



Sophos Anti-Virus for Mac OS X Help

For networked and standalone Macs running Mac OS X version 10.4 or later

Product version: 7

Document date: October 2010



Contents

1 About Sophos Anti-Virus.....	3
2 Scanning for threats.....	4
3 Dealing with threats.....	27
4 Updating.....	31
5 Solving problems.....	36
6 Technical support.....	39
7 Legal notices.....	40

1 About Sophos Anti-Virus

Sophos Anti-Virus for Mac OS X, version 7 is software that detects and deals with threats (viruses, worms, and Trojans) on your Mac or network. As well as being able to detect Mac OS X threats, it can also detect Windows threats that might be stored on your Mac or network and transferred to Windows computers.

Sophos Anti-Virus is preconfigured with the recommended settings for protection. We recommend that you don't make changes to the settings unless there is a specific need or problem that you are aiming to address.

2 Scanning for threats

2.1 About scanning for threats

On-access scanning is your main method of protection against threats. Whenever you access (copy, move, or open) a file, Sophos Anti-Virus scans the file and grants access to it only if it does not pose a threat to your Mac. By default, on-access scanning is turned on and preconfigured with the recommended settings for protection. We recommend that you don't make changes to the settings unless there is a specific need or problem that you are aiming to address.

On-demand scans 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 Mac to which you have access:

■ Local drives scan

Scan all files to which you have access on local volumes. If you authenticate as an administrator, files to which you do not have access are scanned as well. Any removable storage devices that are inserted are included.

You might want to run a local drives scan for one of the following reasons: you want to deal with a threat that Sophos Anti-Virus has detected, you're not running on-access scanning on this Mac because it's a server, or you want to discover that files are infected *before* you need to use them.

■ Custom scans

Scan specific sets of files, folders, or volumes.

You might want to run a custom scan because you want to scan only suspicious parts of a disk or you want to discover that files are infected *before* you need to use them.

■ Finder item scans

Scan a file, folder, or volume that you have selected in Finder.

You might want to run a Finder item scan for one of the following reasons: you want to scan the contents of an archive or compressed file *before* you need to open it, you want to scan something before you email it, or you want to scan a CD or DVD.

You can set up **email alerts** so that any scan type can warn of threats or serious errors.

You can also use **Terminal** to run scans from the command line.

2.2 On-access scanning

On-access scanning is your main method of protection against threats. Whenever you access (copy, move, or open) a file, Sophos Anti-Virus scans the file and grants access to it only if it does not pose a threat to your Mac. By default, on-access scanning is turned on and preconfigured with

the recommended settings for protection. We recommend that you don't make changes to the settings unless there is a specific need or problem that you are aiming to address.

2.2.1 Turn on-access scanning on or off

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

By default, on-access scanning is turned on when you start your Mac.

To turn on-access scanning on or off:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **On-access Scanning**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Change the setting as follows:
 - To turn on-access scanning *on*, click **Start Scanning**. The status changes to **on** and the Sophos Anti-Virus icon in the menu bar turns black.



- To turn on-access scanning *off*, click **Stop Scanning**. The status changes to **off** and the Sophos Anti-Virus icon in the menu bar turns gray.



Important: If you turn on-access scanning off, Sophos Anti-Virus does not scan files that you access for threats. This puts your Mac at risk.

2.2.2 Configuring on-access scanning

2.2.2.1 Add an on-access exclusion

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

You can exclude files, folders, or volumes from on-access scanning. For example, you might want to exclude:

- Files that are large and therefore take a long time to scan

- Files that cause a scanning error
- Files that cause a false-positive
- Backup volumes because the files that are stored on them are scanned when they're backed up anyway

Important: Excluding files, folders, or volumes from scanning reduces your protection against threats.

To add an on-access exclusion:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **On-access Scanning**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Click **Excluded Items**.
5. Do one of the following:
 - Drag the item(s) to be excluded to the list of excluded items.
 - Click **Add (+)** and choose the item(s) to be excluded from the dialog.

For information about specifying which items are excluded, see [Exclusion rules](#) (page 6).

2.2.2.2 Edit an on-access exclusion

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

To edit an on-access exclusion:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **On-access Scanning**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Click **Excluded Items**.
5. In the list of excluded items, double-click an item and edit the item.

For information about specifying which items are excluded, see [Exclusion rules](#) (page 6).

2.2.2.3 Exclusion rules

When you add or edit an exclusion, you can type any POSIX path, whether it is a volume, folder, or file. To specify which items are excluded, use the following rules:

Item(s) to exclude	Syntax to use
A folder and sub-folders recursively	Suffix the exclusion with a slash

Item(s) to exclude	Syntax to use
A folder but not sub-folders	Suffix the exclusion with a double slash
A file	Do <i>not</i> suffix the exclusion with a slash or double slash
A folder or file in a specific location	Prefix the exclusion with a slash
A folder or file anywhere locally or on the network	Do <i>not</i> prefix the exclusion with a slash
A file whose name has a specific filename extension	Substitute an asterisk (*) for the filename stem

Examples

Exclusion path	Item(s) that are excluded
/MyFolder/MyApplication	The file MyApplication in a specific location
/MyFolder/	All files in the folder MyFolder in a specific location and sub-folders recursively
/MyFolder//	All files in the folder MyFolder in a specific location but not sub-folders
MyFolder/MyApplication	The file MyApplication in any folder that is called MyFolder, locally or on the network
MyFolder/	All files in any folder that is called MyFolder, locally or on the network, and sub-folders recursively
MyFolder//	All files in any folder that is called MyFolder, locally or on the network, but not sub-folders
MyApplication	The file MyApplication anywhere locally or on the network
*.mov	All files whose filename extension is .mov anywhere locally or on the network
/MyFolder/*.mov	All files whose filename extension is .mov in a specific location

2.2.2.4 Delete an on-access exclusion

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

To delete an on-access exclusion:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **On-access Scanning**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Click **Excluded Items**.
5. In the list of excluded items, select the exclusion that you want to delete and click **Delete (-)**.

2.2.2.5 Enable on-access scanning inside archives and compressed files

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

By default, on-access scanning inside archives and compressed files is disabled. However, you might want to enable the option if you are dealing with several such files at a time and the cost of not detecting a threat is high. For example, you might be emailing some archives or compressed files to an important contact.

Note: Sophos recommends that you do not enable this option, for the following reasons:

- Scanning inside archives and compressed files makes scanning significantly slower.
- Whether you enable this option or not, when you open a file extracted from an archive, the extracted file is scanned.
- Whether you enable this option or not, files compressed with dynamic compression utilities (PKLite, LZEXE and Diet) are scanned.

To enable on-access scanning inside archives and compressed files:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **On-access Scanning**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Click **Options**.
5. Select “**Inside archives and compressed files**”.

2.2.2.6 Enable on-access scanning of files on network volumes

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

By default, scanning of files that you access on network volumes is disabled because it can slow down access.

To enable on-access scanning of files on network volumes:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **On-access Scanning**.

3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Click **Options**.
5. Select “**Files on network volumes**”.

Note: Files on network volumes that you access through an alias are not scanned.

2.2.2.7 Configure on-access scanning to automatically clean up threats

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure on-access scanning to automatically clean up threats that it detects.

Important: Sophos Anti-Virus does not ask for confirmation before cleaning up a threat.

To configure on-access scanning to automatically clean up threats:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **On-access Scanning**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Choose “**Clean up threat**” from the “**When a threat is found**” pop-up menu.
5. From the “**If cleanup fails**” pop-up menu, choose what action Sophos Anti-Virus should take if cleanup fails:
 - To deny access to the threat, choose “**Deny access**”.
 - To delete the threat, choose “**Delete threat**”.
 - To move the threat to another folder to prevent it being run, choose “**Deny access and move threat**”.

By default, the threats are moved to `/Users/Shared/Infected/`. To choose a different folder, click **Choose Folder**, and enter the folder in the dialog.

Any actions that Sophos Anti-Virus takes against threats are logged in the Sophos Anti-Virus log.

