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Sophos Anti-Virus for Linux startup guide

product version: 9

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1 Is this the right guide?

There are three different types of Sophos Anti-Virus for Linux installation.

Before you start, read about them here and make sure you're reading the right startup guide.

Unmanaged installations

In this type of installation, Sophos Anti-Virus for Linux is installed on standalone or networked Linux computers, but is not configured or managed centrally.

For this type of installation, continue reading this guide.

Note

We recommend that you use managed Sophos Anti-Virus for Linux instead.

Installations managed by Sophos Central

You can install Sophos Anti-Virus for Linux, or upgrade an existing installation, so that it is managed by Sophos Central.

For this type of installation, sign in to Sophos Central, go to the **Protect Devices** tab and follow the instructions for Linux there.

Note

If you don't have Sophos Central yet, you'll need to get an account.

Note

If you are using 64-bit Linux servers managed through Sophos Central see the [Sophos Anti-Virus for Linux 10 startup guide](#).

Installations managed by Sophos Enterprise Console

You can install Sophos Anti-Virus for Linux so that it is managed by Sophos Enterprise Console. See the [Sophos Enterprise Console startup guide for Linux and UNIX](#).

Note

If you don't have Sophos Enterprise Console yet, you'll need to install it on a Windows server and do some basic setup.

2 About Sophos Anti-Virus for Linux

2.1 What Sophos Anti-Virus for Linux does

Sophos Anti-Virus for Linux detects and deals with viruses (including worms and Trojans) on your Linux computer. As well as being able to detect all Linux viruses, it can also detect all non-Linux viruses that might be stored on your Linux computer and transferred to non-Linux computers. It does this by scanning your computer.

2.2 How Sophos Anti-Virus protects your computer

On-access scanning is your main form of protection against viruses. Whenever you open, save or copy a file, Sophos Anti-Virus scans it and grants access to it only if it is safe.

Sophos Anti-Virus also enables you to run an on-demand scan to provide additional protection. An on-demand scan is a scan that you initiate. You can scan anything from a single file to everything on your computer that you have permission to read. You can either manually run an on-demand scan or schedule it to run unattended.

You can find details of all configuration options in the man pages and the [Sophos Anti-Virus for Linux configuration guide](#).

3 System requirements

For system requirements, go to the system requirements page of the Sophos website.

For details of any additional requirements, for example for language support, see the "Additional information" section in the release notes.

Related information

[Sophos system requirements](#)

4 Install Sophos Anti-Virus for Linux across a network

You install Sophos Anti-Virus for Linux on networked Linux computers as follows:

1. Create a central installation directory (CID) on a server. This is a set of files that includes everything needed for installation.
2. Install Sophos Anti-Virus for Linux across the network from the CID.

4.1 Create the CID on the server

To perform this procedure, you must be logged on to your Linux server as root.

1. Log in to <http://www.sophos.com/en-us/support/downloads.aspx> with your Sophos ID.
2. If you have logged in for downloads before, you see the **Product Downloads and Updates** page.

Note

If this is your first time, you see your profile. Click **Endpoint and Server Protection** and then **Downloads and Updates**.

3. Under **Standalone Installers**, click the link for **Anti-Virus for Linux**.
4. On the web page that is displayed, download the Sophos Anti-Virus for Linux tarball to a temporary directory, for example `/tmp`.
5. Change to the temporary directory and untar the tarball: `tar -xzvf tarball`.
6. Run the install script: `./sophos-av/install.sh`.

Note

For information about configuring Sophos Live Protection methods during the installation, see [Turn Sophos Live Protection on or off](#) (page 12).

When prompted for the type of auto-update you require, select `Sophos`. Enter the username and password that are included with your license.

Sophos Anti-Virus for Linux is installed in the directory that you selected.

7. Run the update script to download the central installation files from Sophos: `/opt/sophos-av/bin/savupdate`.

Attention

By default, Sophos Anti-Virus for Linux downloads the required Talpa Binary Packs to enable on-access support on the current system. This can be a problem if the system is acting as an update source for Sophos Anti-Virus for Linux clients on other kernels/distributions.

- a) If you intend to use the client as an update source for other endpoints then run the update script `/opt/sophos-av/bin/savupdate` with the following option set `PrimaryUpdateAllDistros TRUE`. This downloads all the Talpa Binary Packs available.

A local cache directory is created by default in `/opt/sophos-av/update/cache/Primary/`.

The local cache directory is the installset that is used to update an installation of Sophos Anti-Virus for Linux. The local cache directory updates itself automatically from Sophos. By default, it updates every 60 minutes, provided that the server is connected to the internet.

8. Copy the local cache directory to a location that is accessible by all the other computers on the network to create a CID.

We recommend that the other computers have only read access to the CID.

You have finished creating the CID on the server. Make sure the CID is updated from the local cache directory regularly.

4.2 Install Sophos Anti-Virus from the CID

Having created the CID, you install Sophos Anti-Virus on the rest of the network as follows:

1. Create a deployment package that can be used to install Sophos Anti-Virus on other computers.
2. Install Sophos Anti-Virus on each computer using the deployment package.

