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• *Anti-virus packages tested and reviewed by David Rae and David Ludlow.*

*Thanks to MessageLabs for supplying us with the latest viruses for testing ([www.messagelabs.com](http://www.messagelabs.com)).*

# Safety first

**With the rise of the Internet it's all the more important to protect your PC from the multitude of viruses out there. We take a look at a dozen products to see how well they cope with some of the world's most evil viruses.**

**Y**ou would be unlikely to let your child go through school without at least the most basic of vaccines. Why, then, let your PC explore the biggest playground of all, the Internet, without similar protection? The computer virus has been around for years. Unfortunately the pathetic art of virus writing has improved over time and the latest leap forward means that you don't even have to launch an executable for a virus to infect your system.

No PC user should ever underestimate the importance of anti-virus software, and for that reason we have taken an in-depth look at 12 of the most popular products on the market.

To do the products justice we sourced over 350 of the world's most evil viruses – all of which are in the wild and could infect any system that is not protected. As well as looking at the general usability and manageability of all the products, we downloaded the vendors' latest signature databases from the web, and ran a scan against our folder of nasties.

The results were interesting to say the least, and should help you to fight through the mass of marketing hype and find an anti-virus application that suits your needs.

PHOTOGRAPHY: PATRICK LLEWELYN DAVIES

## Aladdin Software eSafe Anti-Virus



than one task at a time, which can be slightly confusing when you first use the product.

eSafe lacks many of the features displayed by other products on test here. Although we could scan every file on the test system, eSafe doesn't provide any customisation options to, for example, scan all emails, or Internet content.

The on-demand scanning configuration screen allowed us to assign new jobs, and specify certain characteristics such as the schedule, and the extensions that we wanted to check – as well as the target directories or files.

Unfortunately, like Trend Micro's PC-Cillin, eSafe's interface can't be re-sized. This is especially annoying if you need to drill down through the file menu to find a specific set of files that you want to scan.

In addition, the virus list is not as

**ESAFE IS PART** of a full desktop security suite that includes a basic firewall as well as this anti-virus product.

Opting for the anti-virus element of the package takes you directly to a screen where you can select either on-demand scanning or the configuration window for background scanning. Selecting either option launches a separate window. We were not overly impressed with this, because the old window disappears when the new one opens. This means you cannot see more

comprehensive as some of the other products in this test, providing a signature database of just over 21,000 viruses. Although the list offers a brief overview of whether the virus is destructive, and how it is transmitted, no other information is provided.

On top of this the scanner only managed to pick up 88.3 per cent of the viruses in our tests. Overall, it's hard to recommend eSafe when there are so many better virus scanning products on the market.

### DETAILS



**PRICE** £49.35 (£42 ex VAT)

**CONTACT** Aladdin Software  
01753 622 266

[www.esafe.com](http://www.esafe.com)

**SYSTEM REQUIREMENTS** Windows 95/98/NT, 32MB of RAM (64MB recommended), 15MB of free hard disk space

**PROS** Combined with other options such as a firewall, this could greatly improve security

**CONS** Poor user interface, unable to re-size windows, small virus list

**OVERALL** Although eSafe may appeal to those wanting a simple desktop security solution we think you'd be better served by two separate best-of-breed products

## Cat Quick Heal



One thing that isn't included as part of the main console window is an update icon, which in our view is a mistake. It's just too easy to forget to update your library if the icon isn't visible on the main screen. Instead it is situated in the tool bar under Utility. Clicking on this fires up a Wizard to guide you through the download process which, unfortunately,

can't be scheduled.

Quick Heal also includes what the company calls an Online Protection Module. This continuously scans your system to prevent virus infection from email or Internet downloads.

Although the software gives the impression of being relatively comprehensive, the results of our tests showed otherwise. It picked up only 63.5 per cent of the viruses in our database. This is a worryingly low figure and is likely to leave your

**QUICK HEAL** from Cat Computer Services is only available via download, so is it worth firing up your modem to grab a copy?

The package includes most of the major elements found in the other packages on test here. It has a heuristic scanner and a real-time monitor. There is also a scheduler, which was one of the easiest in this test to use, and allows users to schedule the scans on an hourly, daily, weekly or monthly basis. You can even set it to scan at a specific date and time.

system open to the threat of infection.

We were a little concerned about the fact that the software didn't pick up more viruses as the list that the product provides is relatively comprehensive. We tried downloading a new signature file in the hope that this would improve the results, but were told that we already had the latest version. Updates only appear on a monthly basis.

There is not a lot more that can be said about Quick Heal. Although all the relevant modules are there, it just wasn't successful enough in our test to warrant any kind of recommendation.