Important: Cleaning up a threat might not be able to undo all the actions the threat has taken on this Mac. For example, if the threat changed the value of a setting, the cleanup process might not know the original setting. You might have to verify the Mac’s configuration. Cleaning up an infected document does not repair any changes the threat has made to the document.

2.2.2.8 Configure on-access scanning to automatically move threats

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure on-access scanning to automatically move threats that

it detects to another folder. Moving an infected program reduces the likelihood of it being run. Note that Sophos Anti-Virus always denies access to infected files that it has moved, as long as on-access scanning is turned on.

Important: You should use this option only if advised to by Sophos technical support. Sophos Anti-Virus does not ask for confirmation before moving a threat.

To configure on-access scanning to automatically move threats:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **On-access Scanning**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Choose “**Deny access and move threat**” from the “**When a threat is found**” pop-up menu.
By default, the threats are moved to /Users/Shared/Infected/. To choose a different folder, click **Choose Folder**, and enter the folder in the dialog.

Any actions that Sophos Anti-Virus takes against threats are logged in the Sophos Anti-Virus log.

2.2.2.9 Configure on-access scanning to automatically delete threats

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure on-access scanning to automatically delete threats that it detects.

Important: You should use this option only if advised to by Sophos technical support. Sophos Anti-Virus does not ask for confirmation before deleting a threat.

To configure on-access scanning to automatically delete threats:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **On-access Scanning**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Choose “**Delete threat**” from the “**When a threat is found**” pop-up menu.

Any actions that Sophos Anti-Virus takes against threats are logged in the Sophos Anti-Virus log.

Important: Deleting a threat does not undo any actions the threat has taken on this Mac.

2.2.2.10 Restore default on-access scanning preferences

You can set the on-access scanning preferences to defaults. If your organization has specified default on-access scanning preferences, the on-access scanning preferences will be set to these defaults. Otherwise, they will be set to defaults recommended by Sophos.

To restore default on-access scanning preferences:

1. Choose **Sophos Anti-Virus > Preferences**.

2. Click **On-access Scanning**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Click **Restore Defaults**.

2.2.2.11 Configure desktop alerts

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

Sophos Anti-Virus displays a desktop alert if a serious error occurs during on-access scanning. By default, it also displays a desktop alert if it detects a threat during on-access scanning. You can configure the desktop alerts that are displayed when a threat is detected.

To configure desktop alerts:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **Messaging**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Change the preferences as follows:
 - To add your own message to the desktop alerts about threats, type the message in the “**Add custom message**” field.
 - To disable desktop alerts about threats, deselect “**Display a desktop alert when a threat is detected on access**”.

2.2.2.12 Restore default alerting preferences

You can restore the alerting preferences to defaults. If your organization has specified default alerting preferences, the alerting preferences will be set to these defaults. Otherwise, they will be set to defaults recommended by Sophos.

To restore default alerting preferences:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **Messaging**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Click **Restore Defaults**.

2.2.2.13 Change logging preferences

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

All on-access scanning activity (including threats detected) and all updating activity is logged in the Sophos on-access scanning and updating log. Sophos Anti-Virus can also log such activity in the Mac OS X system log.

To change the logging preferences for on-access scanning and updating:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **Logging**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Change the preferences as follows:
 - To change the log filename or location, click **Choose Log File** and enter the new filename or location in the dialog.
 - To delete all entries from the log, click **Clear Log**.
 - To log all on-access scanning and updating activity in the system log, select “**Log events to system log**”.

2.2.2.14 Restore default logging preferences

You can restore the logging preferences for on-access scanning and updating to defaults. If your organization has specified default logging preferences, the logging preferences will be set to these defaults. Otherwise, they will be set to defaults recommended by Sophos.

To restore default logging preferences:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **Logging**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Click **Restore Defaults**.

2.2.3 View on-access scanning and updating log

To view the log of all on-access scanning activity (including threats detected) and all updating activity:

1. Choose **Sophos Anti-Virus > Preferences**.
2. In the **Logging** pane, click **View Log**.

The log is displayed in Console. At the start of each log entry, there is a tag to show whether the entry was logged by the on-access scanner (com.sophos.intercheck) or AutoUpdate (com.sophos.autoupdate).

2.3 Local drives scan

The local drives scan is a scan that you initiate. It is a scan of all files to which you have access on local volumes. If you authenticate as an administrator, files to which you do not have access are scanned as well. Any removable storage devices that are inserted are included.

You might want to run a local drives scan for one of the following reasons: you want to deal with a threat that Sophos Anti-Virus has detected, you're not running on-access scanning on this Mac because it's a server, or you want to discover files that are infected *before* you need to use them.

2.3.1 Scan local drives

You can run a scan of all files on this Mac to which you have access. If you are an admin user, this scan also includes all files to which you do *not* usually have access.

- To scan all files on local volumes that you have permission to read, choose **Scan > Scan Local Drives**.

Sophos Anti-Virus displays the progress of the scan in the **Sophos Anti-Virus** window.

Note: You can also run the scan in one of the following ways:

- In the **Sophos Anti-Virus** window, in the **Scan local drives** box, click the Play button.
- Click the Sophos Anti-Virus icon on the right-hand side of the menu bar, and then choose **Scan Local Drives** from the shortcut menu.
- Control-click the Sophos Anti-Virus application icon in the Dock, and then choose **Scan Local Drives** from the shortcut menu.

2.3.2 Configuring the local drives scan

2.3.2.1 Disable scanning inside archives and compressed files for the local drives scan

Note: The setting of this option applies to both the local drives scan and Finder item scans.

By default, scanning inside archives and compressed files is enabled for the local drives scan.

To disable scanning inside archives and compressed files for the local drives scan:

1. Choose **Sophos Anti-Virus > Preferences**.

Note: Alternatively, in the **Sophos Anti-Virus** window, in the **Scan local drives** box, click the Edit button.

2. In the **Scan Local Drives** pane, deselect “**Scan inside archives and compressed files**”.

2.3.2.2 Configure the local drives scan to automatically clean up threats

Note: The setting of this option applies to both the local drives scan and Finder item scans.

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure the local drives scan to automatically clean up threats that it detects.

Important: Sophos Anti-Virus does not ask for confirmation before cleaning up a threat.

To configure the local drives scan to automatically clean up threats:

1. Choose **Sophos Anti-Virus > Preferences**.

Note: Alternatively, in the **Sophos Anti-Virus** window, in the **Scan local drives** box, click the Edit button.

2. In the **Scan Local Drives** pane, choose “**Clean up threat**” from the “**When a threat is found**” pop-up menu.
3. From the “**If cleanup fails**” pop-up menu, choose what action Sophos Anti-Virus should take if cleanup fails:
 - To take no action, choose “**Log only**”. However, if you have enabled email alerts, Sophos Anti-Virus also sends an email alert.
 - To delete the threat, choose “**Delete threat**”.
 - To move the threat to another folder to prevent it being run, choose “**Move threat**”.

By default, the threats are moved to /Users/Shared/Infected/. To choose a different folder, click **Choose Folder**, and enter the folder in the dialog.

Any actions that Sophos Anti-Virus takes against threats are logged in the log of the local drives scan.

Important: Cleaning up a threat might not be able to undo all the actions the threat has taken on this Mac. For example, if the threat changed the value of a setting, the cleanup process might not know the original setting. You might have to verify the Mac’s configuration. Cleaning up an infected document does not repair any changes the threat has made to the document.

2.3.2.3 Configure the local drives scan to automatically move threats

Note: The setting of this option applies to both the local drives scan and Finder item scans.

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure the local drives scan to automatically move threats that it detects to another folder. Moving an infected program reduces the likelihood of it being run.

Important: You should use this option only if advised to by Sophos technical support. Sophos Anti-Virus does not ask for confirmation before moving a threat.

To configure the local drives scan to automatically move threats:

1. Choose **Sophos Anti-Virus > Preferences**.

Note: Alternatively, in the **Sophos Anti-Virus** window, in the **Scan local drives** box, click the Edit button.

2. In the **Scan Local Drives** pane, choose “**Move threat**” from the “**When a threat is found**” pop-up menu.

By default, the threats are moved to /Users/Shared/Infected/. To choose a different folder, click **Choose Folder**, and enter the folder in the dialog.

