

# SOPHOS

## Sophos Anti-Virus for Linux, version 6 startup guide

Includes upgrading from version 5

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## About this guide

This guide tells you how to

- install or upgrade Sophos Anti-Virus on networked and single Linux computers
- configure Sophos Anti-Virus centrally
- start using Sophos Anti-Virus
- check that Sophos Anti-Virus is working
- start and stop on-access scanning
- scan the computer now
- remove viruses
- update Sophos Anti-Virus
- uninstall Sophos Anti-Virus.

You can find details of all other configuration options in the man pages or the user manual.

**Note** If you are using Sophos Anti-Virus in a mixed Linux and Windows network, or you want to centrally manage Sophos Anti-Virus using Sophos Enterprise Console, see the *Sophos Endpoint Security and Control network startup guide* instead of this guide.

**Note** If you are upgrading Sophos Anti-Virus for Linux, version 5 and are using EM Library, see the *Sophos Endpoint Security and Control network upgrade guide* instead of this guide.

Sophos documentation is published at [www.sophos.com/support/docs/](http://www.sophos.com/support/docs/) and on the Sophos CDs.

# 1 System requirements

See Sophos support knowledgebase article 14377  
([www.sophos.com/support/knowledgebase/article/14377.html](http://www.sophos.com/support/knowledgebase/article/14377.html)).

## 2 Install or upgrade Sophos Anti-Virus across a network

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

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

You *upgrade* Sophos Anti-Virus on networked Linux computers as follows:

- Upgrade the central installation directory (CID) on the server. When the computers next update, they will download the latest version from the CID.

### 2.1 Create or upgrade the CID on the server

You can use one of the following methods:

- download and use a tarball (section 2.1.1)
- use the **Sophos Standalone Install CD** ([section 2.1.2](#)).

#### 2.1.1 Download and use a tarball

1. Log on to your Linux server as root.
2. Download the Sophos Anti-Virus for Linux tarball from the Sophos Anti-Virus for Linux, version 6 download web page to a temporary directory.

3. Change to the temporary directory and untar the tarball:

```
tar -xzvf <tarball>
```

4. Run the install script:

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

5. If you are upgrading Sophos Anti-Virus, when prompted for the installation location, you must enter the same one as you used for version 5.
6. When prompted for the type of auto-update you require, select **Sophos**. Enter the username and password that are included with your licence.
7. Sophos Anti-Virus is installed or upgraded in the directory that you selected. The commands in this guide assume that you have installed Sophos Anti-Virus in `/opt/sophos-av`. If you haven't, you must substitute the installation directory that you are using.

For *version 6* of Sophos Anti-Virus, the CID is created by default in `/opt/sophos-av/update/cache/Primary`.

For *version 5* of Sophos Anti-Virus, the CID was originally created by default in `/opt/sophos-av/update/LOCAL/PACKAGE`.

**Note** Sophos recommends that you ensure that other computers will have only read access to the CID.

8. Run the update script to download the central installation files from Sophos:

```
/opt/sophos-av/bin/savupdate
```

The CID will update itself automatically from Sophos. By default, it will do this every 60 minutes, provided that the computer is connected to the internet.

If you are *upgrading* Sophos Anti-Virus, you have completed the process. When the computers next update, they will download the latest version from the CID.

To continue *installing* Sophos Anti-Virus, go to [section 2.2](#).

### 2.1.2 Use the Sophos Standalone Install CD

1. Log on to your Linux server as root.

2. Mount the **Sophos Standalone Install CD**. The exact command will vary according to your flavour of Linux, but it will look like this:

```
mount /dev/cdrom /mnt/cdrom
```

3. Change to the sav-linux directory on the CD and run the install script:

```
cd sav-linux  
./install.sh
```

4. If you are upgrading Sophos Anti-Virus, when prompted for the installation location, you must enter the same one as you used for version 5.
5. When prompted for the type of auto-update you require, select **Sophos**. Enter the username and password that are included with your licence.
6. Sophos Anti-Virus is installed or upgraded in the directory that you selected. The commands in this guide assume that you have installed Sophos Anti-Virus in /opt/sophos-av. If you haven't, you must substitute the installation directory that you are using.

For *version 6* of Sophos Anti-Virus, the CID is created by default in /opt/sophos-av/update/cache/Primary.

For *version 5* of Sophos Anti-Virus, the CID was originally created by default in /opt/sophos-av/update/LOCAL/PACKAGE.