### DETAILS



**PRICE** \$28 (download only)

**CONTACT** Cat Computer Services  
[www.quickheal.com](http://www.quickheal.com)  
00 91 212 622 173

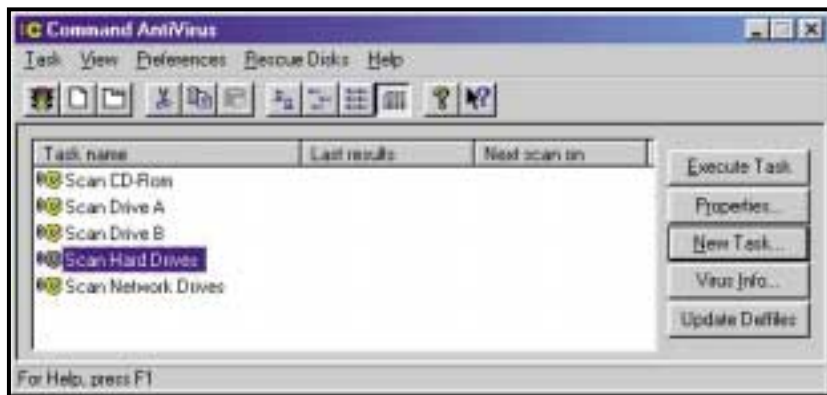
**SYSTEM REQUIREMENTS** 386 PC (486 recommended), Windows 95/98 or NT4 or higher, 8MB of RAM (16MB recommended), 10MB of hard disk space

**PROS** Easy to use

**CONS** Very poor scanning result, no automatic update of virus definition file

**OVERALL** The poor results in the virus detection test make this a product to avoid

## Command AntiVirus



**COMMAND PITCHES ITS** products more at users who need to protect whole networks rather than standalone desktops. This does make the AntiVirus software a little more difficult to set up initially. For example, the installation does not set up basic virus scanning tasks by default. You have to manually configure basic settings the first time you run the software.

AntiVirus is controlled from a single interface rather than a multitude of different windows. The main window always displays the scanning tasks that have been created. By default these

include tasks to scan any floppy drives or hard drives present in the system.

Unfortunately there's no information window to warn you of potential problems, such as when the virus definition file needs to be updated. But at least Command has placed the icon for updating this file in a prominent position in the main window. Unfortunately we couldn't find a way to schedule automatic updates of this file.

Some of the more in-depth tools, such as the ability to scan emails or Internet downloads, are missing from

the software. This betrays the application's network roots and does make the software less attractive for standalone users.

Beyond this, what's on offer is very good. It's easy to schedule scans and, with a detection rate of 92.6 per cent, the software offered good protection. A few interface improvements, and some more features aimed at desktop users would make this package a real winner. If you're looking for anti-virus protection for your network, Command AntiVirus is a good bet.

### DETAILS

★ ★ ★

**PRICE** £58.75 (£50 ex VAT) for download, £105.75 (£90 ex VAT) for boxed package

**CONTACT** Command Software  
020 7931 9301

[www.commandsoftware.com](http://www.commandsoftware.com)

**SYSTEM REQUIREMENTS** Windows 95/98, 8MB of RAM, 7MB of hard disk space

**PROS** Easy to schedule tasks and manually update

**CONS** Only basic scanning offered

**OVERALL** A worthy file scanner, and real-time protection tool, but for the standalone machine it lacks some of the tools that other scanners can offer



## F-Secure Anti-Virus



**F-SECURE, LIKE** Command, aims its products more at the business user, but it still offers some features that should be of interest to consumers.

The software is configured from a single screen which shows all the virus scanning tasks that you have set up. By default, the software creates tasks to scan either your entire hard drive or a single specified folder. You can easily set up a schedule for each task by using a simple dialog box. It's very easy to create a new task or to modify the

default ones to suit your needs.

You can also configure the background scanning tasks from this window. As with all the other products in the test a small icon sits in the system tray to indicate that background scanning is in operation.

Our main problem with the software, yet again, was with the performance of updates to the virus definition file. There's no way of setting up the software to update this file automatically. Instead, you have to manually download and install the latest update. There isn't even an information screen to warn you when the file becomes out of date.

One thing that is definitely in the software's favour is the virus information database. This lists all the viruses the software is capable of detecting. It gives a detailed description of the origin of each virus and the effects

it will have on your system. Although this may not be vital it is useful – not to mention interesting – to have this information to hand.

Where Anti-Virus really excels is in its detection abilities. It discovered 97.8 per cent of the viruses in our database – the highest score in our test. The interface is more functional than flash and the software lacks some of the advanced features found in competitors' products, such as email checking, but for raw virus detection, it's an excellent option.

### DETAILS



**PRICE** £105.75 (£90 ex VAT)

**CONTACT** F-Secure  
01223 257 747

[www.fsecure.com](http://www.fsecure.com)

**SYSTEM REQUIREMENTS** Pentium processor, 32MB of RAM, 15MB of hard drive space

**PROS** Good virus descriptions, high detection rate

**CONS** Hard to update

**OVERALL** The virus detection engine is second to none. If you're after a simple-to-use virus scanner and aren't worried about the uninspiring interface, then this is the product for you

## In-Defense In-Defense



**IN-DEFENSE IS** A bit of a mixed bag of a product. It has some very good features, but also a number of flaws.

The first oddity that we came across was a peculiarity with the installation. For some reason the Back and Next buttons are reversed when you select the standard installation option, but if you opt for the custom install they appear the right way round. After our computer

rebooted we were greeted by a cheesy, scary voice telling us that our computer was now protected from viruses.