Any actions that Sophos Anti-Virus takes against threats are logged in the log of the local drives scan.

2.3.2.4 Configure the local drives scan to automatically delete threats

Note: The setting of this option applies to both the local drives scan and Finder item scans.

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure the local drives scan to automatically delete threats that it detects.

Important: You should use this option only if advised to by Sophos technical support. Sophos Anti-Virus does not ask for confirmation before deleting a threat.

To configure the local drives scan to automatically delete threats:

1. Choose **Sophos Anti-Virus > Preferences**.

Note: Alternatively, in the **Sophos Anti-Virus** window, in the **Scan local drives** box, click the Edit button.

2. In the **Scan Local Drives** pane, choose “Delete threat” from the “When a threat is found” pop-up menu.

Any actions that Sophos Anti-Virus takes against threats are logged in the log of the local drives scan.

Important: Deleting a threat does not undo any actions the threat has taken on this Mac.

2.3.2.5 Restore default local drives scan preferences

Note: The setting of this option applies to both the local drives scan and Finder item scans.

To set the local drives scan preferences to defaults recommended by Sophos:

1. Choose **Sophos Anti-Virus > Preferences**.

Note: Alternatively, in the **Sophos Anti-Virus** window, in the **Scan local drives** box, click the Edit button.

2. In the **Scan Local Drives** pane, click **Restore Defaults**.

2.3.3 View log of the local drives scan

- Choose **Scan > View Scan Log**.

The log is displayed in Console.

2.4 Custom scans

A custom scan is a scan that you initiate. It is a scan of specific sets of files, folders, or volumes.

You might want to run a custom scan because you want to scan only suspicious parts of a disk or you want to discover files that are infected *before* you need to use them.

2.4.1 Run a custom scan

1. If the **Sophos Anti-Virus** window is not open, choose **Window > Sophos Anti-Virus** to open it.
2. If the **Custom Scans** list is not displayed, click the disclosure triangle next to **Custom Scans**.
3. In the **Custom Scans** list, select the scan that you want to run.
4. Click the Play button.

Sophos Anti-Virus displays the progress of the scan in the **Sophos Anti-Virus** window.

2.4.2 Add a custom scan

1. Choose **File > New**.
2. In the scan editor that is displayed, edit the scan as follows:
 - To rename the scan, in the **Scan Name** field, type the new name.
 - To specify what to scan, see [Specify what to scan](#) (page 17).
 - To specify what not to scan, see [Add a custom scan exclusion](#) (page 18), [Edit a custom scan exclusion](#) (page 18), or [Delete a custom scan exclusion](#) (page 19) as appropriate.
 - To disable scanning inside archives and compressed files, see [Disable scanning inside archives and compressed files for a custom scan](#) (page 20).

The scan is added to the **Custom Scans** list in the **Sophos Anti-Virus** window.

Note: You can also add a scan by clicking **Add (+)** at the bottom of the **Sophos Anti-Virus** window.

2.4.3 Copy a custom scan

1. If the **Sophos Anti-Virus** window is not open, choose **Window > Sophos Anti-Virus** to open it.
2. If the **Custom Scans** list is not displayed, click the disclosure triangle next to **Custom Scans**.
3. In the **Custom Scans** list, select the scan that you want to copy.
4. Choose **File > Duplicate**.
5. In the scan editor that is displayed, edit the scan as follows:
 - To rename the scan, in the **Scan Name** field, type the new name.
 - To specify what to scan, see [Specify what to scan](#) (page 17).
 - To specify what not to scan, see [Add a custom scan exclusion](#) (page 18), [Edit a custom scan exclusion](#) (page 18), or [Delete a custom scan exclusion](#) (page 19) as appropriate.

- To disable scanning inside archives and compressed files, see [Disable scanning inside archives and compressed files for a custom scan](#) (page 20).

The scan is added to the **Custom Scans** list in the **Sophos Anti-Virus** window.

Note: You can also copy a selected scan in the **Sophos Anti-Virus** window in one of the following ways:

- Press Command-D.
- At the bottom of the window, choose **Duplicate** from the Action pop-up menu.

2.4.4 Configuring a custom scan

2.4.4.1 Open the custom scan editor

1. If the **Sophos Anti-Virus** window is not open, choose **Window > Sophos Anti-Virus** to open it.
2. If the **Custom Scans** list is not displayed, click the disclosure triangle next to **Custom Scans**.
3. In the **Custom Scans** list, double-click the scan that you want to edit.

Note: You can also open the editor in one of the following ways:

- Select the scan that you want to edit and click the Edit button.
- Select the scan that you want to edit and choose **Edit Scan** from the Action pop-up menu at the bottom of the window.

2.4.4.2 Rename a custom scan

1. If the scan editor is not open, open it. To find out how to do this, see [Open the custom scan editor](#) (page 17).
2. In the scan editor, in the **Scan Name** field, type the new name.

2.4.4.3 Specify what to scan

1. If the scan editor is not open, open it. To find out how to do this, see [Open the custom scan editor](#) (page 17).
2. In the **Scan Items** pane, do one of the following:
 - Drag the item(s) to be scanned to the list of items to scan.
 - Click **Add (+)** and choose the item(s) to be scanned from the dialog.

Note: If you do not have sufficient privileges to see the contents of a folder that you add, Sophos Anti-Virus displays the folder with a No Access symbol and does not scan it.

2.4.4.4 Add a custom scan exclusion

You can exclude files, folders, or volumes from a custom scan. For example, you might want to exclude:

- Files that are large and therefore take a long time to scan
- Files that cause a scanning error
- Files that cause a false-positive
- Backup volumes because the files that are stored on them are scanned when they're backed up anyway

Important: Excluding files, folders, or volumes from scanning reduces your protection against threats.

To add a custom scan exclusion:

1. If the scan editor is not open, open it. To find out how to do this, see [Open the custom scan editor](#) (page 17).
2. In the **Excluded Items** pane, do one of the following:
 - Drag the item(s) to be excluded to the list of excluded items.
 - Click **Add (+)** and choose the item(s) to be excluded from the dialog.

For information about specifying which items are excluded, see [Exclusion rules](#) (page 18).

2.4.4.5 Edit a custom scan exclusion

1. If the scan editor is not open, open it. To find out how to do this, see [Open the custom scan editor](#) (page 17).
2. In the **Excluded Items** pane, double-click an item and edit the item.

For information about specifying which items are excluded, see [Exclusion rules](#) (page 18).

2.4.4.6 Exclusion rules

When you add or edit an exclusion, you can type any POSIX path, whether it is a volume, folder, or file. To specify which items are excluded, use the following rules:

Item(s) to exclude	Syntax to use
A folder and sub-folders recursively	Suffix the exclusion with a slash
A folder but not sub-folders	Suffix the exclusion with a double slash
A file	Do <i>not</i> suffix the exclusion with a slash or double slash

Item(s) to exclude	Syntax to use
A folder or file in a specific location	Prefix the exclusion with a slash
A folder or file anywhere locally or on the network	Do <i>not</i> prefix the exclusion with a slash
A file whose name has a specific filename extension	Substitute an asterisk (*) for the filename stem

Examples

Exclusion path	Item(s) that are excluded
/MyFolder/MyApplication	The file MyApplication in a specific location
/MyFolder/	All files in the folder MyFolder in a specific location and sub-folders recursively
/MyFolder//	All files in the folder MyFolder in a specific location but not sub-folders
MyFolder/MyApplication	The file MyApplication in any folder that is called MyFolder, locally or on the network
MyFolder/	All files in any folder that is called MyFolder, locally or on the network, and sub-folders recursively
MyFolder//	All files in any folder that is called MyFolder, locally or on the network, but not sub-folders
MyApplication	The file MyApplication anywhere locally or on the network
*.mov	All files whose filename extension is .mov anywhere locally or on the network
/MyFolder/*.mov	All files whose filename extension is .mov in a specific location

2.4.4.7 Delete a custom scan exclusion

1. If the scan editor is not open, open it. To find out how to do this, see [Open the custom scan editor](#) (page 17).
2. In the **Excluded Items** pane, select the item that you want to delete and click **Delete (-)**.

