



Ethical Hacking and Countermeasures

Version 6



Module XLIV

Internet Content Filtering Techniques



Ohio Internet Crimes Against Children Task Force expands

[Kim Wendel](#)

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CLEVELAND -- Cuyahoga County Prosecutor Bill Mason announced Monday that Brown County Prosecutor Thomas F. Grennan and the Brown County Prosecutor's Office has joined the OICAC.

The OICAC's goal is the capture and successful prosecution of online predators.

"Internet crime has become the new wave of crime against children," Mason said. "Brown County Prosecutor Thomas F. Grennan's participation in this statewide task force will help protect children and ensure that Internet predators are apprehended and punished."

Mason said children of all ages have access to the Internet. Unfortunately, while the benefits are obvious and numerous, there are dangers as well.

The openness of the Internet provides pedophiles direct access to our children in our homes, he added. Online child sexual exploitation, both the luring of minors into illicit sexual relationships and the production, distribution or solicitation of child pornography, is a serious threat to our youth and families.

Mason said the addition of Grennan and Brown County brings the number of law enforcement partner agencies to 244.

The 244 partner agencies include: 115 Police Departments, 66 County Sheriffs, 53 County Prosecutors and 10 other agencies that include the FBI, the United States Treasury, the U.S. Attorney, the Metropark Rangers and the U.S. Marshals.

There is at least one OICAC member in each of Ohio's 88 counties.

Mason created the Northeast OICAC Task Force in 2000 to combat the rise of Internet crime against children.

Source: <http://www.wkyc.com/>

Module Objective

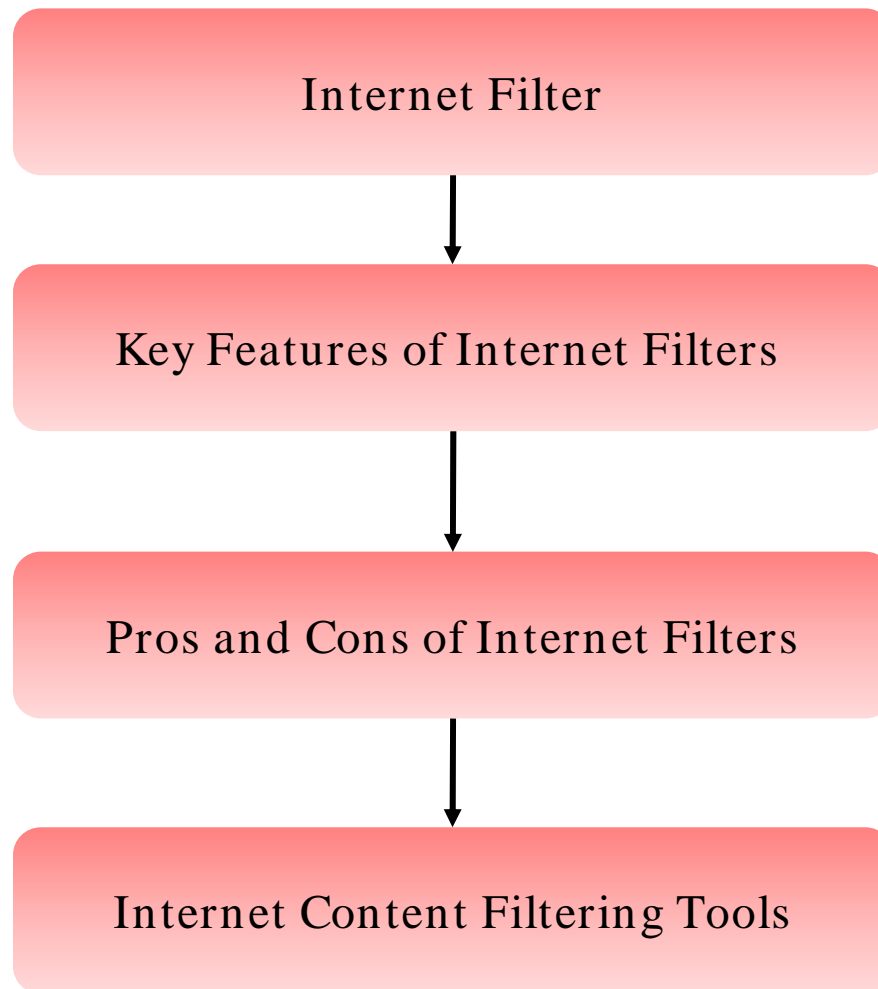
This module will familiarize you with:

Internet Filter

Key Features of Internet Filters

Pros and Cons of Internet Filters

Internet Content Filtering Tools



Introduction to Internet Filter

An Internet filter is a software that blocks unwanted content such as pornography and group sites

Filters use a list of keywords and well-known URLs to restrict children from accessing inappropriate material

More advanced filters can also block or filter chat rooms, instant messages, file downloads, and forums

There are also filters that block out SPAM



Key Features of Internet Filters

User profiles:

- Allow you to create a profile for each member of your family

Reporting:

- Provides detailed information on what your children have been doing and saying online, including sites visited

Time Limits:

- You can set limits on when and how long a user may be online

Regular updates:

- Choose software that allows you to download regular updates to keyword and URL lists

Compatibility:

- Make sure the software will work with the browser you use, as well as your operating system

Pros and Cons of Internet Filters

Pros:

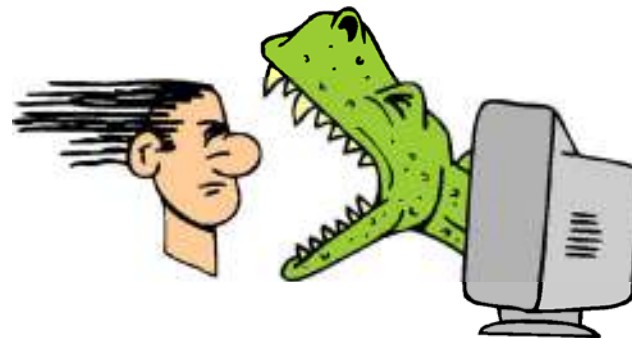
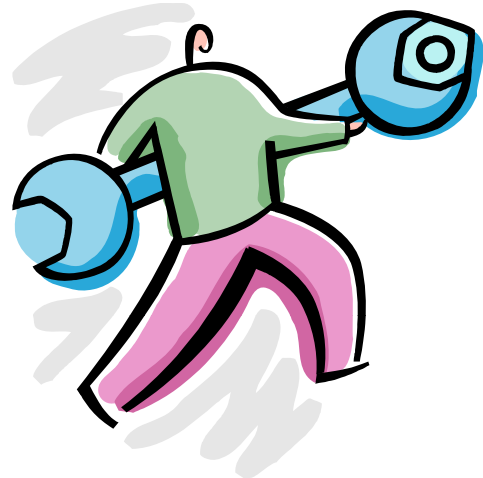
- Prevents children from deliberately or inadvertently accessing pornography
- Prevent predators from talking to your children online
- Allows kids to surf online without constant parental presence



Cons:

- Can sometimes filter out “safe” sites, words, and people
- May create a false sense of security for parents
- Tech-savvy kids may find a way around filters, or may access inappropriate content elsewhere





Internet Content Filtering Tools

iProtect You is an Internet filtering and monitoring program designed for parents who are concerned about the possible detrimental effects of the Internet on the development of their children

Features:

- Block e-mails, chat sessions, instant messages, and P2P connections if they contain inappropriate words
- Prevent your private information (credit card number for example) from being sent to the Internet
- Set a schedule to specify days and times when on-line activity is allowed
- Limit Internet Traffic to a specified amount of data that can be sent or received per user / per day
- Control the list of programs that can have access to the Internet
- Get notification e-mails with full description of blocked operations and an attached screen-shot of your kids' computer to control them remotely

iProtectYou Pro Control Panel

Filtering is: Enabled

You are logged on as: Restricted Users\Vex

- Internet Timetable
- Users and Groups**
- Logs and Charts**
- Traffic Limits**
- Settings

- Filter harmful websites
- Block instant messages
- Schedule Internet use
- Limit Internet Traffic
- Control kids remotely
- Log all online activities
- Protect privacy
- Customize for each user