**Note** Sophos recommends that you ensure that other computers will have only read access to the CID.

7. Run the update script to download the central installation files from Sophos:

```
/opt/sophos-av/bin/savupdate
```

The CID will update itself automatically from Sophos. By default, it will do this every 60 minutes, provided that the computer is connected to the internet.

If you are *upgrading* Sophos Anti-Virus, you have completed the process. When the computers next update, they will download the latest version from the CID.

To continue *installing* Sophos Anti-Virus, continue to section 2.2.

## 2.2 Install Sophos Anti-Virus from the CID

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

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

### 2.2.1 Create a distribution package

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

1. Log on to your Linux server as root.
2. If you created the CID in a Windows share, mount this directory. (To enable this directory to be mounted automatically on system boot, use distribution-specific tools for doing so, or edit `/etc/fstab`.)

3. Change to the CID.

To create a distribution package in tar format, called savinstpkg.tgz, run

```
./mkinstpkg.sh
```

To create a distribution package in RPM format, called savinstpkg-0.0-1.i586.rpm, run

```
./mkinstpkg.sh -r
```

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

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

### 2.2.2 Install Sophos Anti-Virus using the distribution package

On each Linux computer, do as follows.

1. Log on as root.
2. Ensure that root is able to access the CID, for example by mounting the share.
3. Place the distribution package in a temporary directory and change to that directory.
4. To untar the tar package and run the manual update script, enter

```
tar -zxvf savinstpkg.tgz  
./sophos-av/install.sh
```

To install from the RPM package, enter

```
rpm -i <RPM package>
```

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

From now on, Sophos Anti-Virus will be updated automatically on each Linux computer whenever the CID is updated.

To configure Sophos Anti-Virus centrally, go to [section 4](#).

## 3 Install or upgrade Sophos Anti-Virus on a single computer

You can use one of the following methods:

- download and use a tarball (section 3.1)
- use the **Sophos Standalone Install CD** (section 3.2).

### 3.1 Download and use a tarball

1. Log on to your Linux computer as root.
2. Download the Sophos Anti-Virus for Linux tarball from the Sophos Anti-Virus for Linux, version 6 download web page to a temporary directory.
3. Change to the temporary directory and untar the tarball:  

```
tar -xzvf <tarball>
```
4. Run the install script:  

```
./sophos-av/install.sh
```
5. If you are upgrading Sophos Anti-Virus, when prompted for the installation location, you must enter the same one as you used for version 5. By default, this was /opt/sophos-av.
6. When prompted for the type of auto-update you require, select **Sophos**. Enter the username and password that are included with your licence.
7. Sophos Anti-Virus is installed or upgraded in the directory that you selected. The commands in this guide assume that you have installed Sophos Anti-Virus in /opt/sophos-av. If you haven't, you must substitute the installation directory that you are using.

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.

## 3.2 Use the Sophos Standalone Install CD

1. Log on to your Linux computer as root.
2. Mount the **Sophos Standalone Install CD**. The exact command will vary according to your flavour of Linux, but it will look like this:

```
mount /dev/cdrom /mnt/cdrom
```

3. Change to the sav-linux directory on the CD and run the install script:

```
cd sav-linux  
./install.sh
```

4. If you are upgrading Sophos Anti-Virus, when prompted for the installation location, you must enter the same one as you used for version 5. By default, this was /opt/sophos-av.
5. When prompted for the type of auto-update you require, select **Sophos**. Enter the username and password that are included with your licence.
6. Sophos Anti-Virus is installed or upgraded in the directory that you selected. The commands in this guide assume that you have installed Sophos Anti-Virus in /opt/sophos-av. If you haven't, you must substitute the installation directory that you are using.

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.

## 4 Configure Sophos Anti-Virus centrally

If you have installed Sophos Anti-Virus across a network, you can configure Sophos Anti-Virus on the whole or part of the network by creating and updating a configuration file in the central installation directory (CID) of Sophos Anti-Virus. Then, when computers update from the CID, they use this configuration.

There are two configuration files: the *live* configuration file in the CID and the *offline* configuration file stored elsewhere. When you want to change the live file, you change the offline file, and use a program to replace the live file with the offline file.

These instructions are an example only. For details of all the options that you can set in the central configuration, see the user manual.