4.2.1 Create a deployment package

To perform this procedure, you must be logged on to your Linux server as root.

You can use the `mkinstpkg` script to create a deployment package for your end-users. This script uses the same display as the install script, and the answers gathered are inserted into the deployment package. When the end-user installs from the deployment package, it does not ask them any questions and sets up both the update location and credentials for them correctly. You can create a package in tar, RPM or deb format.

Note

The instructions here show how to specify the package format. For details of other options you can use, see [Appendix: Command-line options for mkinstpkg](#) (page 13).

To create a deployment package:

1. Go to the directory `/opt/sophos-av/update/`.
2. To create a package in the current directory, do one of the following:
 - To create a tar format deployment package, called `savinstpkg.tgz`, type: `./mkinstpkg`.
 - To create an RPM format deployment package, called `savinstpkg-0.0-1.i586.rpm`, type: `./mkinstpkg -r`.

Note

The filename might be slightly different depending on the RPM setup.

- To create a deb format deployment package called `savinstpkg.deb`, type: `./mkinstpkg -D`.

When prompted for the location from which to update, type the address of the CID as it appears to the other computers. Enter the username and password that are required to access that address, if applicable.

A deployment package is created in the format that you specified.

3. Use your own tools to copy this package to the computers where you want to install Sophos Anti-Virus for Linux.

4.2.2 Install Sophos Anti-Virus for Linux using the deployment package

To perform this procedure, you must be logged on to the computer as root.

On each computer:

1. Place the deployment package in a temporary directory and change to that directory.
2. Do one of the following:
 - To install from the tar package, type: `tar -zxvf savinstpkg.tgz ./sophos-av/install.sh`.
 - To install from the RPM package, type: `rpm -i RPM package`.
 - To install from the deb package, type: `dpkg -i deb package`.

This copies the necessary files from the server and installs Sophos Anti-Virus for Linux.

You have finished installing Sophos Anti-Virus for Linux on this computer. Sophos Anti-Virus updates itself automatically from the CID. By default, it does this every 60 minutes.

Sophos Anti-Virus for Linux also sends product and platform information to Sophos to help us with product development. See [Sophos Knowledgebase Article 121214](#).

5 Install Sophos Anti-Virus on a standalone computer

To perform this procedure, you must be logged on to the standalone computer as root.

1. Log in to <http://www.sophos.com/en-us/support/downloads.aspx> with your Sophos ID.
2. If you have logged in for downloads before, you see the **Product Downloads and Updates** page.

Note

If this is your first time, you see your profile. Click **Endpoint and Server Protection** and then **Downloads and Updates**.

3. Under **Standalone Installers**, click the link for **Anti-Virus for Linux**.
4. On the web page that is displayed, download the Sophos Anti-Virus for Linux tarball to a temporary directory, for example `/tmp`.
5. Change to the temporary directory and untar the tarball:

```
tar -xzvf tarball
```
6. Run the install script:

```
./sophos-av/install.sh
```

Note

For information about configuring Sophos Live Protection during the installation, see [Turn Sophos Live Protection on or off](#) (page 12).

When prompted for the type of auto-update you require, select `Sophos`. Enter the username and password that are included with your license.

Sophos Anti-Virus is installed in the directory that you selected.

You have finished installing Sophos Anti-Virus on the standalone computer. Sophos Anti-Virus will update itself automatically from Sophos. By default, it will do this every 60 minutes, provided that the computer is connected to the internet.

Sophos Anti-Virus also sends product and platform information to Sophos to help us with product development. See [Sophos Knowledgebase Article 121214](#).

6 On-access scanning

On-access scanning is your main form of protection against viruses. Whenever you open, save or copy a file, Sophos Anti-Virus scans it and grants access to it only if it is safe.

By default, on-access scanning is active. If you want, you can check that it is active and start it if necessary.

Note

To use the commands in this section, you must be logged on to the computer as root.

This document assumes that you have installed Sophos Anti-Virus for Linux in the default location, `/opt/sophos-av`. If you have not, when you run a command, you must substitute the installation directory that you are using.

6.1 Start on-access scanning

To start on-access scanning, do one of the following:

- Type: `/opt/sophos-av/bin/savdctl enable`.
- Use the appropriate tool to start the installed service `sav-protect`. For example, type: `/etc/init.d/sav-protect start` or `service sav-protect start`.

7 Run an on-demand scan of the computer

We recommend that you scan the whole computer for viruses right after you install Sophos Anti-Virus. To do this, you run an on-demand scan.

Note

This is especially important if the computer is a server and you want to minimize the risk of spreading viruses to other computers.

- To run an on-demand scan of the computer, type: `savscan /`.

8 What happens if viruses are detected

Regardless of whether viruses are detected by on-access scanning or an on-demand scan, by default Sophos Anti-Virus for Linux:

- Logs the event in syslog and the Sophos Anti-Virus for Linux log.
- Sends an email alert to root@localhost.