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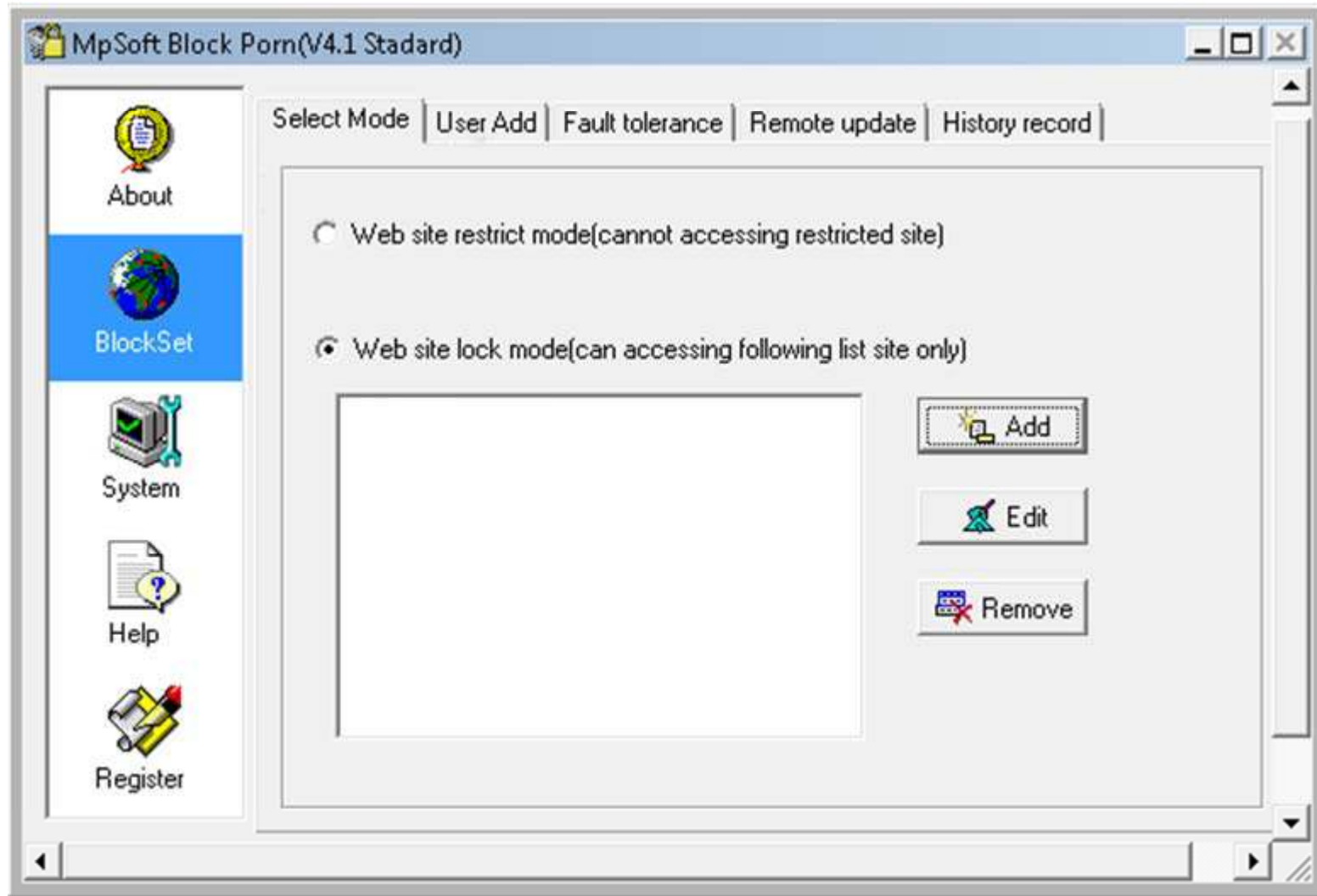
Block Porn is an Internet filtering software that can block access to pornographic material and adult web sites as well as any other web site as needed

The program offers two modes:

- One that allows access to all web sites, except pornography
- Restricted mode that blocks all web browsing, except for the sites that you specifically allow

It includes the options such as blocking access to selected folders, restricting program access, locking the IE home page, custom warning messages, network sync, and more

Block Porn: Screenshot



FilterGate is a powerful filtering product that offers four main Internet filters in one small downloadable application

It is a 4-in-1 filtering package that allows to remove web advertising and popup windows as well as protect your privacy and filter adult content

Four Internet filters are:

PopupFilter setting

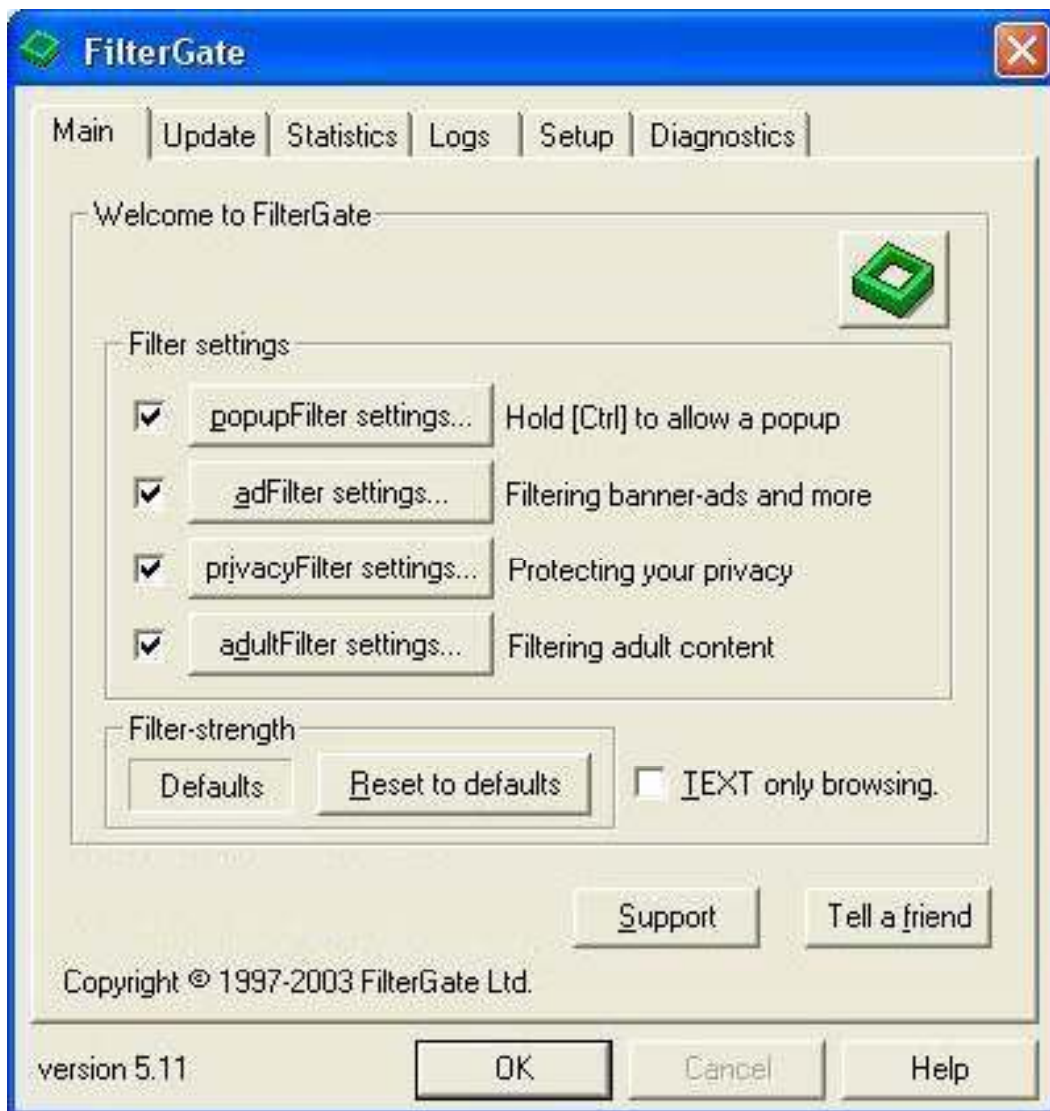
AdFilter setting

PrivacyFilter setting

AdultFilter setting



FilterGate: Screenshot



Adblock is a content filtering plug-in for the Mozilla and Firebird browsers

It allows the user to specify filters, which remove unwanted content based on the source-address