1. With root privileges, run `savconfig` from the `bin` installation subdirectory, using
  - `-f <folder/filename>` to specify the name of the new configuration file
  - `-c` to create a central configuration in that file
  - parameters from the list given in the user manual (or you can run `savconfig` with `-h` for help).

For example, if you want Sophos Anti-Virus to scan the boot sectors of mounted devices whenever on-access scanning is started, enter (on one line)

```
/opt/sophos-av/bin/savconfig -f corpconfig.cfg  
-c ScanOnEnable mounted
```

2. Now run the `addcfg` utility to copy the configuration to the CID, ready for computers to download when they next update. The utility is in the CID. Depending on where the CID is, type

```
/opt/sophos-av/update/cache/Primary/addcfg.sh -fCONFIG-FILE
```

where `CONFIG-FILE` is the path of the offline file.

## 5 Use and configure Sophos Anti-Virus

You can use and configure Sophos Anti-Virus in two ways:

- from the Sophos Anti-Virus GUI
- from the command line.

### 5.1 The Sophos Anti-Virus GUI

1. To run the Sophos Anti-Virus GUI, point a web browser to the following address:

`http://localhost:8081`

2. The Sophos Anti-Virus GUI is displayed. Here you can control and configure **on-access scanning** only. See the man pages or user manual for details.



When you browse to another page, you will be prompted for the username and password you set for the Sophos Anti-Virus GUI during installation. If you want to change the username and/or the password, see the user manual.

**Important** Although the GUI can be run by the root user (as well as other users), it doesn't run with root privileges. Therefore, it can't access all files on the computer.

## 5.2 The command line

To control on-access scanning, enter

```
/opt/sophos-av/bin/savdctl <parameter>
```

To control on-demand scanning, enter

```
savscan <parameter>
```

Use `-h`, the man pages, or the user manual for details of all parameters.

**Note** You must have root privileges to use all Sophos Anti-Virus commands except `savscan`, which is used for on-demand scanning.

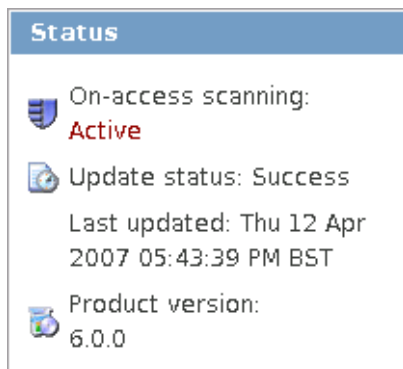
## 6 Check that Sophos Anti-Virus is working

You can check that Sophos Anti-Virus is working, i.e. that on-access scanning is running. You can do so in the GUI or at the command line.

### 6.1 Use the GUI to check on-access scanning

Open the Sophos Anti-Virus GUI. In the **Sophos Anti-Virus Status** panel, you can see whether on-access scanning is running.

**Note** If on-access scanning is not on, you can start it by clicking **Control** and then the **Enable On-access Scanning** button.



**Note** In some web browsers, the page must be manually refreshed for changes in status to be displayed.

### 6.2 Use the command line to check on-access scanning

If you are logged on as root, you can run the `savdstatus` command:

```
/opt/sophos-av/bin/savdstatus
```

If you need to start on-access scanning, enter

```
/opt/sophos-av/bin/savdctl enable
```

**Note** If you are running as a non-privileged user, you can check on-access scanning by entering

```
ps -C savscand
```

If this displays any processes called savscand, on-access scanning is enabled.

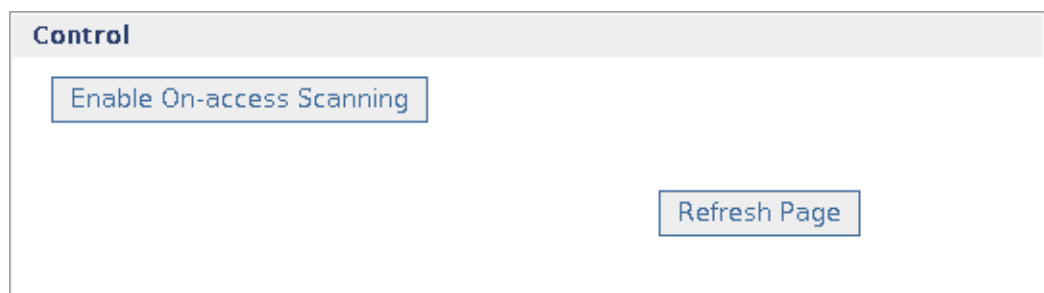
## 7 Start or stop on-access scanning

By default, on-access scanning starts every time the computer is started. However, you can start and stop on-access scanning manually.

