

ClamWin AntiVirus: User Manual

Manual © 2004 Russell Phillips

ClamWin program code © 2004 Alch

<http://clamwin.sourceforge.net>

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Introduction

ClamWin is a graphical front-end to the [ClamAV](#) anti-virus software. It runs on GNOME and MS Windows. An easy to use installer program is provided for Windows users.

Features include:

- Scheduler - set up scans to run at a defined time
- Automatic virus database updates via the Internet
- Context menu integration to MS Windows Explorer - right click on a file to scan it
- MS Outlook add-in to scan incoming and outgoing e-mails

Installation Instructions

Requirements

To install ClamWin on your computer, you must have the following minimum requirements:

Windows 98/ME/NT 4.0 (with service pack 6)/2000/XP/2003

17 MB of hard disk space

For Outlook Addin: Outlook 2000 SR1a/XP/2003

Installing on Windows

Download the latest installer. Close all running programs, then double-click on the downloaded file to run it. If you already have a copy of ClamWin installed, you can upgrade it by simply running the installer for a later version, and installing on top of the existing version.

After clicking **Next** on the initial screen, the licence terms will be displayed. This program is released under the GNU General Public License. You must agree to the terms of this licence to use this program. The installation program will also install binary files from Cygwin (www.cygwin.com) and Clam Anti-Virus (clamav.sourceforge.net), both of which are also distributed under the GNU General Public License.

Next, you will be asked where you would like ClamWin to be installed. The default option is sensible, and you should only change it if you have a particular reason to do so.

Next, you will be asked which parts of the program to install.

Three selections (Cygwin Files, ClamAV Files and ClamWin Files) are greyed out and cannot be de-selected. This is because these files are essential for the program's correct operation. The other options are as follows:

Integration with Windows Explorer: If this option is selected, an extra option is added to Windows Explorer's right-click menu, allowing files to be scanned quickly and easily.

Integration with Microsoft Outlook: If this option is selected, an Outlook add-in will be installed, which will check all incoming and outgoing e-mails for viruses automatically. Note that this option will only appear if Microsoft Outlook (not Outlook Express) is installed.

Download Source Code: If this option is selected, the program's source code will be automatically downloaded from the Internet. The source code is not necessary for a normal installation, but may be of interest or use to programmers.

Next, you will be asked which Start Menu folder ClamWin's icons should be placed in. By default, a new folder named **ClamWin Antivirus** will be created, and the icons placed in that.

The next screen asks if you would like to download virus database files as soon as the program is installed. It is a good idea to update the virus database files as soon as possible. This screen also gives you the option to have a shortcut icon placed on the desktop.

The last screen displays a summary of the options that have been selected. To install ClamWin with the selected options, click **Install**. To go back and change some options, click **< Back**.

If you selected **Download Source Code** or **Download Virus Database Files**, this will be done once the program is installed. You will need to be connected to the Internet.

Installing on Linux/Unix

There is no setup program for the Linux/Unix version, as there is with the Windows version. To install ClamWin on Linux or Unix, follow these steps:

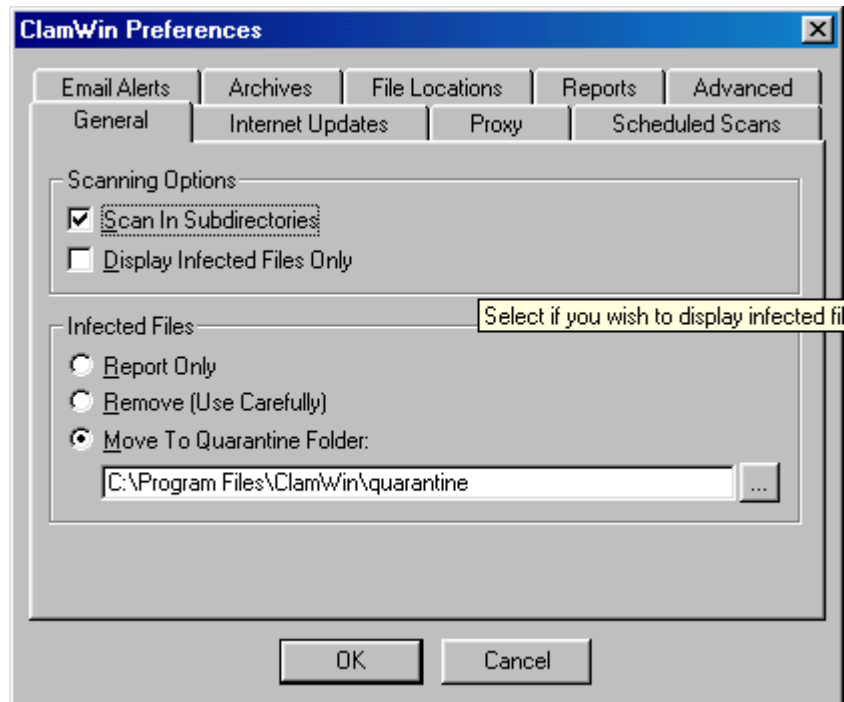
1. Ensure ClamAV is installed and working
2. Ensure Python is installed and working
3. Download and unzip the source code