Getting to grips with the product isn't made any easier by the fact that there isn't a single application where you can manage all your anti-virus settings. Instead you have to use various different programs. For example, if you want to set up the scanning options for macros, you have to close the main console and launch a separate application.

The macro scanning is one of the software's

strong points, because the background scanning can be set up to check for malicious macros. Since macro viruses are becoming a lot more common, this is a very useful tool to have.

The main program looks a little dated and is not very easy to use. It only allows for either document files, or executable files to be scanned. And you can't schedule scans.

In-Defense relies totally on heuristic analysis to detect viruses, so there are no virus definition files to update. Instead you place your trust in the analysis engine to detect virus-like activity and then react to it. We think this is quite a big risk to take and when we ran the software against our collection of viruses it only suggested that there 'may' be viruses on our system.

Overall we can't recommend In-Defense because of its total dependence on heuristic analysis and feel that it lacks too many of the features found in competing products.

### DETAILS



**PRICE** £49.95 inc VAT (£42.51 ex VAT)

**CONTACT** POW! Distribution  
01202 716 726 [www.pow-dist.co.uk](http://www.pow-dist.co.uk)

[www.indefense.com](http://www.indefense.com)

**SYSTEM REQUIREMENTS** 386 processor, 8MB of RAM, 6MB of hard drive space

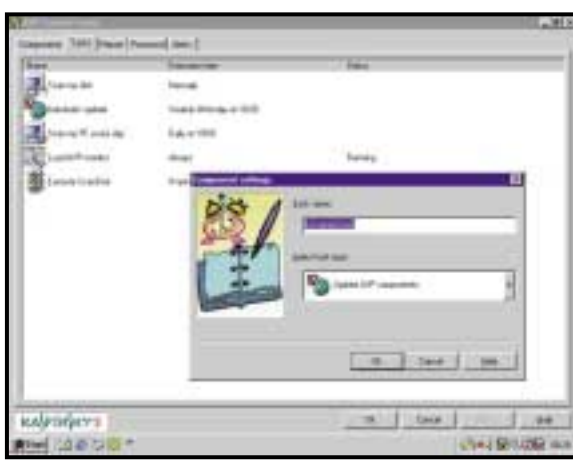
**PROS** Good macro protection

**CONS** No scheduled scans, poor interface is confusing, totally dependent on heuristic analysis

**OVERALL** In-Defense is just too basic a program to recommend and you should look for something more fully featured



## Kaspersky Lab AntiViral Toolkit Pro



Although there is an option to drill down into individual folders, this comes across as something of an after-thought. You have to click on an Add Folder icon, and then select the folder that you want to include in the scan. This then appears in the main window. You then have to select it before clicking again to start the scan. All a tad longwinded.

**PERHAPS ONE OF** the most respected – if not well known – names in the anti-virus world is Kaspersky. This Russian-based company's AntiViral Toolkit Pro (AVP) product takes a no-nonsense approach which, although simple, may not appeal to everyone.

The main management window is a rather dull affair, lacking any flash graphics or pretty icons. However, the AVP Control Centre is well laid out and easy to use, making it simple to set up scheduled scans and automatic updates.

The virus list for AVP is held online, which may seem a bit of a pain at first, but is actually a pretty good idea. You do have the problem that you have to go online to research a virus that your software has discovered, but the advantage is that the list will always be kept up to date.

The online list is also extremely comprehensive and you can search for virus entries either alphabetically or by category. There's also a database listing computer hoaxes and joke programs.

Updates for the virus definition file are posted online on a daily basis and are accessed via the Tools button at the top of the main menu.

This product has been the standard choice in Russia for years, but it is now also available in the UK from a company called Oxford Solutions.

Overall, AVP is a well written anti-virus package that managed to pick up 91.1 per cent of our test viruses. Although some users might be put off by the simplistic interface, there is no doubting the quality of the scanning engine.

### DETAILS



**PRICE** Single user: £45 (£38 ex VAT); 25 users £737 (£625 ex VAT)

**CONTACT** Oxford Solutions 01844 210 300

[www.avp.com](http://www.avp.com)

**SYSTEM REQUIREMENTS** 486 or higher, Windows 95/98/NT, 16MB of RAM, 8MB of hard disk space

**PROS** Basic yet thorough, easy to set up

**CONS** No option for scheduling

**OVERALL** The experience of Kaspersky Lab has shone through with this product. While it's not exactly user friendly, the virus scanning engine has a high detection rate

## McAfee VirusScan



**MCAFFEE HAS LONG** been associated with anti-virus software and the company's experience is easy to see in VirusScan.

Although the installation is not quite up to the level of that provided by Symantec's Norton AntiVirus – it only has basic options such as the creation of a rescue disk – once you get up and running VirusScan really starts to shine.

Of particular interest is the real-time file system scanning. In addition to being able to check files as they're being

accessed, McAfee will also offer to check Internet downloads, and incoming emails.

Even better is the inclusion of ActiveX, and Java scanning. This is an important area, because malicious ActiveX or Java code can be just as dangerous as other forms of viruses.