Sophos Anti-Virus for Linux also displays alerts according to whether the viruses were detected by on-access scanning or an on-demand scan, as explained below.

On-access scanning

If on-access scanning detects a virus, Sophos Anti-Virus for Linux denies access to the file and by default displays a desktop pop-up alert.

If the desktop pop-up alert can't be displayed, a command-line alert is displayed instead.

For information about cleaning up viruses, see the [Sophos Anti-Virus for Linux configuration guide](#).

On-demand scans

If an on-demand scan detects a virus, by default Sophos Anti-Virus for Linux displays a command-line alert. It reports the virus on the line which starts with >>> followed by either `Virus` or `Virus Fragment`:

```
SAVScan virus detection utility
Version 4.69.0 [Linux/Intel]
Virus data version 4.69
Includes detection for 2871136 viruses, Trojans and worms
Copyright (c) 1989-2012 Sophos Limited. All rights reserved.

System time 13:43:32, System date 11 June 2012

IDE directory is: /opt/sophos-av/lib/sav

Using IDE file nystate-d.ide
. . . . .
Using IDE file injec-lz.ide

Quick Scanning

>>> Virus 'EICAR-AV-Test' found in file /usr/mydirectory/eicar.src

33 files scanned in 2 seconds.
1 virus was discovered.
1 file out of 33 was infected.
Please send infected samples to Sophos for analysis.
For advice consult www.sophos.com or email support@sophos.com
End of Scan.
```

9 Uninstall Sophos Anti-Virus for Linux

To uninstall Sophos Anti-Virus for Linux:

- Go to each Linux computer and run the uninstall script: `/opt/sophos-av/uninstall.sh`.
If the `savd` daemon is running, the script prompts you to stop it.

The uninstall script deletes:

- All entries from the system startup that are associated with Sophos Anti-Virus for Linux.
- The Sophos Anti-Virus for Linux man pages.
The Sophos Anti-Virus for Linux man pages are added to the local `man` environment; the path is usually `/usr/local/man`. This path depends on your environment variables.
- The `savscan` on-demand scanner in `/usr/local/bin`.
- `/opt/sophos-av` and its contents.

10 Turn Sophos Live Protection on or off

- To turn on Live Protection, type: `/opt/sophos-av/bin/savconfig set LiveProtection true.`
- To turn off Live Protection, type: `/opt/sophos-av/bin/savconfig set LiveProtection false.`

11 Appendix: Command-line options for mkinstpkg

The mkinstpkg tool creates a deployment package that end users can use to install Sophos Anti-Virus.

The default installation location is `/opt/sophos-av/update`.

Here is a full list of the command-line options you can use with mkinstpkg. "=" at the end of the option means it takes an argument.

Option	Description
<code>-d,--debug</code>	Use the <code>--debug</code> option when the Sophos Anti-Virus installer is run.
<code>-h,--help</code>	Output help text.
<code>-o=,--output=</code>	Destination for the package.
<code>-r,--rpm</code>	Build an RPM package.
<code>-D,--deb</code>	Build a DEB package.
<code>--tar</code>	Build a tar file (default).
<code>--update-proxy-address=</code>	Proxy address to use when installing Sophos Anti-Virus over HTTP.
<code>--update-proxy-username=</code>	Proxy username to use when installing Sophos Anti-Virus over HTTP.
<code>--update-proxy-password=</code>	Proxy password to use when installing Sophos Anti-Virus over HTTP.
<code>--extra-options=</code>	Extra installer options to use when installing Sophos Anti-Virus, for example: <code>--extra-options="--preferFanotify"</code> .
<code>-v,--verbose</code>	Use the <code>--verbose</code> option when the Sophos Anti-Virus installer is run.
<code>--rpm-version=</code>	RPM version if building an RPM package.
<code>--rpm-release=</code>	RPM release version if building an RPM package.
<code>--sophos</code>	Update from Sophos rather than your own server.
<code>--update-type=</code>	Specify where Sophos Anti-Virus will update from. Use "s" for updates from Sophos, or anything other than "s" for updates from your own server.

Option	Description
--sec-group=	The group that computers will be added to when Sophos Anti-Virus is installed.

12 Support

You can find technical support for Sophos products in any of these ways:

- Visit the Sophos Community at community.sophos.com/ and search for other users who are experiencing the same problem.
- Visit the Sophos support knowledge base at www.sophos.com/en-us/support.aspx.
- Download the product documentation at www.sophos.com/en-us/support/documentation.aspx.
- Open a ticket with our support team at <https://secure2.sophos.com/support/contact-support/support-query.aspx>.

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=====

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TinyXML XML parser

www.sourceforge.net/projects/tinyxml

Original code by Lee Thomason (www.grinninglizard.com)

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zlib

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The data format used by the zlib library is described by RFCs (Request for Comments) 1950 to 1952 in the files <http://tools.ietf.org/html/rfc1950> (zlib format), [rfc1951](http://tools.ietf.org/html/rfc1951) (deflate format) and [rfc1952](http://tools.ietf.org/html/rfc1952) (gzip format).