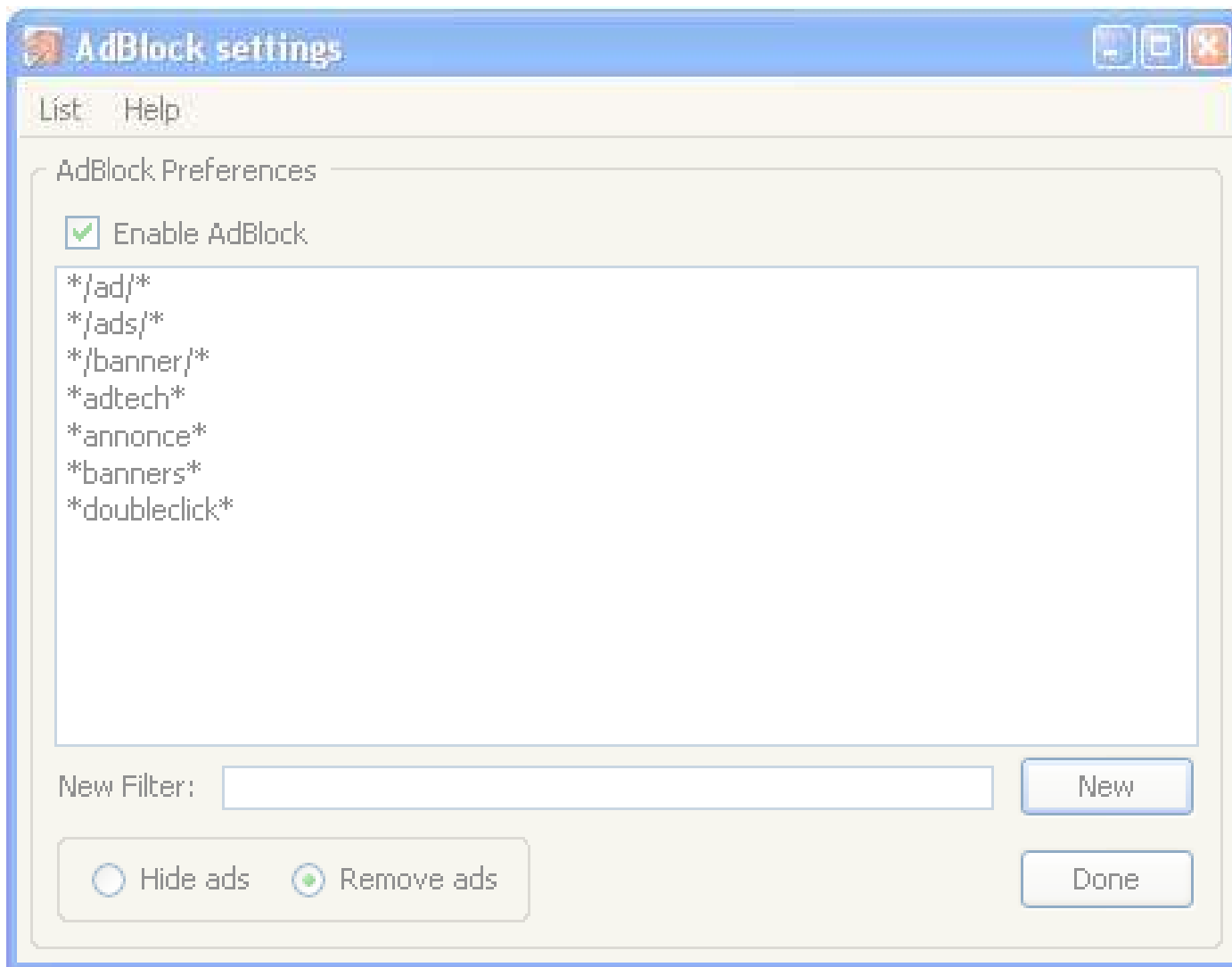
Every time a webpage loads, Adblock will intercept and disable the elements matching your filters

Adblock supports two types of filters:

- Simple Filter
- Regular Expression



Adblock: Screenshot

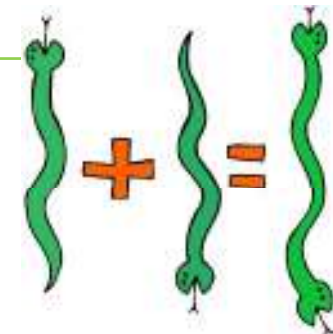


AdSubtract is a program that blocks every type of conceivable web advertisements

It protects your privacy while you surf the web

Features:

- Pop-Ups and Pop-Unders are blocked
- Banner ads of all sizes vanish
- Stops multimedia ads
- Stops windows messenger pop-up spam
- Distracting animations can be frozen; Web sounds can be silenced
- Privacy protection automatically deletes cookies, browser history, cache, and more
- Ad Server/ Profiling cookies can be blocked
- Easy to toggle AdSubtract On/ Off to Enable/ Disable filtering



AdSubtract: Screenshot

AdSubtract PRO 3

AdSubtract® About Options Test Help **INTERMUTE™**

Ad Blocking
AdSubtract Filtering is:
ON
[Disable Filtering](#)

Total Ads Blocked
Total Ads Subtracted by AdSubtract Users:
15,025,500,815

Updates
➤ This copy of AdSubtract is up to date.
➤ Your ad database is up to date.
[Check for Updates](#)

Scoreboard
Ads Subtracted Since 10-9-2003 :
8506
Banner Ads
3259
Pop-Up Ads
94
Search Ads

[OK](#)

GalaxySpy



GalaxySpy is a program that lets you retake control of your Internet experience

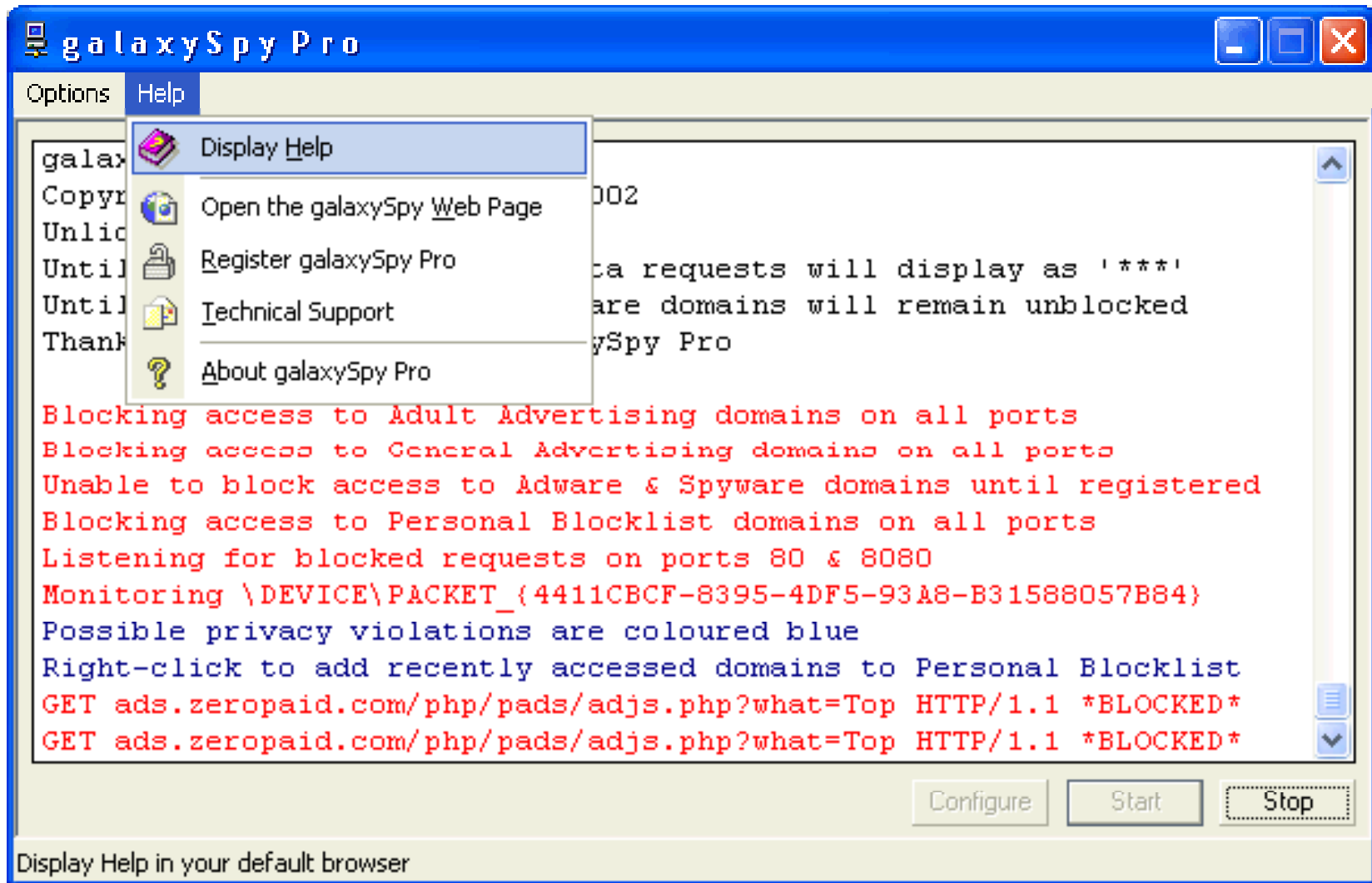
It allows you selectively block ads, adult-content sites, market research, profiling, and tracking