To run ClamWin, execute the following command:

```
python ClamWin.py
```

Configuration

To configure ClamWin, either right-click on the system tray icon and select **Configure ClamWin**, or, from the main program window, select **Preferences** from the **Tools** menu. A dialogue with nine tabs will be displayed, as shown below. Clicking **OK** will close the dialogue box and save any changes made. Clicking **Cancel** will close the dialogue box without saving any changes.



Each of the tabs is discussed below.

General

This tab has options that control ClamWin's behaviour when scanning, and what ClamWin should do about infected files. The **Scanning Options** control ClamWin's behaviour when scanning. Any combination of options can be selected. The options are as follows:

Scan In Subdirectories: Select this option to have ClamWin scan sub-directories as well as the directory specified.

Display Infected Files Only: When ClamWin is running a scan, it displays the names of the files as it scans them. If this option is selected, ClamWin will only display the names of files that have been detected as infected. Selecting this option may slightly increase scanning speed.

Display Warning When Virus Is Detected: If this option is selected, a warning message will be displayed if ClamWin detects a virus.

The **Infected Files** options control determine what action ClamWin should take if it detects a virus. Only one option can be selected. The options are:

Report Only: If this option is selected, ClamWin only reports that a virus was found.

Remove (Use Carefully): If this option is selected, ClamWin will *permanently* delete the

infected file. The file will not be placed in Windows' Recycle Bin.

Move To Quarantine Folder: If this option is selected, ClamWin will move the infected file to the designated folder. To change the folder, enter the path in the text box, or click on the ... button to browse to a folder.

Filters

On this tab, ClamWin can be configured to scan only certain types of file, or to ignore certain types of file. The two can be combined to give greater control over what types of file are scanned.

Internet Updates

On this tab, you can control how ClamWin gets updates to the virus database. If the **Enable Automatic Virus Database Updates** option is selected, then ClamWin will automatically check for and download database updates. How often it checks and at what time can be set by the user.

If ClamWin is not running (or the computer is switched off) at the time specified, the update will be applied the next time ClamWin is started (which will normally be the next time the computer is switched on). The only exception is if the update frequency is set to "workdays", in which case it won't do anything until Monday

The address of the server to be queried can be set manually. Most users will want to leave this at the default setting (database.clamav.net). However, if you have a local server that mirrors database.clamav.net, you can enter its address instead.

The other option is **Update Virus Database On Logon**. If this option is selected, ClamWin will check for updates as soon as a user logs on to the PC.

Proxy

If you connect to the Internet via a proxy server, enter the details on this tab. If not, leave the details blank. Most users do not use a proxy server, and so can safely ignore this tab.

Scheduled Scans

This tab allows the user to configure ClamWin to run scans at certain times. Details of scheduled scans are displayed. To add a scan, click the **Add** button, then set the description, frequency, time, and folder to scan. An existing scheduled scan can be changed by clicking the **Edit** button, or removed by clicking the **Remove** button.

Scheduled scans can be activated or deactivated by clicking on the appropriate button. A deactivated scan will not run at the scheduled time.

Email Alerts

To have ClamWin send an e-mail report when a virus is detected, check the **Send Email Alert On Virus Detection** option. Fill in the details for your SMTP server, and the details for the message (subject, from address, to address).

Note: some SMTP servers do not require a user name & password. If this is the case, leave these settings blank.

To test the settings, click the **Send Test Email** button.