You can do this in the GUI or at the command line.

### 7.1 Start or stop on-access scanning in the GUI

1. Open the Sophos Anti-Virus GUI. At the home page, click **Control**.
2. If on-access scanning is off, click **Enable On-access Scanning** to start it. If it is on, click **Disable On-access Scanning** to turn it off.



**Note** In some web browsers, the page must be manually refreshed for changes in status to be displayed.

### 7.2 Start or stop on-access scanning from the command line

To start on-access scanning, type

```
/opt/sophos-av/bin/savdctl enable
```

To stop on-access scanning, type

```
/opt/sophos-av/bin/savdctl disable
```

## **8 Scan the computer immediately**

If you accepted the default settings, the computer is automatically protected by on-access scanning for viruses/spyware.

You can also scan the computer at any time by using the on-demand scanner. The scanner is called `savscan` and it is installed in `/usr/local/bin`.

### **8.1 Scan the computer**

To scan the whole computer for viruses/spyware, type

```
savscan /
```

### **8.2 Scan a directory**

To scan a particular directory or file for viruses/spyware, specify the path to the item to be scanned:

```
savscan /usr/mydirectory
```

### **8.3 Get help with the on-demand scanner**

For help using the on-demand scanner, view the man page or type

```
savscan -h
```

## 9 What happens if viruses/spyware are found?

### 9.1 If viruses/spyware are found during on-access scanning

If Sophos Anti-Virus finds a virus or item of spyware during an on-access scan, it denies access to the file and displays a message box like the one shown below.



If the message box cannot be displayed, the alert is shown at the command line.

Sophos Anti-Virus also logs the event in the Sophos Anti-Virus log, and sends an alert to Enterprise Console if this is managing the computer.

See the Sophos website ([www.sophos.com](http://www.sophos.com)) for information on cleaning up viruses/spyware.

## 9.2 If viruses/spyware are found when you run a scan

If Sophos Anti-Virus finds a virus or item of spyware when you run a scan, it reports it on the line which starts with >>> followed by either “Virus” or “Virus Fragment”:

```
SAVScan virus detection utility
Version X.XX.XX [Linux/Intel]
Virus data version X.XX, February 2007
Includes detection for 201433 viruses, trojans and worms
Copyright (c) 1989-2007 Sophos Plc, www.sophos.com

System time 10:23:49, System date 11 February 2007

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, email support@sophos.com
or telephone +44 1235 559933
End of Scan.
```

Sophos Anti-Virus also logs the event in the Sophos Anti-Virus log.

See the Sophos website ([www.sophos.com](http://www.sophos.com)) for information on cleaning up viruses/spyware.

## **10 Update Sophos Anti-Virus immediately**

Provided that you set up auto-updating during installation, Sophos Anti-Virus is kept updated automatically.

To update a computer between automatic updates, run the update script:

```
/opt/sophos-av/bin/savupdate
```

## 11 Uninstall Sophos Anti-Virus

To uninstall Sophos Anti-Virus, go to each Linux computer and run the uninstall script:

```
/opt/sophos-av/uninstall.sh
```

If the savd daemon is running, the script will prompt you to stop it.

The uninstall script deletes

- all entries from the system startup that are associated with Sophos Anti-Virus
- the Sophos Anti-Virus man pages in /usr/share/man
- the savscan on-demand scanner in /usr/local/bin
- /opt/sophos-av and its contents.

## Technical support

For technical support, visit [www.sophos.com/support](http://www.sophos.com/support).

If you contact technical support, provide as much information as possible, including the following:

- Sophos software version number(s)
- Operating system(s) and patch level(s)
- The exact text of any error messages

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### **libmagic – file type detection**

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## **Medusa web server**

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## **pycrypto**

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--amk ([www.amk.ca](http://www.amk.ca))

## **OpenSSL cryptographic toolkit**

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This product includes cryptographic software written by Eric Young  
([eay@cryptsoft.com](mailto:eay@cryptsoft.com)). This product includes software written by Tim  
Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)).

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This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscape's SSL.

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The ACE home page is <http://www.cs.wustl.edu/ACE.html>

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