It detects and blocks adware, cookies, hackers, scripts, spyware, viruses, and worms

This program features an optional password for parental control

The Professional Edition lets you log Web sites visited, cookie contents and requested URLs

GalaxySpy: Screenshot



AdsGone Pop Up Killer

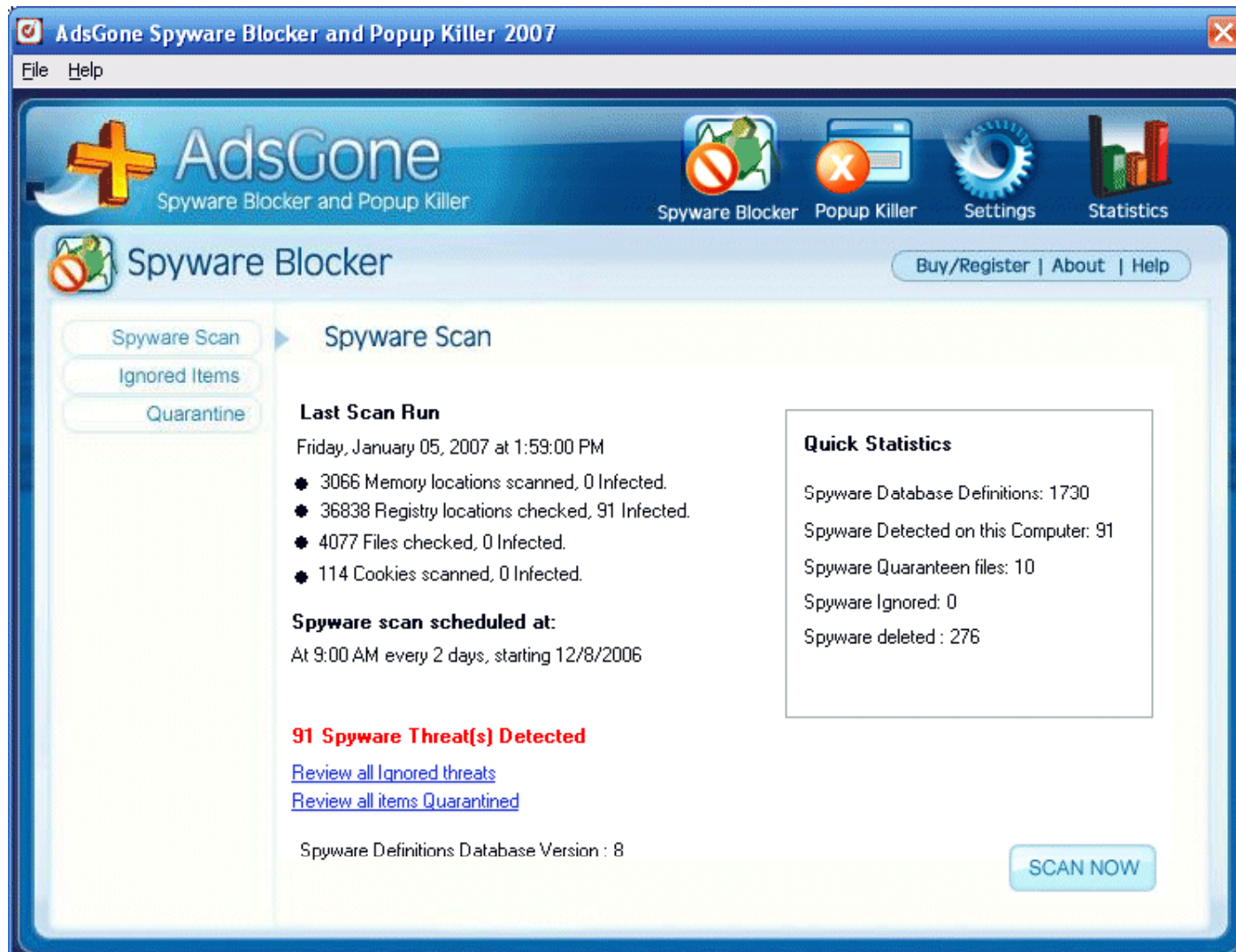
AdsGone is a program that runs while you are browsing the Web

Features:

- Blocks unwanted popup ads
- Prevents messenger service and web page dialog ads
- Blocks banner ads
- Kills spyware and adware programs
- Blocks ads and Pop-Ups when using Kazaa, Morpheus, Gator, or Chat programs like ICQ, MSN, AIM, or Trillian
- Blocks Macromedia "Flash" ads



AdsGone Pop Up Killer: Screenshot



Anti-PopUp for IE is a small program that automatically stops a sponsor's pop-ups

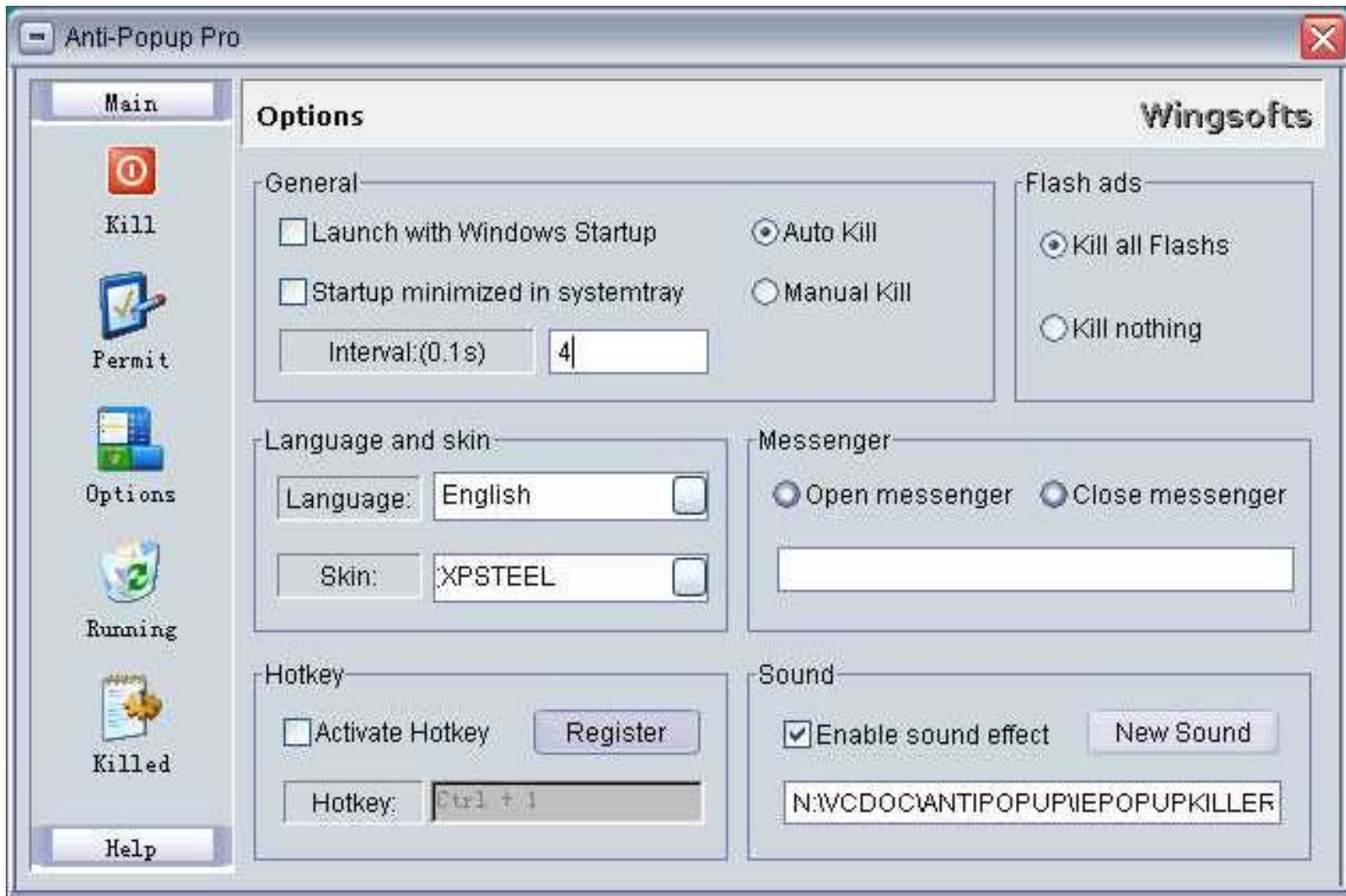
It does not require that you add each pop-up window to a list

