Service for Business 8.0, 7.1

F-Secure Internet Security 2009

F-Secure Internet Security 2008

F-Secure Internet Security 2007

F-Secure Internet Security 2006

F-Secure Client Security 9.x

F-Secure Client Security 8.x

Antivirus Client Security 7.1



F-Secure Antivirus for Workstation 8

33.11. Kaspersky

Kaspersky Endpoint Security 10 for Windows (32bit-Edition)

Kaspersky Endpoint Security 10 for Windows (64bit-Edition)

Kaspersky Endpoint Security 8 for Windows (32bit-Edition)

Kaspersky Endpoint Security 8 for Windows (64bit-Edition)

Kaspersky Anti-Virus 2010 9.0.0.459*

Kaspersky® Business Space Security

Kaspersky® Work Space Security

Kaspersky Internet Security 8.0, 7.0, 6.0 (con Windows Vista+UAC, es necesario desactivar UAC)

Kaspersky Anti-Virus 8*

Kaspersky® Anti-virus 7.0 (con Windows Vista+UAC, es necesario desactivar UAC)

Kaspersky Anti-Virus 6.0 for Windows Workstations*

33.12. McAfee

McAfee SaaS Endpoint Protection 6.x, 5.X
McAfee VirusScan Enterprise 8.8, 8.7i, 8.5i, 8.0i, 7.1.0
McAfee Internet Security Suite 2007
McAfee Total Protection Service 4.7*
McAfee Total Protection 2008

33.13. Norman

Norman Security Suite 10.x (32bit- Edition)

Norman Security Suite 10.x (64bit- Edition)

Norman Security Suite 9.x (32bit- Edition)

Norman Security Suite 9.x (64bit- Edition)

Norman Endpoint Protection 8.x/9.x

Norman Virus Control v5.99

33.14. Norton

Norton Antivirus Internet Security 2008* Norton Antivirus Internet Security 2007 Norton Antivirus Internet Security 2006

33.15. Microsoft

Microsoft Security Essentials 1.x Microsoft Forefront EndPoint Protection 2010 Microsoft Security Essentials 4.x Microsoft Security Essentials 2.0



Microsoft Live OneCare
Microsoft Live OneCare 2.5*

33.16. MicroWorld Technologies

eScan Corporate for Windows 9.0.824.205

33.17. PcTools

Spyware Doctor with AntiVirus 9.x

33.18. Sophos

Sophos Anti-virus 9.5
Sophos Endpoint Security and Control 10.2
Sophos Endpoint Security and Control 9.5
Sophos Anti-virus 7.6
Sophos Anti-virus SBE 2.5*
Sophos Security Suite

33.19. Symantec

Symantec.cloud - Endpoint Protection.cloud 21.x (32bits)
Symantec.cloud - Endpoint Protection.cloud 21.x (64bits)
Symantec EndPoint Protection 12.x (32bits)
Symantec EndPoint Protection 12.x (64bits)
Symantec EndPoint Protection 11.x (32bits)
Symantec EndPoint Protection 11.x (64bits)
Symantec EndPoint Protection 11.x (64bits)
Symantec Antivirus 10.1
Symantec Antivirus Corporate Edition 10.0, 9.x, 8.x

33.20. Trend Micro

Trend Micro OfficeScan 7.x

Trend Micro Worry-Free Business Security 8.x (32bit- Edition)
Trend Micro Worry-Free Business Security 8.x (64bit- Edition)
Trend Micro Worry-Free Business Security 7.x (32bit- Edition)
Trend Micro Worry-Free Business Security 7.x (64bit- Edition)
Trend Micro Worry-Free Business Security 6.x (32bit- Edition)
Trend Micro Worry-Free Business Security 6.x (64bit- Edition)
Trend Micro Worry-Free Business Security 5.x
PC-Cillin Internet Security 2006
PC-Cillin Internet Security 2007*
PC-Cillin Internet Security 2008*
Trend Micro OfficeScan Antivirus 8.0