Archives

ClamWin can check the files in archive files (such as .zip files) for viruses. This tab allows the user to select whether or not ClamWin should check inside archive files, and set the maximum size of archive files to be checked, the maximum number of files to be extracted, and the maximum number of sub-archives to be extracted.

It should be noted that scanning within archives can slow down a scan, so disabling scanning of archives may reduce the time taken for a scan to complete.

File Locations

This tab allows the locations of the ClamScan program file, FreshClam program file (the program used to retrieve database updates) and the virus database to be altered. These values are set during installation, and should not normally need to be altered. *Do not change these settings unless you know what you are doing.* If they are incorrectly set, ClamWin will stop working.

Reports

This tab allows the user to change the location & name of the log files. Most users will not need to change these settings.

Advanced

This tab has four settings. The default settings will be fine for most users.

Treat Files As Mailboxes: If selected, ClamWin will parse all files as if they were MIME e-mail messages (eg Unix/Linux mailboxes, .eml files saved from Outlook Express)

Extract Attachments and Macros from MS Office Documents: If selected, ClamWin will check for macro viruses in MS Office documents.

Limit Log File Size To: Older logs will be deleted when necessary to keep the log file within the specified size.

Scanner Priority: This can be set to Low, Normal or High, and determines how the CPU cycles are split between ClamWin and other running applications. Setting this to High may make scans quicker, but may have slow down other applications. Conversely, setting this to Low may make scans slower, but should have less impact on other applications.

Usage

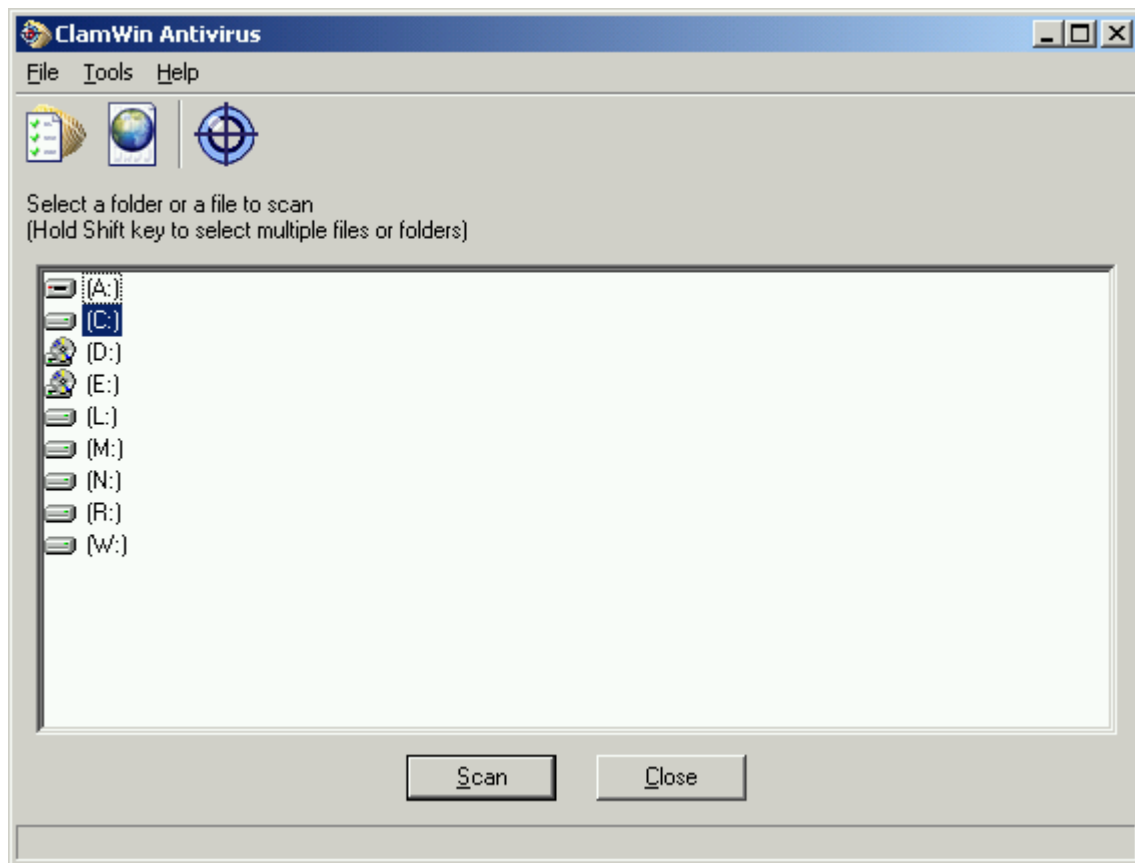
There are several ways to use ClamWin:

- Run from the Start menu
- Run from the system tray icon
- Scheduled scans
- Outlook integration
- Windows Explorer integration

This section will discuss each method in turn

Run from the Start Menu

By default, during installation, a program group named "ClamWin Antivirus" is created, with one item, "Virus Scanner". Selecting this item will start ClamWin with the main window open, as shown below:



To scan a file or a folder, simply select it in the main window, and click **Scan**. Multiple files/folders can be selected by holding down the **Control** or **Shift** key whilst clicking.

Run from the system tray icon

To run ClamWin from the system tray icon, either double-click on the icon or right-click and select **Open ClamWin**. ClamWin will be started with the main window open, as above.

The system tray icon allows other options to be selected on right-click:

Download Virus Database Update: This will cause ClamWin to check for updates to the virus database, and download any updates that are available.

Configure ClamWin: This will display ClamWin's preferences dialogue, where ClamWin's settings can be altered.

Scheduler: If the mouse is moved over this option, a sub-menu will be displayed. From this sub-menu, scheduled scans can be configured, already configured scheduled scans can be run, or running scans can be stopped.

Display Reports: If the mouse is moved over this option, a sub-menu will be displayed. From this sub-menu, the virus database update report or scan report can be viewed.

Scheduled Scans

Scheduled scans can be set up in the preferences dialogue. If a scheduled scan is set up, ClamWin will run a scan at the specified time, without interrupting the user. If a virus is found, a balloon notification will appear above the system tray icon (note: the balloon notification feature does not work in Windows 98). The action taken by ClamWin on detecting a virus will be determined by what has been set in the **General** tab of the preferences dialogue.

Outlook Integration

If Outlook is installed on the computer, and the **Integration with Microsoft Outlook** option was selected during the installation of ClamWin, then ClamWin will scan all incoming and outgoing e-mails for viruses. This is done entirely automatically, with no user intervention required. If an incoming e-mail has a virus attached, the virus attachment is replaced with a report file.

Windows Explorer Integration

If the **Integration with Windows Explorer** option was selected during the installation of ClamWin, an extra option (Scan For Viruses With ClamWin) will be added to the Windows Explorer right-click menu. Right-clicking on a file or folder and selecting this option will scan the file or folder for viruses, providing a quick and simple way to scan suspicious files.

Advanced Operation

This section has details for more advanced users.

Running from the Command Line

ClamWin can be run from the command line, from a batch file for instance. For a full list of parameters, navigate to the directory containing the executable files ("C:\Program Files\ClamWin\bin" on a default installation) and run

```
clamscan.exe --help
```

The directory *must* be specified, using the --database=FILE/DIR parameter. In a default installation, the command to scan the entire C: drive would be:

```
clamscan.exe --database="C:\Program Files\ClamWin\db" --recursive C:\
```

Note the use of the --recursive parameter to ensure that sub-directories are scanned.

When run from the command line, a value will be returned, indicating whether or not a virus was detected. If no virus is found, the return value will be 0. If a virus is found, the return value is 1. Any other return value indicates an error.

FAQ: Frequently Asked Questions

Q: Can ClamWin be configured to check files as they are opened/executed (commonly known as "on-access scanning")?

A: No. However, if the "Integration with Windows Explorer" option is checked during installation, any file can be scanned from within Windows Explorer simply by right-clicking on it and selecting "Scan For Viruses With ClamWin"

Q: How can I check it works?

A: Download the EICAR anti-virus test file from http://www.eicar.org/anti_virus_test_file.htm. This is not a virus, but a standard test file. Any anti-virus program should recognise it and treat it as a virus. ClamWin will report it as "Eicar-Test-Signature". The file is a DOS program, and if run it will print the message "EICAR-STANDARD-ANTIVIRUS-TEST-FILE!"

Q: I installed ClamWin with Outlook integration. Why doesn't it appear in Outlook?

A: ClamWin will not appear as an add-in. However, if it is properly installed, an extra menu option ("About ClamWin") will have been added to Outlook's Help menu.

Q: Does it check incoming and outgoing e-mails?