Also AntiPopUp does not stop all new windows as they occur

It uses the smart identification engine, which recognizes sponsor's pop-up windows and closes them automatically

It also has an Internet Eraser capabilities

Anti-PopUp: Screenshot



Pop Up Police

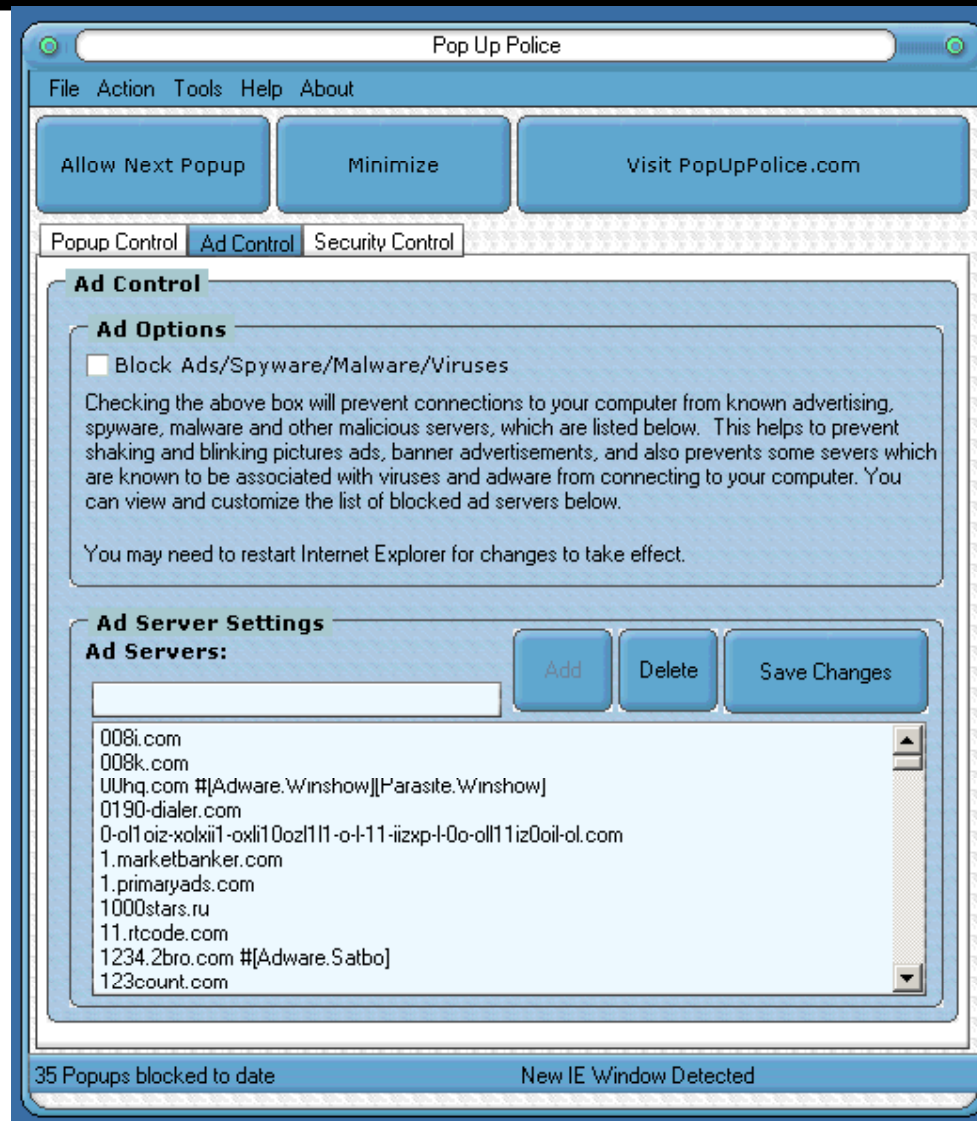
Pop Up Police is a popup blocker that will keep your Internet surfing experience entertaining

It gives total control over Pop Ups and Banner Ads, with extra Security Control for protection against sneak attack

Protects PC from fatal worms and virus sneak attacks



Pop Up Police: Screenshot



Super Ad Blocker

Super Ad Blocker blocks all forms of advertising including Flash, Rich Media, fly-in, slide-in, pop-ups, pop-unders, spyware ads, and messenger ads

It blocks and removes thousands of major spyware/ adware applications

Includes advanced privacy cleaning and automatic updates, so the product is never out of date

It provides detailed statistics for the number and type of ads blocked



Super Ad Blocker: Screenshot



Anti-AD Guard is a program that filters and blocks commercial banners from being loaded by browsers

The multistage defense system guarantees practically complete filtration of advertisements

This heuristic analyzer allows blocking the new formats of advertisements without updating the program

It is compatible with all popular browsers such as Internet Explorer, FireFox, Mozilla, Opera, and Netscape

Anti-AD Guard: Screenshot



Net Nanny controls access to websites and other online content such as Internet-based games, blocks file sharing of music, images and videos, and monitors a user's Internet activity