McAfee can stop this harmful code from running and, if you choose, block

access to the offending websites in future. The software even comes pre-programmed to block a small number of dangerous sites. The only problem is that you have to manually add any new sites that you want to block – there's no automatic update from McAfee for this feature.

Like Norton, McAfee has an info screen as part of its main interface. This displays alerts when, for example, the virus definition file needs to be updated. However, you can't schedule to

automatically update this file by default, and locating the manual method of doing this took some rummaging about in the software's documentation. Eventually we found the solution – you have to install a separate program that automates the task. We feel that something this important should really be built into the main program.

On the whole McAfee is a very capable product and with a detection rate of 96 per cent, we're confident it will offer good protection.

### DETAILS

★★★★

**PRICE** £33.75 (£29 exVAT)

**CONTACT** McAfee 01753 217 500

[www.mcafee.com](http://www.mcafee.com)

**SYSTEM REQUIREMENTS** Windows 95/98, 16MB of RAM, 17MB of hard disk space

**PROS** Good Internet tools, clear user interface

**CONS** Update function not built in to main program, default options are a bit basic

**OVERALL** Despite the problem with getting the latest virus updates, McAfee offers some great tools to cope with the new wave of Internet-based malicious code

## Norman Data Defense NVC



**NORMAN VIRUS CONTROL (NVC)** comes as three modules: the NVC which detects viruses; NVClean which removes them, and a new real-time monitor called Cats Claw which scans files as they are opened to guard against the threat of macro viruses.

The main problem with NVC is that the user interface varies between bland to downright frustrating to use. This hits you straight away when you first access the main NVC centre. It's decidedly unappealing to the eye. The main window feels very cramped and looks

quite dull. Another problem with the main console window is that there is no icon for signature database updates. Instead you must visit the Windows Start menu and select the option from there. Nevertheless, it does house a number of other icons from which you can launch

into a variety of user-defined scans.

Selecting a drive and then clicking on the scan button is all that's needed to get things started. If, however, you want to drill down deeper into your files to scan a particular document or file, you hit another problem – this window has one of least attractive layouts of any in this test. It resembles a Unix interface more than the colourful graphics we have come to expect from Windows.

On the other hand, scans are reasonably easy to set up and can be scheduled to run at periods ranging

from hours to months. What was strange, but not altogether worrying, was the fact that when we scheduled a scan to start on 5 March, the month was actually displayed in French – *zut alors!*

The addition of Cats Claw is very important, as it means that any files imported to your system, either via email or removable disks, will be scanned for macros automatically.

In our test NVC picked up 92.3 per cent of our viruses that were captured in the wild and overall we feel that NVC is a good product. However, the user interface does need to be tweaked to make it a touch more friendly.

### DETAILS

★★★

**PRICE** £47 (£40 exVAT)

**CONTACT** Norman Data Defense 01908 520900

[www.norman.com](http://www.norman.com)

**SYSTEM REQUIREMENTS** Any PC running Windows 95 or 98

**PROS** Real-time scanning is a good addition, main scheduling features are reasonably easy to use

**CONS** Poor user interface

**OVERALL** A relatively good virus scanner let down by a poor, unattractive, user interface

## Panda Software Antivirus Platinum



**PANDA HAS BEEN** gaining respect in the anti-virus community, and using the latest version of its Antivirus Platinum software it's easy to see why. It is simple to get to grips with due to its intuitive layout, yet still manages to pack in the necessary power that you need to fight against the threat of virus infection.

The initial screen, through which you access the software's various anti-virus services, bears an uncanny resemblance to Microsoft Outlook, and as a result makes you feel at home straight away.

From here you can select two modes

of operation: Basic or Advanced. The Basic option attempts to allow those unfamiliar with anti-virus software to set-up scanning options with the minimum of fuss, by hiding many of the more advanced modules. It's a good idea in theory, but in practice the options are far too basic. It's better to choose the Advanced mode, which is highly configurable and has all the options the average

user will need – and more.

Signature updates can be grabbed from the web by clicking an icon and specifying the relevant address. This is one of Panda's strong points as the virus database is updated daily.

The virus list that comes as standard contains over 48,000 viruses and includes a brief explanation of each.

Another impressive feature is the software's heuristic analysis engine. This allows you to scan for unknown viruses by searching out common virus traits. Heuristic analysis is the cutting edge of

anti-virus technology and it's great to see it in a consumer application.

Antivirus Platinum's Sentinel module sits in the background and monitors imported files for macro viruses. Configuration is accessed via an icon on the taskbar. Sentinel also includes an Internet scanner to scan files downloaded to your PC when browsing the web.

The software had an impressive detection rate of 96 per cent which puts it up there with the big boys. Overall this is a comprehensive product, offering pretty much everything you could want from an anti-virus package.