A: If ClamWin is installed with Outlook integration, it will check all incoming and outgoing e-mails for viruses. E-mails are checked automatically when they are opened. If an incoming e-mail has a virus attachment, the attachment will be replaced with a report file.

Q: How can I report a virus that ClamWin doesn't recognise?

A: ClamWin uses the same database as ClamAV (clamav.sourceforge.net). Viruses that are not in the database can be reported using the on-line form at <http://www.nervous.it/~nervous/cgi-bin/sendvirus.cgi>. Please make sure that you have updated your database to the latest version before using this form. False positives can also be reported here.

Q: How can I use ClamWin on a Unix/Linux system under GNOME?

A: First, you must have ClamAV (clamav.sourceforge.net) and Python (www.python.org) installed and working. Download and unzip the source zip file. ClamWin can then be run using the following command:

```
python ClamWin.py
```

Q: Can I upgrade an existing version of ClamWin?

A: Yes, just run the normal setup program, and install over the top of the existing version.

Q: Why doesn't the Integration with Microsoft Outlook option appear during installation?

A: This option only appears if Microsoft Outlook is installed on the computer. Note that Outlook (which is part of the Microsoft Office suite) and Outlook Express (which comes as part of Windows) are two very different programs (despite the similarity in names). ClamWin does not integrate with Outlook Express.

Known Bugs & Issues

Very few things in life are perfect, and ClamWin is no exception. However, where bugs & problems are known, they are documented here. Some are not strictly bugs, but are listed here as they may cause issues for users.

E-mail Clients that Store Messages in a Single File

Some e-mail clients (eg [The Bat!](#)) store all messages in a single file. Others store each e-mail as a separate file. If ClamWin finds a virus attached to an e-mail, it will consider the entire file (ie all the e-mails in that file) to be infected. Therefore, the entire file will be removed or moved to quarantine.

Odd Behaviour When Setting Times

When setting the time for Internet updates or scheduled scans, you may find that ClamWin acts strangely. This should be fixed in a future version, but a workaround is to ensure that both digits of the hour or minute are selected, then use the arrows to alter the value. Double-clicking on the hours, minutes or seconds will cause both digits to be selected.

Conflicts with Cygwin and/or ActiveState Python

If you have [Cygwin](#) or [ActiveState's ActivePython](#) installed, you may get conflicts with ClamWin. There is no known workaround (short of uninstalling Cygwin or ActivePython), but this issue is being investigated.

Does not Detect Outlook 2000 (pre-SP1)

The current installer will not detect Outlook 2000 unless Service Pack 1 is installed. As a workaround, create the following registry key, then re-run ClamWin setup:

```
HKEY_CURRENT_USER\Software\Microsoft\Office\Outlook
```

Troubleshooting

Problem: When trying to send a test e-mail alert, the following message appears:

Could not send the email. Please ensure you are connected to the internet.
Error: SMTP AUTH extension not supported by server.

Solution: The SMTP server settings are wrong. Note that many ISP's do not require a user name & password for the SMTP server. Try leaving these settings blank.

Problem: Error message -

Unable to create temporary directory

Solution: This error may appear if you have previously installed & uninstalled Cygwin. If you no longer need Cygwin, remove this registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\Cygnus Solutions

After removing the registry key, re-install ClamWin

Problem: Outlook 2000 is not detected during setup

Solution: This is a known bug, which will be fixed in a later release. As a workaround, create the following registry key, then re-run ClamWin setup:

HKEY_CURRENT_USER\Software\Microsoft\Office\Outlook

Problem: Minimised Outlook window cannot be restored

Outlook 2000, when minimised, will not restore correctly when the button on the taskbar is clicked. However, right-clicking on the taskbar button and selecting Restore does work. This appears to be due to a bug in Outlook, which can be fixed by installing Service Release 1. SR1 also fixes a number of other bugs, and can be downloaded from:

<http://www.microsoft.com/downloads/details.aspx?FamilyID=AF6C8D03-7633-45B4-AB96-795EE656F2A2&displaylang=EN>

Problem: Windows Explorer Integration doesn't work in Windows 95, 98, ME

This problem can occur if ClamWin is upgraded (ie it is installed without removing the old version first). This problem should be fixed in version 0.35, but earlier versions can be fixed as follows:

In the folder "c:\program files\clamwin\bin\", rename the file "explor~1.dll" to "explorershell.dll"

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