Net Nanny gives control over Internet connection

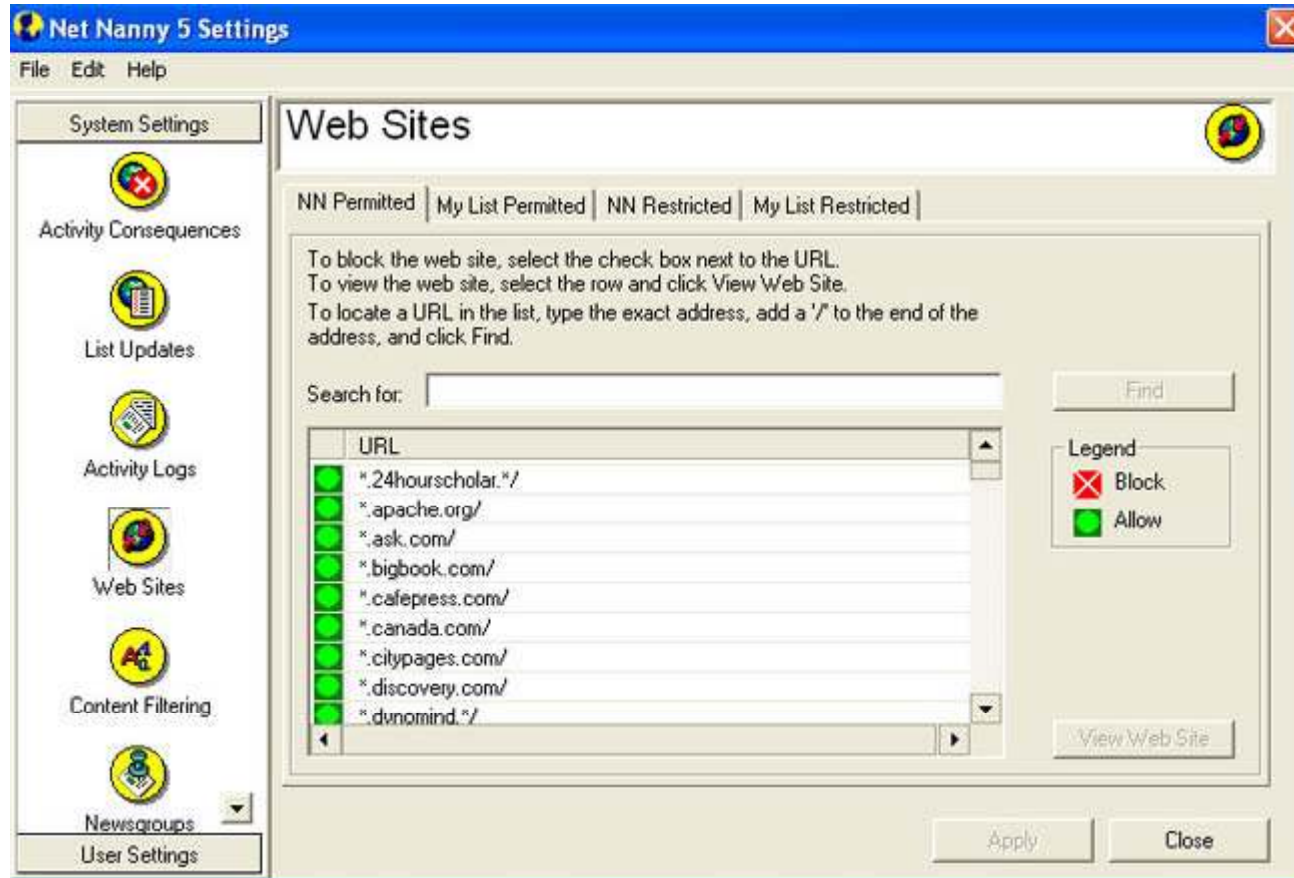
Easily prevent personal information from being given out over the Internet

Features:

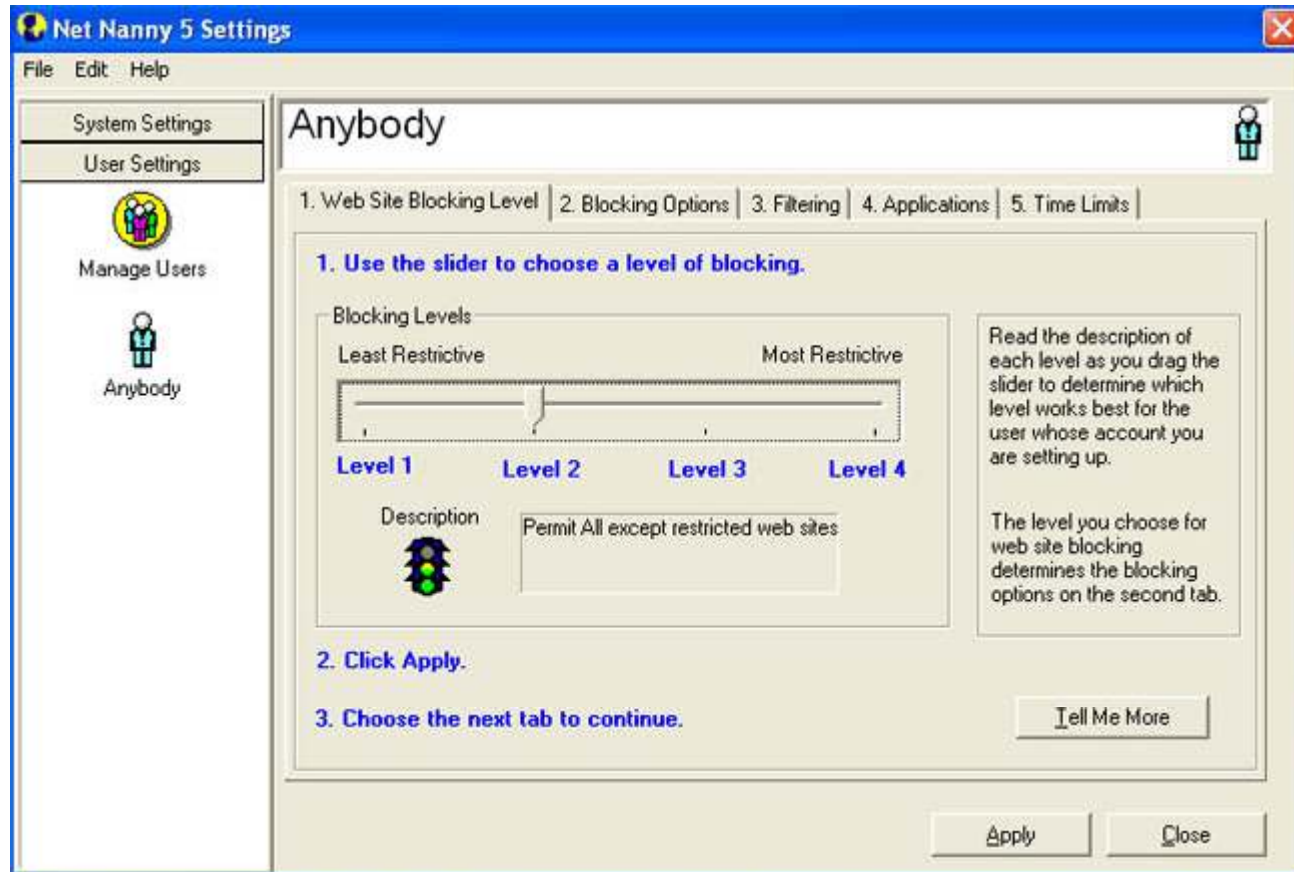
- Customize warning messages and violation actions
- Control over the use of words and phrases
- Monitor and limit time spent online
- Log and record all online chat sessions



Net Nanny: Screenshot 1



Net Nanny: Screenshot 2



CyberSieve is a Internet filtering and parental control software program

It allows you to control and monitor your child's use of the Internet

Features:

- Filter harmful websites and newsgroups
- Restrict Internet time to a predetermined schedule
- Decide which programs can have internet access
- Limit the amount of data that can be sent or received to/ from your computer
- Block e-mails, online chats, instant messages and P2P connections containing inappropriate words
- Set different levels of restrictions for every member of your family depending on their maturity, interests, habits, and parental control needs
- Monitor your child's use of the Internet irrespective of where you are; in the neighboring room, at work, or even on vacation
- Get detailed Internet activity logs

The screenshot shows the CyberSieve Control Panel interface. On the left is a navigation menu with five items: 'Users and Groups' (with a server rack icon), 'Logs and Charts' (with a document and pencil icon), 'Internet Timetable' (with a calendar and globe icon), 'Traffic Limits' (with a server rack and globe icon), and 'Settings' (with a gear icon). Below the menu is a help icon (a question mark in a circle). The main content area on the right displays the following information:

- Filtering is: Enabled**
- You are logged on as: lex**

- Help and Support Center
 - ▶ CyberSieve Manual
 - ▶ Send Support Request

- CyberSieve on the Web
 - ▶ Product Information Page
 - ▶ Articles and Tutorials
 - ▶ Ordering Page

At the bottom right of the panel, the text reads: Copyright © 2000-2005 SoftForYou Company

Bsafe is a Internet filtering software which allows you to monitor your child's use of Internet

Features:

- Filters unwanted online adult content
- Customize your list of allowed Websites
- Monitors & logs chat room conversations
- Monitors & logs Instant Messaging
- McAfee Anti-Virus & Anti-Spyware available
- Provides protection of personal & private data
- SPAM Filter & Popup Blocker

Bsafe All-in-One Security
ONLINE My Account Settings Update Help

Control Center

- Content Filter
- AntiVirus Center
- Personal Firewall
- Popup Blocker
- SPAM Filter

Internet Protection Control Center



Protection Service Status		
●	Content Filter	ON
●	AntiVirus Center	ON
●	Personal Firewall	ON
●	Popup Blocker	ON
●	Spam Filter	ON

Internet Content Filtering Software - Reliable, Accurate & Fast!