### DETAILS

★★★★★

**PRICE** £49.99 (£42.54 ex VAT)

**CONTACT** Panda Software  
01372 824278

[pandasoftware.com](http://pandasoftware.com)

**SYSTEM REQUIREMENTS** 486 or higher;  
16MB of RAM; 50MB of hard drive space

**PROS** Extremely configurable, easy to use,  
fully featured

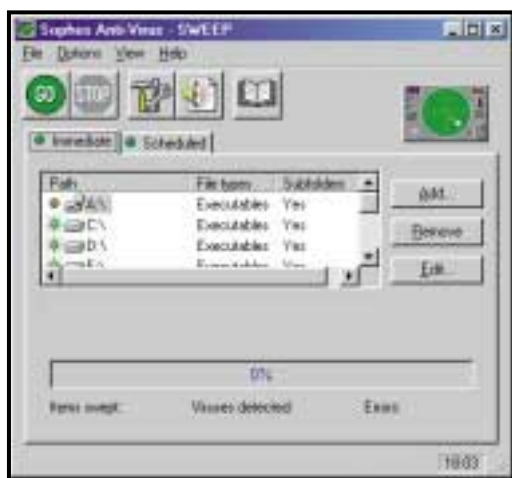
**CONS** The sheer number of available options  
could be confusing

**OVERALL** A comprehensive AV product that  
is hard to beat, although it could seem a little  
over the top for the average user





## Sophos Anti-Virus



The software is divided into two components: the scanner itself, and InterCheck, the background scanning tool. As with other products in this test, control of the program is through a central console.

The main view of the console shows the tasks that have been created – scans of a particular folder or an entire drive, for example. Tasks are split into two groups: immediate, and scheduled. Immediate tasks are run by double-clicking them, while scheduled tasks operate according to user-

**SOPHOS IS ONE OF** the major players in the anti-virus arena and has a good reputation for developing quality products for business, so we were interested to see how its latest product would stand up to our testing.

Anti-Virus is supplied with a huge manual, an emergency floppy disk and, er, some stickers adorned with the word 'Virus'. We're not sure what the stickers are for, but the manual and emergency disk are certainly welcome additions.

defined criteria.

Anti-Virus includes a virus library with descriptions of each virus and instructions on the best way of cleaning them. It's a good source of information, but contains less detail than F-Secure's product.

If we've got one thing to moan about, once again it has to be the way that updates are handled. There is no information screen to warn about an out-of-date definition file, and there's no automatic downloading of updates.

Instead Sophos can either email, or post you a CD with the update. This then has to be installed manually. The updates are also posted on the Sophos website, so it's a shame you can't schedule automatic updates. More annoyingly, the updates have to be manually copied into the Sophos directory.

On the whole, AntiVirus is a good product as it's very easy to get to grips with, and it is simple to create and schedule new tasks. It had a good detection rate of 94.5 per cent, but we can't help thinking that with a little bit more work it would be an excellent product, rather than merely a good one.

### DETAILS



**PRICE** £229 (£195 ex VAT)

**CONTACT** Sophos 01235 559 933

[www.sophos.com](http://www.sophos.com)

**SYSTEM REQUIREMENTS** Windows 95/98, 8MB of RAM, 4MB of hard drive space

**PROS** Easy to use, everything you need in one box

**CONS** Difficult to update, expensive

**OVERALL** Lacks some of the more advanced features found on the other products, but has a good detection rate and an inviting user interface

## Symantec Norton AntiVirus 2000



installing email scanning. It also created a rescue disk – a bootable floppy with a copy of the scanning software loaded on it.

A quick reboot later and our computer was automatically running a complete system scan, and a System Tray icon told us that background scanning was installed.

**SYMANTEC'S NORTON** brand has a long history of creating good tools for the home user, and Norton AntiVirus 2000 is no exception. Right from the outset this product impressed us.

The installation is well designed and helps you set up good protection, so when you run the software for the first time, much of the configuration work has already been done. The installation procedure performed an update of the virus definition library and auto-detected our Outlook settings before

A single application controls all aspects of the scanner's configuration and Symantec has included an information screen that displays various information and warnings. For example, it will warn you if your virus definition database is older than a month. Even better is the fact that when you double click on a warning an extra information box appears. So, if you double click on the warning about your out-of-date definition file, the software will ask you if you want to run

LiveUpdate to sort out the problem.

LiveUpdate is a separate application that can be scheduled to check the company's website at predefined intervals to find out when any updates to the software have been posted or when a new virus definition file is available. You can also schedule when you want the software to scan your computer for viruses.

With a detection rate of 95.1 per cent, AntiVirus 2000 was one of the better performing packages on test here. This, combined with the ease of use the software offers, makes this a fine product.

### DETAILS



**PRICE** £42.44 (£36.12 ex VAT)

**CONTACT** Symantec 020 7616 5600

[www.symantec.com](http://www.symantec.com)

**SYSTEM REQUIREMENTS** 486 or higher, Windows 95/98, 16MB of RAM (32MB recommended), 45MB of hard disk space

**PROS** Superb installation, easy to use

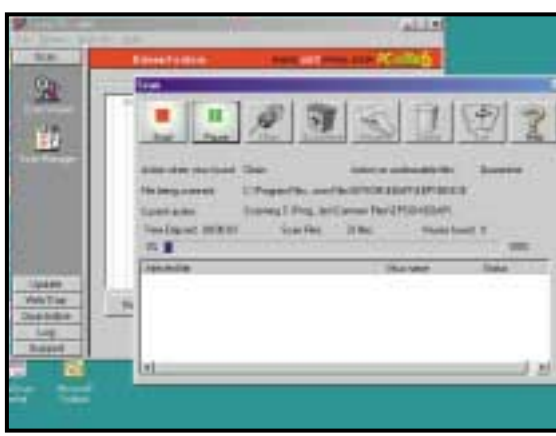
**CONS** Not the highest detection rate, but very close!