2.4.4.8 Disable scanning inside archives and compressed files for a custom scan

By default, scanning inside archives and compressed files is enabled.

To disable scanning inside archives and compressed files for a custom scan:

1. If the scan editor is not open, open it. To find out how to do this, see [Open the custom scan editor](#) (page 17).
2. In the **Options** pane, deselect “**Inside archives and compressed files**”.

2.4.4.9 Configure a custom scan to automatically clean up threats

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure a custom scan to automatically clean up threats that it detects.

Important: Sophos Anti-Virus does not ask for confirmation before cleaning up a threat.

To configure a custom scan to automatically clean up threats:

1. If the scan editor is not open, open it. To find out how to do this, see [Open the custom scan editor](#) (page 17).
2. In the **Options** pane, choose “**Clean up threat**” from the “**When a threat is found**” pop-up menu.
3. From the “**If cleanup fails**” pop-up menu, choose what action Sophos Anti-Virus should take if cleanup fails:
 - To take no action, choose “**Log only**”. However, if you have enabled email alerts, Sophos Anti-Virus also sends an email alert.
 - To delete the threat, choose “**Delete threat**”.
 - To move the threat to another folder to prevent it being run, choose “**Move threat**”.

By default, the threats are moved to `/Users/Shared/Infected/`. To choose a different folder, click **Choose Folder**, and enter the folder in the dialog.

Any actions that Sophos Anti-Virus takes against threats are logged in the log of the custom scan.

Important: Cleaning up a threat might not be able to undo all the actions the threat has taken on this Mac. For example, if the threat changed the value of a setting, the cleanup process might not know the original setting. You might have to verify the Mac’s configuration. Cleaning up an infected document does not repair any changes the threat has made to the document.

2.4.4.10 Configure a custom scan to automatically move threats

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure a custom scan to automatically move threats that it detects to another folder. Moving an infected program reduces the likelihood of it being run.

Important: You should use this option only if advised to by Sophos technical support. Sophos Anti-Virus does not ask for confirmation before moving a threat.

To configure a custom scan to automatically move threats:

1. If the scan editor is not open, open it. To find out how to do this, see [Open the custom scan editor](#) (page 17).
2. In the **Options** pane, choose “**Move threat**” from the “**When a threat is found**” pop-up menu. By default, the threats are moved to /Users/Shared/Infected/. To choose a different folder, click **Choose Folder**, and enter the folder in the dialog.

Any actions that Sophos Anti-Virus takes against threats are logged in the log of the custom scan.

2.4.4.11 Configure a custom scan to automatically delete threats

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure a custom scan to automatically delete threats that it detects.

Important: You should use this option only if advised to by Sophos technical support. Sophos Anti-Virus does not ask for confirmation before deleting a threat.

To configure a custom scan to automatically delete threats:

1. If the scan editor is not open, open it. To find out how to do this, see [Open the custom scan editor](#) (page 17).
2. In the **Options** pane, choose “**Delete threat**” from the “**When a threat is found**” pop-up menu.

Any actions that Sophos Anti-Virus takes against threats are logged in the log of the custom scan.

Important: Deleting a threat does not undo any actions the threat has taken on this Mac.

2.4.5 Delete a custom scan

1. If the **Sophos Anti-Virus** window is not open, choose **Window > Sophos Anti-Virus** to open it.
2. If the **Custom Scans** list is not displayed, click the disclosure triangle next to **Custom Scans**.
3. In the **Custom Scans** list, select the scan that you want to delete.
4. Click **Delete (-)**.

2.4.6 View a custom scan log

1. If the **Sophos Anti-Virus** window is not open, choose **Window > Sophos Anti-Virus** to open it.
2. If the **Custom Scans** list is not displayed, click the disclosure triangle next to **Custom Scans**.
3. In the **Custom Scans** list, select the scan for which you want to view the log.

4. At the bottom of the window, choose **View Scan Log** from the Action pop-up menu.

The log is displayed in Console.

2.5 Finder item scans

A Finder item scan is a scan that you initiate. It is a scan of a file, folder, or volume that you have selected in Finder.

You might want to run a Finder item scan for one of the following reasons: you want to scan the contents of an archive or compressed file *before* you need to open it, you want to scan something before you email it, or you want to scan a CD or DVD.

2.5.1 Run a Finder item scan from a shortcut menu

1. In Finder, select the file, folder, or volume that you want to scan.
You can select more than one item.
2. Control-click the selection, and then do one of the following:
 - On Mac OS X version 10.5, choose **More > “Scan with Sophos Anti-Virus”** from the shortcut menu.
 - On other Mac OS X versions, choose **“Scan with Sophos Anti-Virus”** from the shortcut menu.

Sophos Anti-Virus displays the progress of the scan in a dialog.

2.5.2 Run a Finder item scan by dragging an item to the Dock icon

1. In Finder, select the file, folder, or volume that you want to scan.
You can select more than one item.
2. Drag the selection to the Sophos Anti-Virus application icon in the Dock.
Sophos Anti-Virus displays the progress of the scan in a dialog.

2.5.3 Run a Finder item scan from the Services submenu

1. On Mac OS X version 10.6, in Finder, select the file, folder, or volume that you want to scan.
You can select more than one item.
2. Choose **Finder > Services > “Scan with Sophos Anti-Virus”**.
Sophos Anti-Virus displays the progress of the scan in a dialog.

2.5.4 Configuring Finder item scans

2.5.4.1 Disable scanning inside archives and compressed files for a Finder item scan

Note: The setting of this option applies to both the local drives scan and Finder item scans.

By default, scanning inside archives and compressed files is enabled for a Finder item scan.

To disable scanning inside archives and compressed files for a Finder item scan:

1. Choose **Sophos Anti-Virus > Preferences**.
2. In the **Scan Local Drives** pane, deselect “**Scan inside archives and compressed files**”.

2.5.4.2 Configure Finder item scans to automatically clean up threats

Note: The setting of this option applies to both the local drives scan and Finder item scans.

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure Finder item scans to automatically clean up threats that they detect.

Important: Sophos Anti-Virus does not ask for confirmation before cleaning up a threat.

To configure Finder item scans to automatically clean up threats:

1. Choose **Sophos Anti-Virus > Preferences**.
2. In the **Scan Local Drives** pane, choose “**Clean up threat**” from the “**When a threat is found**” pop-up menu.
3. From the “**If cleanup fails**” pop-up menu, choose what action Sophos Anti-Virus should take if cleanup fails:
 - To take no action, choose “**Log only**”. However, if you have enabled email alerts, Sophos Anti-Virus also sends an email alert.
 - To delete the threat, choose “**Delete threat**”.
 - To move the threat to another folder to prevent it being run, choose “**Move threat**”.

By default, the threats are moved to `/Users/Shared/Infected/`. To choose a different folder, click **Choose Folder**, and enter the folder in the dialog.

Any actions that Sophos Anti-Virus takes against threats are logged in the log of the Finder item scan.

Important: Cleaning up a threat might not be able to undo all the actions the threat has taken on this Mac. For example, if the threat changed the value of a setting, the cleanup process might not know the original setting. You might have to verify the Mac’s configuration. Cleaning up an infected document does not repair any changes the threat has made to the document.

2.5.4.3 Configure Finder item scans to automatically move threats

Note: The setting of this option applies to both the local drives scan and Finder item scans.

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure Finder item scans to automatically move threats that they detect to another folder. Moving an infected program reduces the likelihood of it being run.

Important: You should use this option only if advised to by Sophos technical support. Sophos Anti-Virus does not ask for confirmation before moving a threat.

To configure Finder item scans to automatically move threats:

1. Choose **Sophos Anti-Virus > Preferences**.
2. In the **Scan Local Drives** pane, choose “**Move threat**” from the “**When a threat is found**” pop-up menu.
By default, the threats are moved to /Users/Shared/Infected/. To choose a different folder, click **Choose Folder**, and enter the folder in the dialog.

Any actions that Sophos Anti-Virus takes against threats are logged in the log of the Finder item scan.