User ID: 1-1-tester

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Stop-the-Pop-Up Lite

Stop-the-Pop-Up Lite is a pop-up blocker that blocks all annoying pop-up windows from appearing as you surf the web

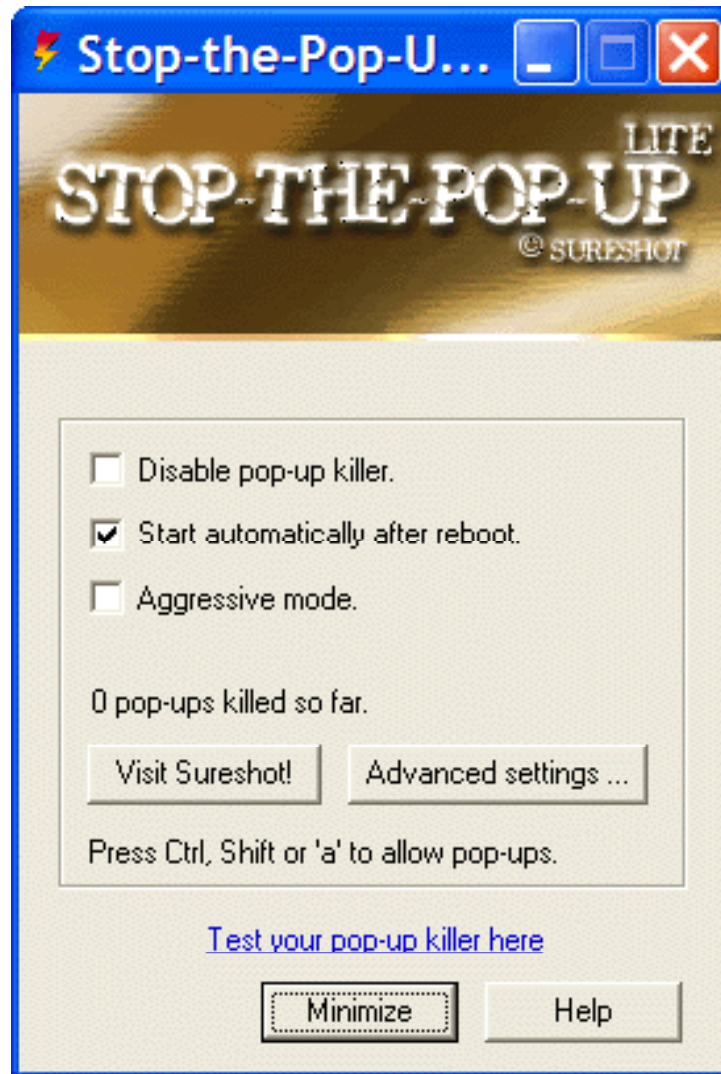
It kills all pop ups from file sharing programs and the spyware/ adware that are bundled with these peer-to-peer programs

It supports Kazaa, Kazaa Lite, Morpheus, Grokster, iMesh, Xolox, and Direct Connect

It kills the new breed of pop-ups called 'Messenger Service spam'

It also recognizes and kills hostile activeX controls from companies known to develop spyware or adware

Stop-the-Pop-Up Lite: Screenshot



WebCleaner is a program that prevents annoying sponsors PopUp's when you visit some web sites

With features such as the Smart Check Popup Engine, WebCleaner can kill all kinds of typical ads popups

It can also block any Web content (advertising images or Flashes) you do not want



WebCleaner: Screenshot

WebCleaner Proxy configuration Filter configuration

Proxy settings

Port number*
Timeout
Username
Password

* Changes to this option require a proxy restart to take effect.

Parent proxy settings

Hostname
Port number
Username
Password

Allowed hosts

Proxy filter modules

- BinaryCharFilter
- Blocker
- Compress
- GifImage
- Header
- ImageReducer
- ImageSize
- Replacer
- Rewriter

Don't filter hosts

AdCleaner is a program that blocks floating ads and new form popups

It cleans and auto blocks over 5600 Adwares, Spywares

It is easy to use, default settings , and hotkeys supported

Cleans all form of IE ads including:

- General popup ads
- Modeless dialog popup ads
- Winhelp popup ads
- Unfathered popup ads
- Floating ads
- Animated ads
- Flash ads
- Uncached image ads



AdCleaner: Screenshot



Adult Photo Blanker

Adult Photo Blanker blanks objectionable adult images and movies

It monitors Internet activity and protects the user from harmful objectionable content

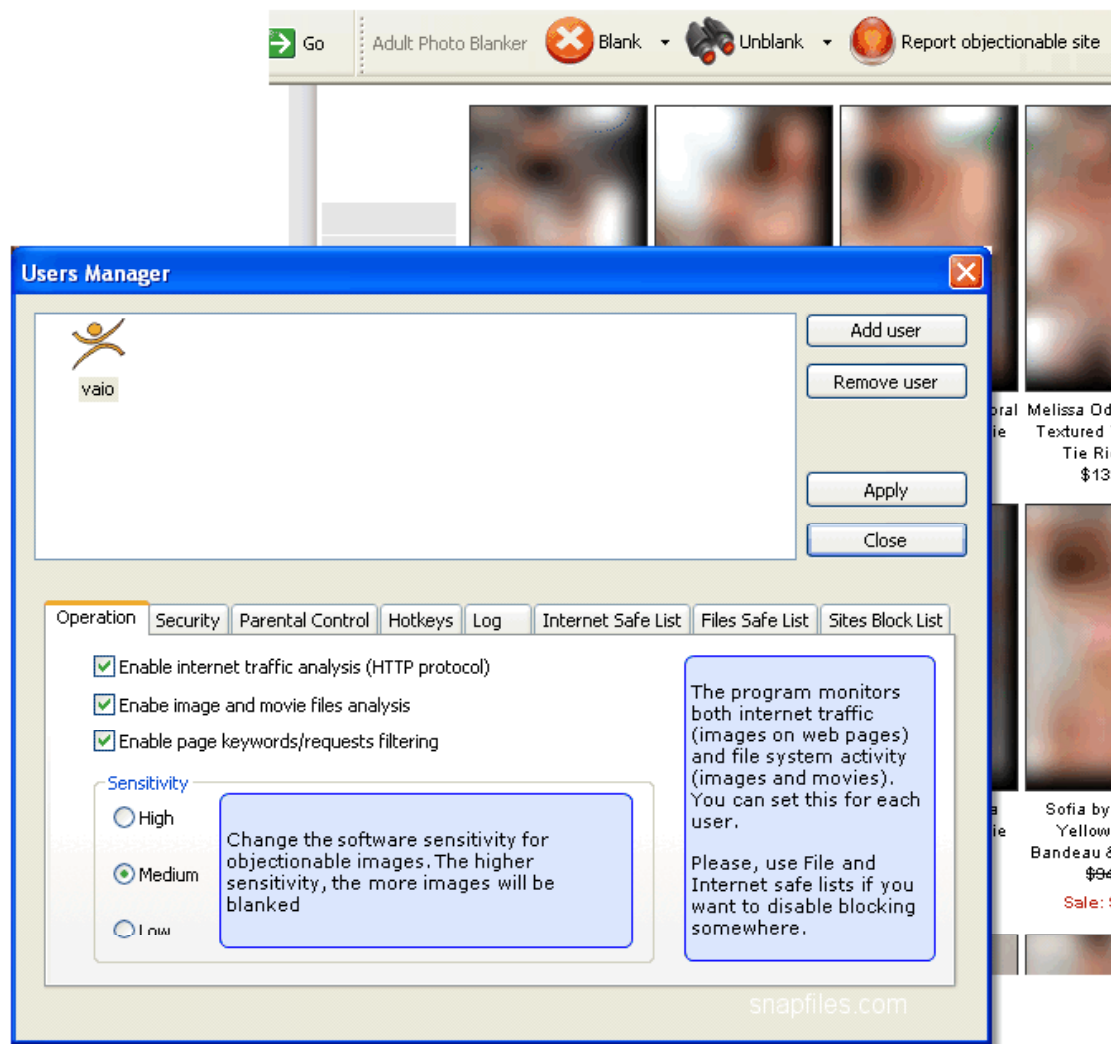
It is compatible with all browsers and e-mail programs