Trend Micro OfficeScan 8.x

Trend Micro OfficeScan 10.x

33.21. Comodo Antivirus

Comodo Antivirus V 4.1 32bits

33.22. Panda Security

Panda Cloud Antivirus 3.x

Panda Cloud Antivirus 2.X

Panda Cloud Antivirus 1.X

Panda for Desktops 4.50.XX

Panda for Desktops 4.07.XX

Panda for Desktops 4.05.XX

Panda for Desktops 4.04.10

Panda for Desktops 4.03.XX y anteriores

Panda for File Servers 8.50.XX

Panda for File Servers 8.05.XX

Panda for File Servers 8.04.10

Panda for File Servers 8.03.XX y anteriores

Panda Global Protection 2015*

Panda Internet Security 2015*

Panda Antivirus Pro 2015*

Panda Gold Protection*

Panda Free Antivirus

Panda Global Protection 2014*

Panda Internet Security 2014*

Panda Antivirus Pro 2014*

Panda Gold Protection*

Panda Global Protection 2013*

Panda Internet Security 2013*

Panda Antivirus Pro 2013*

Panda Global Protection 2012*

Panda Internet Security 2012*

Panda Antivirus Pro 2012*

Panda Global Protection 2011*

Panda Internet Security 2011*

Panda Antivirus Pro 2011*

Panda Antivirus for Netbooks (2011)*

Panda Global Protection 2010

Panda Internet Security 2010

Panda Antivirus Pro 2010

Panda Antivirus for Netbooks



Panda Global Protection 2009
Panda Internet Security 2009
Panda Antivirus Pro 2009
Panda Internet Security 2008
Panda Antivirus+Firewall 2008
Panda Antivirus 2008
Panda Internet Security 2007
Panda Antivirus + Firewall 2007
Panda Antivirus 2007

- * Panda 2015, 2014, 2013, 2012 products need a reboot to get uninstalled.
- * Comodo Antivirus V4.1 (32 bit-Edition) While the program is being uninstalled, if UAC is enabled, the user will be prompted to select the option Allow in the UAC window.
- *F-Secure PSB for Workstations 9.00* During the installation process of the PCOP agent in Windows 7 and Windows Vista, the user will be prompted to select the Allow option.
- *AVG Internet Security Business Edition 2011 32bit- Edition* During the PCOP agent installation process, the user will be prompted to select the Allow option in several windows.
- *AVG Internet Security Business Edition 2011 64bit- Edition (10.0.1375)* During the PCOP agent installation process, the user will be prompted to select the Allow option in several windows.
- * Kaspersky Anti-Virus 6.0 for Windows workstations:

During the PCOP agent installation process in 64 bits platforms, the user will be prompted to select the Allow option in several windows.

In order to uninstall the protection, the Kaspersky protection should not be password protected.

While the program is being uninstalled, if UAC is enabled, the user will be prompted to select the option Allow in the UAC window.

- * F-Secure PSB for Workstations 9.00 During the PCOP agent installation process, the user will be prompted to select the Allow option in two windows.
- * AVG Anti-Virus Network Edition 8.5 During the PCOP agent installation process, the user will be prompted to select the Allow option in two windows.
- * Panda Antivirus 2011 Products do not uninstall correctly for 64 bits platforms. While the program is being uninstalled, if UAC is enabled, the user will be prompted to select the option Allow in the UAC window.
- * Panda Cloud Antivirus 1.4 Pro y Panda Cloud Antivirus 1.4 Free While the program is being uninstalled, if UAC is enabled, the user will be prompted to select the option Allow in the UAC window.
- * Trend Micro PC-Cillin Internet Security 2007 and 2008 cannot be uninstalled automatically with Windows Vista x64
- * Trend Micro PC-Cillin Internet Security 2007 and 2008 cannot be uninstalled automatically with Windows Vista x86 with UAC enabled
- * ESET NOD32 Antivirus 3.0.XX (2008) does not uninstall correctly for 64 bits platforms.



- * ESET NOD32 Antivirus 2.7* after installation of the PCOP agent on the computer, it will restart automatically without displaying any notification or asking for user confirmation
- * ESET NOD332 Antivirus 2.70.39* after installation of the PCOP agent on the computer, it will restart automatically without displaying any notification or asking for user confirmation
- * ESET Smart Security 3.0 does not uninstall correctly for 64 bits platforms
- * Sophos Anti-virus SBE 2.5 does not uninstall correctly in Windows 2008
- * eTrust Antivirus 7.1 does not uninstall correctly for 64 bits platforms
- * Norton Antivirus Internet Security 2008 does not uninstall correctly if the Windows Vista UAC is enabled
- * BitDefender Free Edition 2009 12.0.12.0 Windows Vista and UAC enabled. While the program is being uninstalled, the user will be prompted to select the option Allow in the UAC window
- * Kaspersky Anti-Virus 2010 9.0.0.459 and UAC enabled. While the program is being uninstalled, the user will be prompted to select the option Allow in the UAC window.
- * Kaspersky Anti-Virus 8 Windows Vista and UAC enabled. While the program is being uninstalled, the user will be prompted to select the option Allow in the UAC window.
- * McAfee Total Protection Services 4.7. The uninstaller does not run correctly if the UAC is enabled. Furthermore, in 32 bit-edition platforms the user intervention is neccessary.
- * Microsoft Live OneCare 2.5 does not uninstall in Windows Small Business Server 2008. If you have a program not included on this list, contact the corresponding vendor to find out how to uninstall it before installing Endpoint Protection.