**OVERALL** AntiVirus 2000 offers superb protection against viruses and is extremely easy to use – a great product





## Trend Micro PC-Cillin



Manager, as this allows you to set up a variety of scheduled scans easily. As well as the standard drive and directory scans, there are options for Internet-related content, all Word documents, and all Excel documents. Simply clicking on one of the options highlights a number of icons at the top of the console, such as Run, Edit and New Task.

**THE NEW OWNER** of PC-Cillin, Trend Micro, has added significantly to this stalwart of the anti-virus scene. This latest offering, version 6, is an extremely intuitive and easy-to-use product that detected an impressive 97.5 per cent of the viruses we presented it with.

The main management console is an under-sized window, with a number of tabs on the left, and a main window to the right. The main scanning interface contains two sections – the Scan Wizard and the Scan Manager.

It is more likely that you will use the

PC-Cillin also includes a real-time scanner which sits in the background scanning all the files that you access. This background scanning is configurable, but is set up ready to go by default, which means you don't really have to worry too much about changing the initial configuration.

What we liked about PC-Cillin is its intuitive front end. The software is extremely powerful with a host of configuration options, yet the interface does a great job of hiding this complexity from the user.

A virus encyclopaedia is also

included with a comprehensive explanation for every common virus present in the database. One strange anomaly was that we were not able to read the whole description, as the window wasn't large enough to accommodate all the text and there was no way to re-size it.

PC-Cillin incorporates web security in the form of a filter that can block users from visiting undesirable pages, plus a malicious object blocker that checks for potentially dangerous ActiveX and Java content while you are surfing.

### DETAILS

★★★★★



**PRICE** £19 excluding postage (£16 ex VAT)

**CONTACT** Trend Micro 01628 421 508

[www.antivirus.com](http://www.antivirus.com)

**SYSTEM REQUIREMENTS** Pentium or higher, 16MB of RAM (32MB recommended), 15MB of hard drive space

**PROS** Clean interface, easy to use yet powerful

**CONS** We were unable to re-size main console window

**OVERALL** A very good user interface combined with an excellent scanning engine makes this one of the best products on test

## Virus protection in a networked environment

Protecting your business from the threat of viruses is no small task. The risks come not only from malicious hackers, but also employees who may be unaware that they are putting your business systems at risk. It's hard to patrol what people bring in on floppy disks, or download from the Internet, and once one computer becomes infected, the virus will spread quickly in a networked environment.

The obvious answer is to roll out virus protection to all your desktop machines, but several points need to be considered before choosing a product.

You need to take control away from users. After all, you don't want a careless – or even malicious – worker to be able to change the scanner's settings or even disable the virus protection altogether. Therefore the software you roll out to the desktops should be managed from a central point – a single piece of management software.

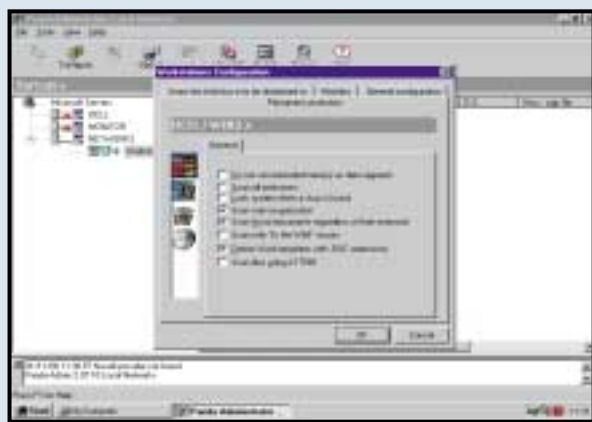
Ideally this management software should provide a method for distributing the

However, this distributed installation process should be customisable. You need to be able to create settings that prevent users from getting at the scanner or uninstalling it.

Typically this is called a stealth installation: the virus scanner's there, but the users can't see it. If your management software doesn't have this feature then you're going to have to make a trip to each PC to configure the desktop software and, let's face it, this defeats the original point of remote installation.

One thing to look out for is how the installation method works. Good management software will provide automatic Windows NT installation, and some method for creating customised Windows 95/98 installation packages. The norm for Windows 95/98 installations is to be able to produce a custom install by modifying login scripts.

Of course, once the software is installed the management console should allow complete remote control of the client software. Important features



*Panda has a number of configuration options for client PCs*

client software to the desktop. There's nothing worse than having to visit each PC on the network just to install a single piece of software. It's much better to be able to perform a distributed installation from a single machine.

include the ability to schedule scans and some way of updating the virus definition file. You should perform a complete scan of a machine on a regular basis to make sure that nothing nasty has found its way onto the computer.



*Norton AntiVirus Corporate Edition protects networked machines*

The best management software will allow you to apply schedules to individual machines, or to groups of machines.