2.5.4.4 Configure Finder item scans to automatically delete threats

Note: The setting of this option applies to both the local drives scan and Finder item scans.

To deal with threats, we recommend that you use Quarantine Manager (see [Dealing with threats](#) (page 27)). However, you can configure Finder item scans to automatically delete threats that they detect.

Important: You should use this option only if advised to by Sophos technical support. Sophos Anti-Virus does not ask for confirmation before deleting a threat.

To configure Finder item scans to automatically delete threats:

1. Choose **Sophos Anti-Virus > Preferences**.
2. In the **Scan Local Drives** pane, choose “**Delete threat**” from the “**When a threat is found**” pop-up menu.

Any actions that Sophos Anti-Virus takes against threats are logged in the log of the Finder item scan.

Important: Deleting a threat does not undo any actions the threat has taken on this Mac.

2.5.4.5 Restore default Finder item scan preferences

Note: The setting of this option applies to both the local drives scan and Finder item scans.

To set the Finder item scan preferences to defaults recommended by Sophos:

1. Choose **Sophos Anti-Virus > Preferences**.

2. In the **Scan Local Drives** pane, click **Restore Defaults**.

2.5.5 View a Finder item scan log

- In the progress dialog that is displayed when you run a Finder item scan, click **View Scan Log**.

The log is displayed in Console.

2.6 Configure email alerts

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

Sophos Anti-Virus can send an email if it detects a threat or a serious error occurs. This applies to on-access scanning, the local drives scan, custom scans, and Finder item scans. By default, email alerts are disabled.

To configure email alerts:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **Messaging**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Select “**Send an email alert when a threat is detected or an error occurs**”.
5. Change the preferences as follows:
 - To enable Sophos Anti-Virus to send an email alert only if it detects a threat, select **Threats**.
 - To enable Sophos Anti-Virus to send an email alert if it detects a threat or a serious error occurs, select “**Threats and errors**”.
 - To specify the email address *to* which email alerts should be sent, type the address in the **Recipient** field.
 - To specify the address of the email server from which email alerts should be sent, type the address in the **Outgoing Email Server** field.
 - To specify the email address *from* which email alerts should be sent, type the address in the **Sender** field.

2.7 Restore default alerting preferences

You can restore the alerting preferences to defaults. If your organization has specified default alerting preferences, the alerting preferences will be set to these defaults. Otherwise, they will be set to defaults recommended by Sophos.

To restore default alerting preferences:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **Messaging**.

3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Click **Restore Defaults**.

2.8 Use Sophos Anti-Virus from Terminal

You can run a scan from Terminal, Mac OS X's command-line interface. To display the command-line Help for this feature:

1. Open Terminal.
To do this, find the folder /Applications/Utilities and double-click Terminal.
2. At the command prompt, type:

```
sweep -h
```

3 Dealing with threats

If a threat is detected on your Mac, it is listed in a component of Sophos Anti-Virus called Quarantine Manager. You should open Quarantine Manager and deal with the threat there.

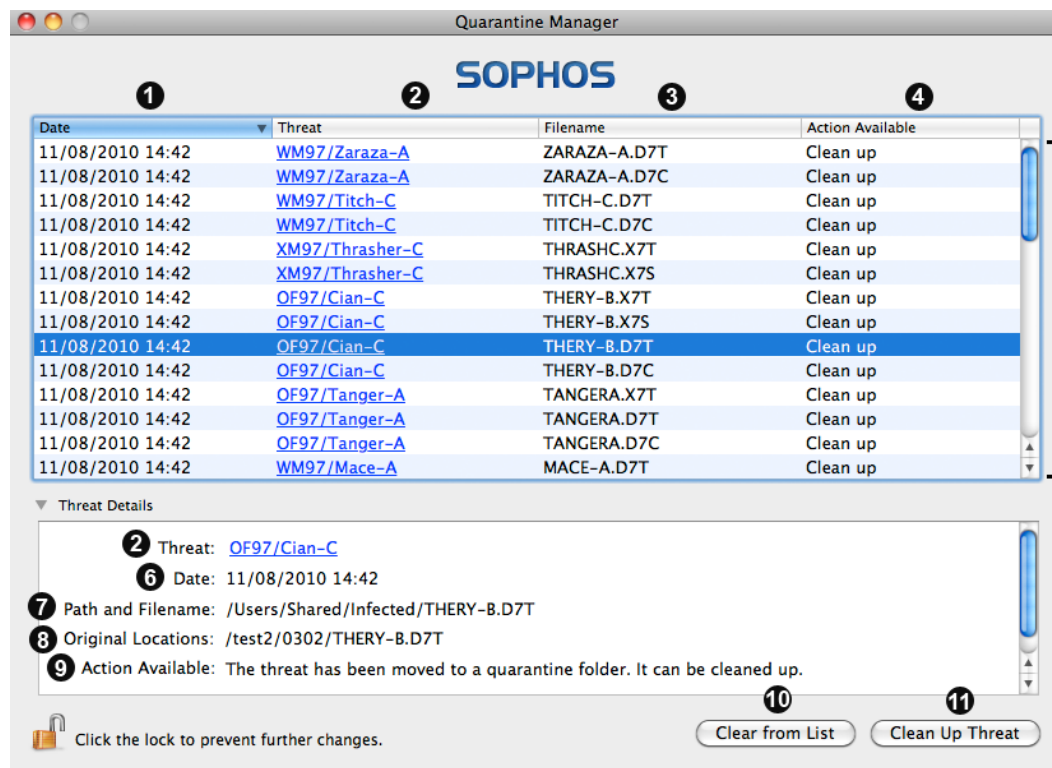
3.1 Open Quarantine Manager

To open Quarantine Manager, do one of the following:

- Choose **Window > Quarantine Manager**.
- Click the Sophos Anti-Virus icon on the right-hand side of the menu bar, and then choose **Open Quarantine Manager** from the shortcut menu.
- In the **Sophos Anti-Virus** window, click **Open Quarantine Manager**.

3.2 About Quarantine Manager

Quarantine Manager lists all the threats that have been detected by scanning and enables you to deal with them. The elements of the **Quarantine Manager** window are shown below:



1	The date and time of detection. If the threat has been detected multiple times, only the first detection is included here.
2	The name of the threat, including a link to the analysis on the Sophos website.
3	The main file associated with the threat.
4	The action that you can take to deal with the threat.
5	The list of threats that have been detected. You can sort the threats by clicking any of the column headings. You can select one or more threats to deal with at a time. The maximum number of threats listed is 200. If this limit is reached, the newest threats replace the oldest.
6	The date and time of detection. If the threat has been detected multiple times, only the first and last detections are included here.
7	The locations and names of all the files that comprise the threat.
8	If the threat has been moved during scanning or partially removed, this element is displayed. All the original files that comprise the threat are listed.
9	The action that you can take to deal with the threat and a summary of what action has been taken so far, if applicable.
10	Click “ Clear from List ” to clear a selected threat from Quarantine Manager without dealing with the threat itself. For more information, see Clear a threat from Quarantine Manager (page 30).
11	Click Clean Up Threat to clean up a selected threat. For more information, see Deal with threats in Quarantine Manager (page 29).

3.3 View threat details in Quarantine Manager

In Quarantine Manager, you can view more details on how a threat has affected your Mac, for example all the files that comprise the threat.

Some details are hidden unless you authenticate by clicking the lock icon at the bottom of the **Quarantine Manager** window.

To view details of a threat in Quarantine Manager:

1. In Quarantine Manager, select the threat for which you want to view the details.
You can select more than one threat but the details that are displayed are less specific.
2. Click the disclosure triangle next to **Threat Details**.

The threat details are displayed in the **Threat Details** box. For a description of each field, see [About Quarantine Manager](#) (page 27).

3.4 Deal with threats in Quarantine Manager

1. In Quarantine Manager, click the **Action Available** column heading to sort the list of threats according to the action available.
2. Select all the threats for which the action available is “**Clean up**”.
3. Click **Clean Up Threat**.

You must authenticate by clicking the lock icon at the bottom of the **Quarantine Manager** window.

Any threats that are cleaned up are cleared from the list.

4. Click the **Action Available** column heading to sort the list of threats.
5. If there are any threats for which the action available is **Restart**, restart your Mac to complete the cleanup.
6. Click the **Action Available** column heading to sort the list of threats.
7. If there are any threats for which the action available is “**Scan local drives**”, run a scan of local drives (see [Scan local drives](#) (page 13)).
8. Click the **Action Available** column heading to sort the list of threats.
9. If there are any threats for which the action available is “**Clean up**”, go back to step 3.
10. If there are any threats for which the action available is “**Clean up manually**”, see [Clean up a threat manually](#) (page 30).

Important: Cleaning up a threat might not be able to undo all the actions the threat has taken on this Mac. For example, if the threat changed the value of a setting, the cleanup process might not know the original setting. You might have to verify the Mac’s configuration. Cleaning up an infected document does not repair any changes the threat has made to the document.

3.5 Disable cleanup warning

By default, Sophos Anti-Virus warns you before it cleans up threats in Quarantine Manager.

To disable the cleanup warning:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **Messaging**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Deselect “**Warn before cleaning up threats in Quarantine Manager**”.

Note: You can also disable the cleanup warning by selecting “**Do not show this message again**” in the warning dialog.

3.6 Clean up a threat manually

If Sophos Anti-Virus cannot clean up a threat, Quarantine Manager indicates that it must be cleaned up manually.

To clean up a threat manually:

1. In Quarantine Manager, click the threat name link.
The threat analysis web page is displayed in your web browser.
2. On the web page, click the **Action** tab.
3. Follow the instructions there for dealing with the threat.
4. To ensure that the threat has been cleaned up, run a local drives scan (see [Scan local drives](#) (page 13)).

The threat is automatically cleared from Quarantine Manager.

3.7 Clear a threat from Quarantine Manager

To clear a threat, you must authenticate by clicking the lock icon at the bottom of the **Quarantine Manager** window.

You might want to clear a threat because:

- It's been confirmed as a false-positive
- You are confident that you have successfully cleaned it up manually
- You have removed infected removable media
- You want to clear the list of threats before running a scan of local drives

To clear a threat from Quarantine Manager:

1. In Quarantine Manager, select the threat that you want to clear.
You can select more than one threat at a time.
2. Click "**Clear from List**".

Clearing a threat does not delete any files.

4 Updating

4.1 Update Sophos Anti-Virus immediately

By default, Sophos Anti-Virus updates every hour. However, you can update it immediately.

To update Sophos Anti-Virus immediately, do one of the following:

- Choose **Sophos Anti-Virus > Update Now**.
- Click the Sophos Anti-Virus icon on the right-hand side of the menu bar, and then choose **Update Now** from the shortcut menu.
- Control-click the Sophos Anti-Virus application icon in the Dock, and then choose **Update Now** from the shortcut menu.

4.2 Configuring updating

4.2.1 Set a source for updates

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

To specify where Sophos Anti-Virus downloads updates from:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **AutoUpdate**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Change the preferences as follows:
 - To enable Sophos Anti-Virus to update directly from Sophos, choose **Sophos** from the “**Update from Primary Location**” pop-up menu. In the **User Name** and **Password** fields, type the updating credentials that were given to you by Sophos.
 - To enable Sophos Anti-Virus to update from your company web server, choose “**Company Web Server**” from the “**Update from Primary Location**” pop-up menu. In the **Address** field, type the web address of the location from which updates will be downloaded. In the **User Name** and **Password** fields, type the updating credentials that are needed to access the server.
 - To enable Sophos Anti-Virus to update from a network volume, choose “**Network Volume**” from the “**Update from Primary Location**” pop-up menu. In the **Address** field, type the network address of the location from which updates will be downloaded. In the **User Name** and **Password** fields, type the updating credentials that are needed to access the volume.

The following are examples of the address. Replace the text inside the brackets with the appropriate names:

http://<server>/<web share>/Sophos Anti-Virus/ESCOSX

smb://<server>/<Samba share>/Sophos Anti-Virus/ESCOSX

afp://<server>/<AppleShare share>/Sophos Anti-Virus/ESCOSX

You can use an IP address or NetBIOS name instead of a domain or host name to refer to the server. Using an IP address can be better if you have any DNS problems.

If Sophos Anti-Virus must access the update source through the proxy that has been set up in System Preferences, see [Enable updating through the system proxy](#) (page 33). If Sophos Anti-Virus must access the update source through another proxy, see [Enable updating through a custom proxy](#) (page 33).

4.2.2 Set an alternative source for updates

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

To specify where Sophos Anti-Virus downloads updates from if it cannot contact its usual source:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **AutoUpdate**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Select **“Use a secondary location”**. Then, change the preferences as follows:
 - To enable Sophos Anti-Virus to update directly from Sophos, choose **Sophos** from the **“Update from Secondary Location”** pop-up menu. In the **User Name** and **Password** fields, type the updating credentials that were given to you by Sophos.
 - To enable Sophos Anti-Virus to update from your company web server, choose **“Company Web Server”** from the **“Update from Secondary Location”** pop-up menu. In the **Address** field, type the web address of the location from which updates will be downloaded. In the **User Name** and **Password** fields, type the updating credentials that are needed to access the server.
 - To enable Sophos Anti-Virus to update from a network volume, choose **“Network Volume”** from the **“Update from Secondary Location”** pop-up menu. In the **Address** field, type the network address of the location from which updates will be downloaded. In the **User Name** and **Password** fields, type the updating credentials that are needed to access the volume.

The following are examples of the address. Replace the text inside the brackets with the appropriate names:

http://<server>/<web share>/Sophos Anti-Virus/ESCOSX

smb://<server>/<Samba share>/Sophos Anti-Virus/ESCOSX

afp://<server>/<AppleShare share>/Sophos Anti-Virus/ESCOSX

You can use an IP address or NetBIOS name instead of a domain or host name to refer to the server. Using an IP address can be better if you have any DNS problems.

If Sophos Anti-Virus must access the update source through the proxy that has been set up in System Preferences, see [Enable updating through the system proxy](#) (page 33). If Sophos Anti-Virus must access the update source through another proxy, see [Enable updating through a custom proxy](#) (page 33).

4.2.3 Enable updating through the system proxy

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

You can specify that you want Sophos Anti-Virus to update through the proxy that has been set up in System Preferences.

To enable updating through the system proxy:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **AutoUpdate**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Choose “**Use System Proxy Settings**” from the pop-up menu at the bottom of the “**Primary Location**” section or the “**Secondary Location**” section, as required.

4.2.4 Enable updating through a custom proxy

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

You can specify the settings of a proxy through which you want Sophos Anti-Virus to update.

To enable updating through a custom proxy:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **AutoUpdate**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Choose “**Use Custom Proxy Settings**” from the pop-up menu at the bottom of the “**Primary Location**” section or the “**Secondary Location**” section, as required.
5. In the dialog that appears, type the address and port number of the proxy in the **Address** fields. In the **User Name** and **Password** fields, type the credentials that are needed to access the proxy.

4.2.5 Schedule updates

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

By default, Sophos Anti-Virus updates every hour. However, you can change when or how often it updates.

To schedule updates:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **AutoUpdate**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Change the preferences as follows:
 - To enable Sophos Anti-Virus to update at regular intervals, select “**Check for updates every**” and enter the time period.
 - To enable Sophos Anti-Virus to update every time that a network connection is established, select “**Check for updates on connection to network or Internet**”.

4.2.6 Restore default updating preferences

You can restore the updating preferences to defaults. If your organization has specified default updating preferences, the updating preferences will be set to these defaults. Otherwise, they will be set to defaults recommended by Sophos.

To restore default updating preferences:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **AutoUpdate**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Click **Restore Defaults**.

4.2.7 Change logging preferences

Important: If your organization has specified default preferences, these defaults might override changes that you make here.

All on-access scanning activity (including threats detected) and all updating activity is logged in the Sophos on-access scanning and updating log. Sophos Anti-Virus can also log such activity in the Mac OS X system log.