### Definition files

We can't stress how important it is to carry out regular updates of the virus definition file. New viruses are being written every day, so the virus definition file can quickly get out of date, and the last thing you want is an obsolete scanner sitting on workstations.

Performing a monthly, or even weekly, update is a must. While client software is usually capable of accessing the Internet itself to get the latest update, this is a waste of Internet bandwidth. A better option is for the management machine to perform the download, and then distribute the software to the clients using the LAN. This makes sure that the administrator stays in control of the whole process.

### Beyond the desktop

For client management we'd have to recommend Norton Anti-Virus. Quite simply this product is the best that you will find. It excels at everything from distributing the software to controlling the desktop scanners. It's very easy to use, and by default it's designed to make sure that

control is performed by the administrator.

Beyond the desktop, however, are several other important considerations. It's worth thinking about putting in a scanner at the email server. This can catch viruses before they reach the desktop, or before a virus leaves your company. Also worth protecting, for similar reasons, is the Internet gateway. For this point on the network we'd recommend a totally different scanner to the one sitting at the desktop.

It's not usually something that we would suggest, but there's a very good reason for this: each virus scanner has different updates. At any one time, a virus that one scanner will pick up will be overlooked by another. By putting in place a different scanner at an email server you improve the odds of catching a virus. Basically the more that you can do to protect your network the better.

We'd suggest that you look for a virus scanner that can be used as a plug-in to your email software. It's not unusual to find software which can act as a Microsoft Exchange plug-in, and at the end of the day this will make virus protection a whole lot easier. Combine the two techniques that we've mentioned and your network will be well protected.

MANUFACTURER	ALADDIN	CAT COMPUTER	COMMAND	F-SECURE	IN DEFENSE	KAPERSKY LAB
PRODUCT	E-SAFE	QUICK HEAL	COMMAND	F-SECURE	IN-DEFENSE	ANTI-VIRAL
	SOFTWARE	SERVICES	CORPORATION			
	ANTI-VIRUS		ANTIVIRUS			TOOLKIT PRO
Version (Windows 9x)	2.2	5.23	3.09p	4.07	2.10	3.0.129
Price inc VAT (ex VAT)	£49.35 (£42)	\$28 (download)	£58.75 (£50) download £105.75 (£90) posted	£105.75 (£90)	£49.38	Single user £45 (£38) 25 users £737 (£625)
Telephone	01753 622 266	00 91 212 622 173	020 7931 9301	01223 257 747	001 831 471 1413	01844 210 300
Website	<a href="http://www.esafe.com">www.esafe.com</a>	<a href="http://www.quickheal.com">www.quickheal.com</a>	<a href="http://www.commandsoftware.com">www.commandsoftware.com</a>	<a href="http://www.fsecure.com">www.fsecure.com</a>	<a href="http://www.indefense.com">www.indefense.com</a>	<a href="http://www.avp.com">www.avp.com</a>
Supported platforms	Windows 95/98/2000, 4, NT	Windows 95/98/2000	Windows 3.x/95/98, NT	Windows 3.x/95/98, NT, Linux	Windows 95/98, NT	Windows 95/98, NT
Real-time scanner	✓	✓	✓	✓	✓	✓
On-demand scanner	✓	✓	✓	✓	✓	✓
Email protection	X	X	X	X	X	X
Internet protection	✓ (firewall, and content filtering)	X	X	X	X	✓
Real-time macro protection	X	✓	X	X	✓	X
Scan scheduling	✓	✓	✓	✓	X	✓
Update interval	Every 4-6 days	Monthly	Daily	Daily	N/A	Weekly
Automatic updating	✓	X	✓	✓ (requires additional downloadable program)	N/A	✓
Scanner detection percentage	88.3	63.5	92.6	97.8	N/A (heuristic analysis)	91.1

MANUFACTURER	McAfee	NORMAN	PANDA	SOPHOS	SYMANTEC	TREND MICRO
PRODUCT	VIRUSSCAN	VIRUS	ANTIVIRUS	SOPHOS	NORTON	PC-CILLIN
		CONTROL	PLATINUM	ANTI-VIRUS	ANTI-VIRUS 2000	
Version (Windows 9x)	4	4.7	6	3.31	6	6
Price inc VAT (ex VAT)	£33.75 (£29)	£47 (£40)	£49.99 (£42.54)	£195 with 12 monthly CD updates, £99.50 download updates only	£42.44 (£36.12)	£19
Telephone	01753 217 500	01908 520900	01372 824278	01235 559 933	020 7616 5600	01628 421 508
Website	<a href="http://www.mcafee.com">www.mcafee.com</a>	<a href="http://www.norman.com">www.norman.com</a>	<a href="http://www.panda.com">www.panda.com</a>	<a href="http://www.sophos.com">www.sophos.com</a>	<a href="http://www.symantec.com">www.symantec.com</a>	<a href="http://www.trend.com">www.trend.com</a>
Supported platforms	Windows 95/98/NT	Windows 3.1x/95/98, NT, DOS	Windows 3.1x/95/98, NT, DOS	Windows 95/98/2000	Windows 95/98/2000, NT	Windows 95/98, NT4
Real-time scanner	✓	✓	✓	✓	✓	✓
On-demand scanner	✓	✓	✓	✓	✓	✓
Email protection	✓	X	X	X	✓	X
Internet protection	✓	X	X	X	X	✓
Real-time macro protection	X	✓	X	✓	X	X
Scan scheduling	✓	✓	✓	✓	✓	✓
Update interval	Daily	Monthly	Daily	Daily	unknown	Twice Monthly
Automatic updating	✓ (requires additional downloadable program)	✓	✓	✓ (requires additional downloadable program)	✓	✓
Scanner detection percentage	96	92.3	96	94.5	95.1	97.5