To change the logging preferences for on-access scanning and updating:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **Logging**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Change the preferences as follows:
 - To change the log filename or location, click **Choose Log File** and enter the new filename or location in the dialog.
 - To delete all entries from the log, click **Clear Log**.

- To log all on-access scanning and updating activity in the system log, select “**Log events to system log**”.

4.2.8 Restore default logging preferences

You can restore the logging preferences for on-access scanning and updating to defaults. If your organization has specified default logging preferences, the logging preferences will be set to these defaults. Otherwise, they will be set to defaults recommended by Sophos.

To restore default logging preferences:

1. Choose **Sophos Anti-Virus > Preferences**.
2. Click **Logging**.
3. If some settings are dimmed, click the lock icon and type an administrator name and password.
4. Click **Restore Defaults**.

4.3 Check the progress of an update

- To check the progress of an update that was started by you or scheduled, click the Sophos Anti-Virus icon on the right-hand side of the menu bar, and then choose **Show AutoUpdate Window** from the shortcut menu.

Note: To view a log of all updating activity, see [View on-access scanning and updating log](#) (page 35).

4.4 View on-access scanning and updating log

To view the log of all on-access scanning activity (including threats detected) and all updating activity:

1. Choose **Sophos Anti-Virus > Preferences**.
2. In the **Logging** pane, click **View Log**.

The log is displayed in Console. At the start of each log entry, there is a tag to show whether the entry was logged by the on-access scanner (com.sophos.intercheck) or AutoUpdate (com.sophos.autoupdate).

5 Solving problems

5.1 Sophos Anti-Virus does not update

Symptoms

Sophos Anti-Virus is unable to update or does not attempt to do so. If it is unable to update, a white cross is superimposed on the Sophos Anti-Virus icon on the right-hand side of the menu bar.



Causes

To find out why this is happening, view the updating log. For information, see [View on-access scanning and updating log](#) (page 35).

Resolve the problem

- If Sophos Anti-Virus is contacting the wrong source for updates, see [Set a source for updates](#) (page 31). Check that the settings are correct.
- If Sophos Anti-Virus cannot use your proxy server, see [Enable updating through the system proxy](#) (page 33) or [Enable updating through a custom proxy](#) (page 33), depending on which type of proxy you are using. Check that the settings are correct.
- If Sophos Anti-Virus is not attempting to update when you expect it to, see [Schedule updates](#) (page 33). Check that the settings are correct.

5.2 Update Now menu command is dimmed

Symptoms

The **Update Now** menu command is dimmed in the **Sophos Anti-Virus** menu, the menu bar icon shortcut menu, or the Dock icon shortcut menu.

Causes

Updating is not configured.

Resolve the problem

See [Configuring updating](#) (page 31).

5.3 Sophos Anti-Virus icon is gray

Symptoms

The Sophos Anti-Virus icon on the right-hand side of the menu bar is gray.



Causes

Your Mac is not protected by on-access scanning.

Resolve the problem

Turn on on-access scanning. For information about how to do this, see [Turn on-access scanning on or off](#) (page 5).

5.4 “Scan with Sophos Anti-Virus” menu command is not present

Symptoms

If you try to run a Finder item scan from a shortcut menu, the menu doesn't contain the command “Scan with Sophos Anti-Virus”.

Causes

The command isn't contained in the menu immediately after you install Sophos Anti-Virus.

Resolve the problem

Log in to your Mac again.

5.5 Manual cleanup required

Symptoms

A threat is displayed in Quarantine Manager with the available action **Clean up manually**.

Causes

This could be for one of the following reasons:

- Sophos Anti-Virus does not have threat data to clean up the threat.
- The threat is on a write-protected volume.

Resolve the problem

Depending on the reason for the threat not being cleaned up, do one of the following:

- If Sophos Anti-Virus does not have threat data to clean up the threat, you must clean up the threat manually (see [Clean up a threat manually](#) (page 30)).

- If you can turn on write access to the volume:

Clear the threat from Quarantine Manager (see [Clear a threat from Quarantine Manager](#) (page 30))

Scan for the threat again

Turn on write access to the volume

Clean up the threat in Quarantine Manager (see [Deal with threats in Quarantine Manager](#) (page 29))

6 Technical support

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

- Visit the SophosTalk community at <http://community.sophos.com/> and search for other users who are experiencing the same problem.
- Visit the Sophos support knowledgebase at <http://www.sophos.com/support/>.
- Download the product documentation at <http://www.sophos.com/support/docs/>.
- Send an email to support@sophos.com, including your Sophos software version number(s), operating system(s) and patch level(s), and the text of any error messages.

7 Legal notices

Copyright © 2009, 2010 Sophos Group. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise unless you are either a valid licensee where the documentation can be reproduced in accordance with the licence terms or you otherwise have the prior permission in writing of the copyright owner.

Sophos and Sophos Anti-Virus are registered trademarks of Sophos Plc and Sophos Group. All other product and company names mentioned are trademarks or registered trademarks of their respective owners.

ACE™, TAO™, CIAO™, and CoSMIC™

ACE¹, TAO², CIAO³, and CoSMIC⁴ (henceforth referred to as “DOC software”) are copyrighted by Douglas C. Schmidt⁵ and his research group⁶ at Washington University⁷, University of California⁸, Irvine, and Vanderbilt University⁹, Copyright © 1993–2005, all rights reserved.

Since DOC software is open-source, free software, you are free to use, modify, copy, and distribute—perpetually and irrevocably—the DOC software source code and object code produced from the source, as well as copy and distribute modified versions of this software. You must, however, include this copyright statement along with code built using DOC software.

You can use DOC software in commercial and/or binary software releases and are under no obligation to redistribute any of your source code that is built using DOC software. Note, however, that you may not do anything to the DOC software code, such as copyrighting it yourself or claiming authorship of the DOC software code, that will prevent DOC software from being distributed freely using an open-source development model. You needn't inform anyone that you're using DOC software in your software, though we encourage you to let us¹⁰ know so we can promote your project in the DOC software success stories¹¹.

DOC software is provided as is with no warranties of any kind, including the warranties of design, merchantability, and fitness for a particular purpose, noninfringement, or arising from a course of dealing, usage or trade practice. Moreover, DOC software is provided with no support and without any obligation on the part of Washington University, UC Irvine, Vanderbilt University, their employees, or students to assist in its use, correction, modification, or enhancement. A number of companies¹² around the world provide commercial support for DOC software, however. DOC software is Y2K-compliant, as long as the underlying OS platform is Y2K-compliant.

Washington University, UC Irvine, Vanderbilt University, their employees, and students shall have no liability with respect to the infringement of copyrights, trade secrets or any patents by DOC software or any part thereof. Moreover, in no event will Washington University, UC Irvine, or Vanderbilt University, their employees, or students be liable for any lost revenue or profits or other special, indirect and consequential damages.

The ACE¹³, TAO¹⁴, CIAO¹⁵, and CoSMIC¹⁶ web sites are maintained by the DOC Group¹⁷ at the Institute for Software Integrated Systems (ISIS)¹⁸ and the Center for Distributed Object Computing of Washington University, St. Louis¹⁹ for the development of open-source software as part of the

open-source software community²⁰. By submitting comments, suggestions, code, code snippets, techniques (including that of usage), and algorithms, submitters acknowledge that they have the right to do so, that any such submissions are given freely and unreservedly, and that they waive any claims to copyright or ownership. In addition, submitters acknowledge that any such submission might become part of the copyright maintained on the overall body of code, which comprises the DOC software. By making a submission, submitter agree to these terms. Furthermore, submitters acknowledge that the incorporation or modification of such submissions is entirely at the discretion of the moderators of the open-source DOC software projects or their designees.

The names ACE, TAO, CIAO, CoSMIC, Washington University, UC Irvine, and Vanderbilt University, may not be used to endorse or promote products or services derived from this source without express written permission from Washington University, UC Irvine, or Vanderbilt University. Further, products or services derived from this source may not be called ACE, TAO, CIAO, or CoSMIC nor may the name Washington University, UC Irvine, or Vanderbilt University appear in their names, without express written permission from Washington University, UC Irvine, and Vanderbilt University.

If you have any suggestions, additions, comments, or questions, please let me²¹ know.

Douglas C. Schmidt²²

References

1. <http://www.cs.wustl.edu/~schmidt/ACE.html>
2. <http://www.cs.wustl.edu/~schmidt/TAO.html>
3. <http://www.dre.vanderbilt.edu/CIAO/>
4. <http://www.dre.vanderbilt.edu/cosmic/>
5. <http://www.dre.vanderbilt.edu/~schmidt/>
6. <http://www.cs.wustl.edu/~schmidt/ACE-members.html>
7. <http://www.wustl.edu/>
8. <http://www.uci.edu/>
9. <http://www.vanderbilt.edu/>
10. mailto:doc_group@cs.wustl.edu
11. <http://www.cs.wustl.edu/~schmidt/ACE-users.html>
12. <http://www.cs.wustl.edu/~schmidt/commercial-support.html>
13. <http://www.cs.wustl.edu/~schmidt/ACE.html>
14. <http://www.cs.wustl.edu/~schmidt/TAO.html>
15. <http://www.dre.vanderbilt.edu/CIAO/>
16. <http://www.dre.vanderbilt.edu/cosmic/>
17. <http://www.dre.vanderbilt.edu/>
18. <http://www.isis.vanderbilt.edu/>
19. <http://www.cs.wustl.edu/~schmidt/doc-center.html>
20. <http://www.opensource.org/>
21. <mailto:d.schmidt@vanderbilt.edu>
22. <http://www.dre.vanderbilt.edu/~schmidt/>

Boost

Version 1.0, 17 August 2003

Permission is hereby granted, free of charge, to any person or organization obtaining a copy of the software and accompanying documentation covered by this license (the “Software”) to use, reproduce, display, distribute, execute, and transmit the Software, and to prepare derivative works of the Software, and to permit third-parties to whom the Software is furnished to do so, all subject to the following:

The copyright notices in the Software and this entire statement, including the above license grant, this restriction and the following disclaimer, must be included in all copies of the Software, in whole or in part, and all derivative works of the Software, unless such copies or derivative works are solely in the form of machine-executable object code generated by a source language processor.

THE SOFTWARE IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR ANYONE DISTRIBUTING THE SOFTWARE BE LIABLE FOR ANY DAMAGES OR OTHER LIABILITY, WHETHER IN CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

dlcompat

Copyright © 2002 Jorge Acereda (jacereda@users.sourceforge.net) & Peter O’Gorman (ogorman@users.sourceforge.net)

Portions may be copyright others, see the Authors section below.

Maintained by Peter O’Gorman (ogorman@users.sourceforge.net)

Bug Reports and other queries should go to ogorman@users.sourceforge.net

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the “Software”), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Authors

Original code by Jorge Acereda (jacereda@users.sourceforge.net). This was heavily modified by Peter O’Gorman (ogorman@users.sourceforge.net).

With input from (in alphabetical order):

- Stéphane Conversy (conversy@lri.fr)
- Francis James Franklin (fjf@alinameridon.com)
- Ben Hines (bhines@alumni.ucsd.edu)
- Max Horn (max@quendi.de)
- Karin Kosina (kyrah@sim.no)
- Darin Ohashi (DOhashi@maplesoft.com)
- Benjamin Reed (ranger@befunk.com)

Forgive me if I missed you, and e-mail me (ogorman@users.sourceforge.net) to get added to this list.

dtoa.c

The author of this software is David M. Gay.

Copyright © 1991, 2000 by Lucent Technologies.

Permission to use, copy, modify, and distribute this software for any purpose without fee is hereby granted, provided that this entire notice is included in all copies of any software which is or includes a copy or modification of this software and in all copies of the supporting documentation for such software.

THIS SOFTWARE IS BEING PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED WARRANTY. IN PARTICULAR, NEITHER THE AUTHOR NOR LUCENT MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND CONCERNING THE MERCHANTABILITY OF THIS SOFTWARE OR ITS FITNESS FOR ANY PARTICULAR PURPOSE.

libxml2

Except where otherwise noted in the source code (e.g. the files hash.c, list.c and the trio files, which are covered by a similar licence but with different Copyright notices) all the files are:

Copyright © 1998–2003 Daniel Veillard. All Rights Reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the “Software”), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED “AS IS”, WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE DANIEL VEILLARD BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of Daniel Veillard shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from him.

Authors

- Daniel Veillard (daniel@veillard.com)
- Bjorn Reese (breese@users.sourceforge.net)
- William Brack (wbrack@mmm.com.hk)
- Igor Zlatkovic (igor@zlatkovic.com) for the Windows port
- Aleksey Sanin (aleksey@aleksey.com)

OpenSSL cryptographic toolkit

The OpenSSL toolkit stays under a dual license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. Actually both licenses are BSD-style Open Source licenses. In case of any license issues related to OpenSSL please contact openssl-core@openssl.org.

OpenSSL license

Copyright © 1998–2006 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment:

“This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)”
4. The names “OpenSSL Toolkit” and “OpenSSL Project” must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.

5. Products derived from this software may not be called “OpenSSL” nor may “OpenSSL” appear in their names without prior written permission of the OpenSSL Project.
6. Redistributions of any form whatsoever must retain the following acknowledgment:

“This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)”

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT “AS IS” AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (ey@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay license

Copyright © 1995–1998 Eric Young (ey@cryptsoft.com) All rights reserved.

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

This library is free for commercial and non-commercial use as long as the following conditions are adhered to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young’s, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:

“This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)”

The word “cryptographic” can be left out if the routines from the library being used are not cryptographic related :-).

4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement:

“This product includes software written by Tim Hudson (tjh@cryptsoft.com)”

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG “AS IS” AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.]

Python

PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2

1. This LICENSE AGREEMENT is between the Python Software Foundation (“PSF”), and the Individual or Organization (“Licensee”) accessing and otherwise using this software (“Python”) in source or binary form and its associated documentation.
2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, worldwide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF’s License Agreement and PSF’s notice of copyright, i.e., “Copyright © 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009 Python Software Foundation; All Rights Reserved” are retained in Python alone or in any derivative version prepared by Licensee.
3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python.
4. PSF is making Python available to Licensee on an “AS IS” basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.

5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.
6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.
7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.
8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement.

Simple ECMAScript Engine

Copyright © 2003, 2004, 2005, 2006, 2007 David Leonard. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of David Leonard nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

strcasestr.c

Copyright © 1990, 1993 The Regents of the University of California. All rights reserved.

This code is derived from software contributed to Berkeley by Chris Torek.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

strnstr.c

Copyright © 2001 Mike Barcroft (mike@FreeBSD.org). Copyright © 1990, 1993 The Regents of the University of California. All rights reserved.

This code is derived from software contributed to Berkeley by Chris Torek.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE)

ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

UnRAR

The source code of UnRAR utility is freeware. This means:

1. All copyrights to RAR and the utility UnRAR are exclusively owned by the author - Alexander Roshal.
2. The UnRAR sources may be used in any software to handle RAR archives without limitations free of charge, but cannot be used to re-create the RAR compression algorithm, which is proprietary. Distribution of modified UnRAR sources in separate form or as a part of other software is permitted, provided that it is clearly stated in the documentation and source comments that the code may not be used to develop a RAR (WinRAR) compatible archiver.
3. The UnRAR utility may be freely distributed. It is allowed to distribute UnRAR inside of other software packages.
4. THE RAR ARCHIVER AND THE UnRAR UTILITY ARE DISTRIBUTED "AS IS". NO WARRANTY OF ANY KIND IS EXPRESSED OR IMPLIED. YOU USE AT YOUR OWN RISK. THE AUTHOR WILL NOT BE LIABLE FOR DATA LOSS, DAMAGES, LOSS OF PROFITS OR ANY OTHER KIND OF LOSS WHILE USING OR MISUSING THIS SOFTWARE.
5. Installing and using the UnRAR utility signifies acceptance of these terms and conditions of the license.
6. If you don't agree with terms of the license you must remove UnRAR files from your storage devices and cease to use the utility.

Thank you for your interest in RAR and UnRAR.

Alexander L. Roshal