# Editor's Choice

The anti-virus market is one of the most competitive in the IT industry, and the ever increasing security threat posed by virus writers ensures that all the anti-virus software vendors are kept on their toes.

There are few things as annoying as a virus attack; not only can it affect you, but it could also end up affecting your friends or even other companies that you do business with. It's therefore key to make the right choice when selecting an anti-virus package.

Luckily, the majority of the products we tested here are up to the job of providing substantial protection against the threat of viruses. Symantec, Network Associates, Trend Micro, Sophos, F-Secure, Panda Software and Command all provide good products that will catch the vast majority of viruses before they infect your system.

We felt InDefense's decision to rely solely on heuristic analysis was a brave step, but one that hasn't really worked. The product simply didn't inspire confidence, as it could only suggest that our infected machine 'may' have a virus.

In our opinion a combination of heuristic analysis and signature database scanning is the best approach. Although performing a scan using both

technologies can eat up system resources, we feel it is worth it for the extra protection it provides.

And so it's on to the packages that we thought were the cream of the crop. It was not easy to pick out products for special attention, as most of the packages on review here are very worthy products, however we did feel that some did stand out from the crowd.

➤ Our first **Highly Commended** award goes to Panda Antivirus Platinum. Panda is a relatively new arrival on the anti-virus scene, but its software is an excellent product that scored an impressive 96 per cent in our detection test. The package has a wealth of features, is easy to use and returned excellent scan results. If anything the sheer number of features is a little overwhelming and we'd question whether you really need that level of customisation in an anti-virus product. We really liked the way the background scanner automatically checks files downloaded to your PC while you are browsing the web.

➤ Our second **Highly Commended** award goes to F-Secure. Not only did it return the highest score in the scanning tests, at 97.8 per cent, but the user

interface is also extremely intuitive and easy to use.

The virus information database is extremely well implemented. It lists all the viruses the software is capable of detecting and gives a detailed description of the origin of each virus and the effects it will have on your system.

The only thing we didn't like was the way you have to manually download and install updates to the virus definition file and the fact that there is no information screen to warn you when the file becomes out of date.

➤ This month's grouptest has been extremely closely fought so we decided to give two **Editor's Choice** awards. Both Trend Micro's PC-Cillin and Symantec's Norton AntiVirus 2000 are superb products that we have no qualms about recommending.

Symantec has a strong history of developing excellent anti-virus software and Norton Anti-Virus is no exception. Symantec provides excellent support with a frequently updated virus definition file and the live update option is superb. Although the product didn't come out on top in the scanning test, it did manage a very high score of 95.1 per cent.

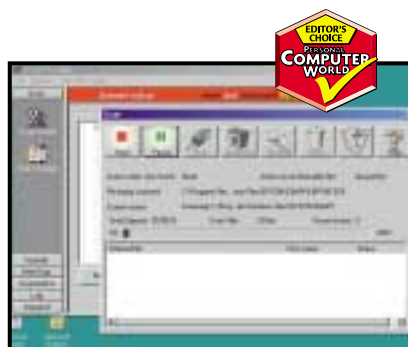
The installation process was the best out of all the products tested here and we were impressed with the way the install automatically logged on to the web to update the virus definition library, as well as auto-detecting our Outlook settings before installing the email scanning module.

➤ Our second **Editor's Choice** award goes to Trend Micro for PC-Cillin. The software is extremely powerful with a host of configuration options, yet the interface does a great job of hiding this complexity from the user. It also achieved the second highest score in our virus detection test with 97.5 per cent of viruses detected.

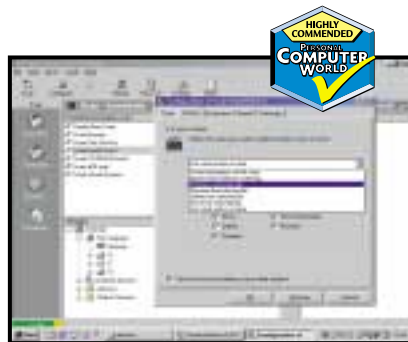
We were also impressed by the inclusion of the web security filter that can block users from visiting undesirable web pages, and the malicious object blocker which checks for potentially dangerous ActiveX and Java content. The virus encyclopaedia was also very good with its comprehensive explanation of every common virus present in the database.



*Installing Norton Anti-Virus was a dream*



*PC-Cillin includes a web security filter*



*Panda Antivirus has a multitude of features*



*F-Secure got top marks in our scanning test*