It intercepts attempts to open files and checks them for objectionable content

It works with all widely used formats of images and movie files



Adult Photo Blanker: Screenshot



LiveMark Family enables you to block access to web sites that are inappropriate for children

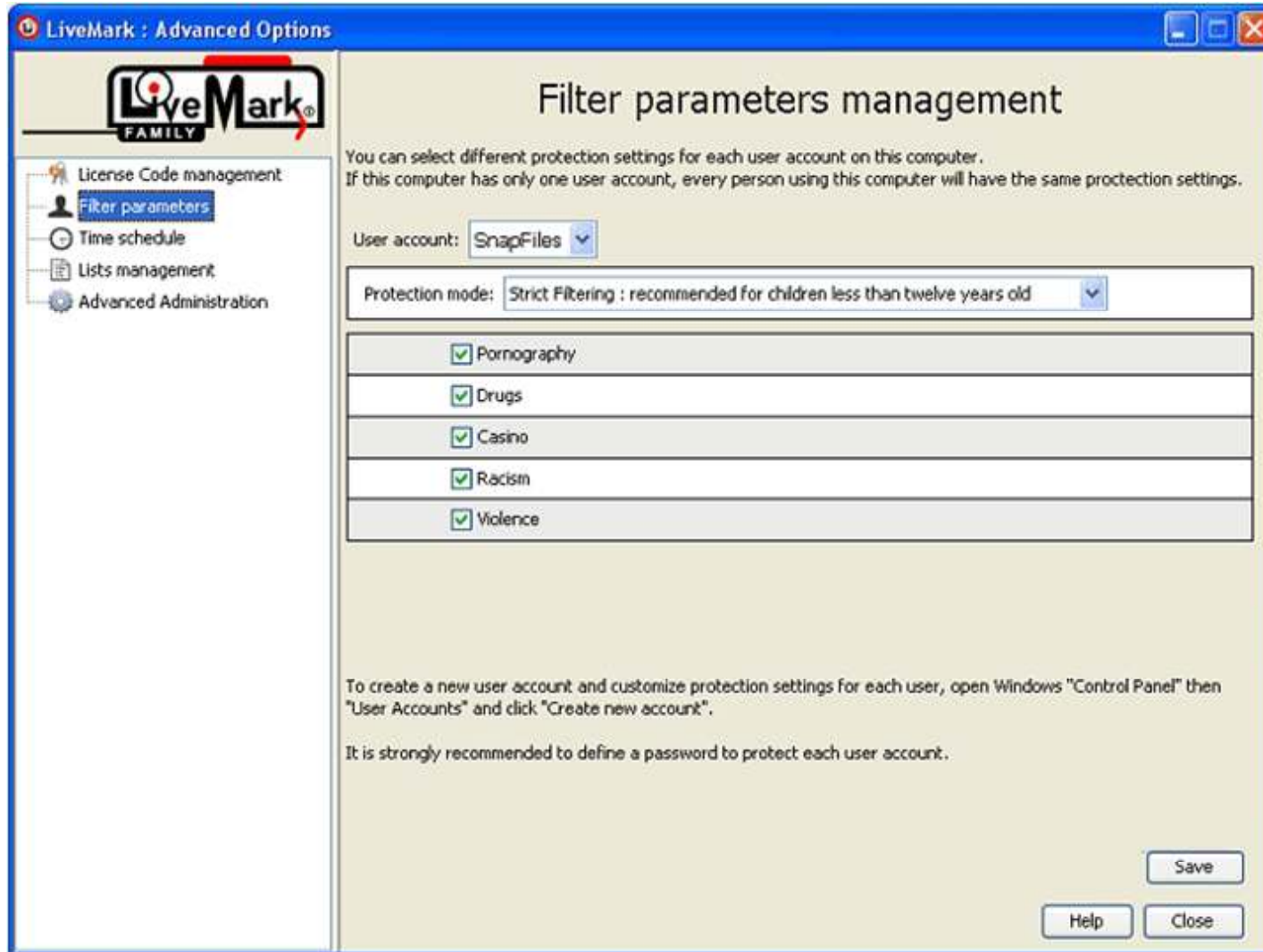
You can choose from two filtering levels (under 12 or over 12 years old) and also select the topics that should be filtered (pornography, violence etc.)

There filtering is done automatically based on the criteria set by the software

It has the option to override certain sites and specifically allow or block them based on your personal preference

It also includes an option to limit Internet access to certain times of the day

LiveMark Family: Screenshot



KDT Site Blocker

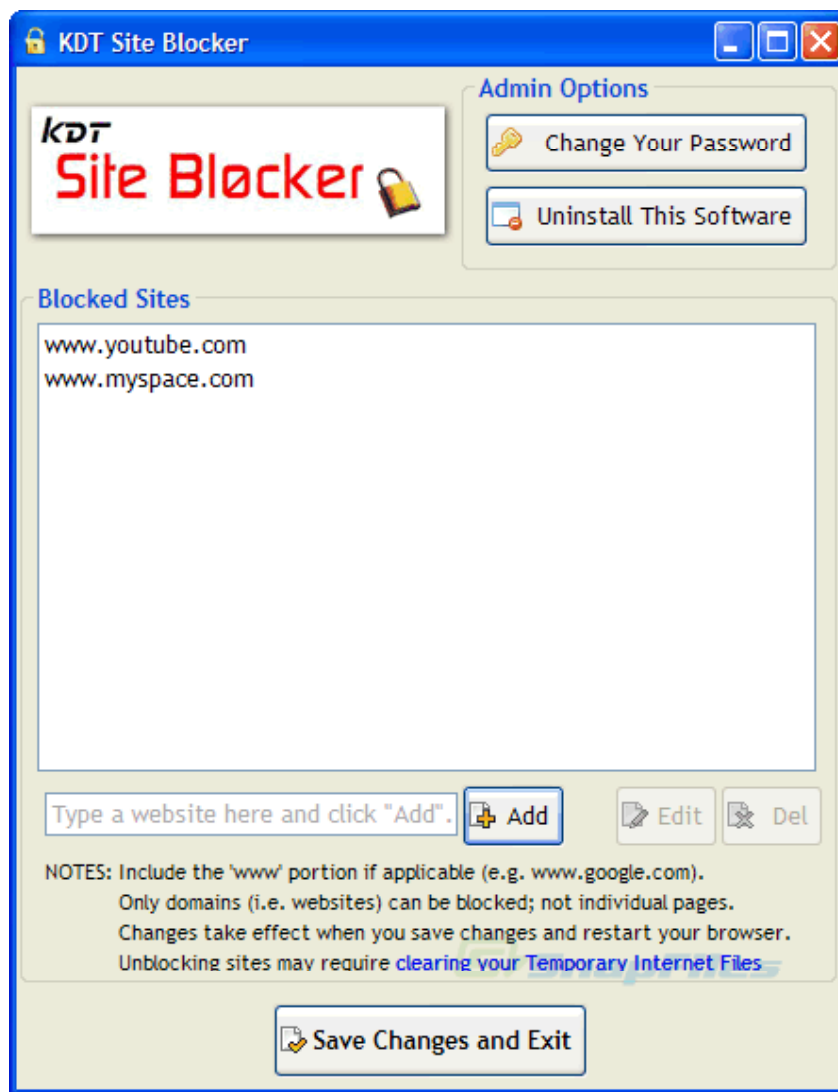
KDT Site Blocker is an easy to use tool to block access to certain websites

It works with any browser (IE, Firefox, Opera etc.)

It automatically displays a generic 'blocked' page whenever a blocked site is accessed

To block a site, you need to add the domain name to the list

KDT Site Blocker: Screenshot



Internet Safety Guidelines for Children

Educate children about the Internet and their dangers

Bookmark child-friendly web sites

Teach children not to give personal information over the Internet

Teach children never to open an email from unknown person

Never allow children to meet with someone on online session and chat rooms

Teach children never to respond to an unsubscribe on a pornographic email

An Internet filter is a piece of software that helps to block out unwanted content such as pornography and hate group sites

Filters use a list of keywords and well-known URLs to keep children from accessing inappropriate material

Filters prevent children from deliberately or inadvertently access pornography

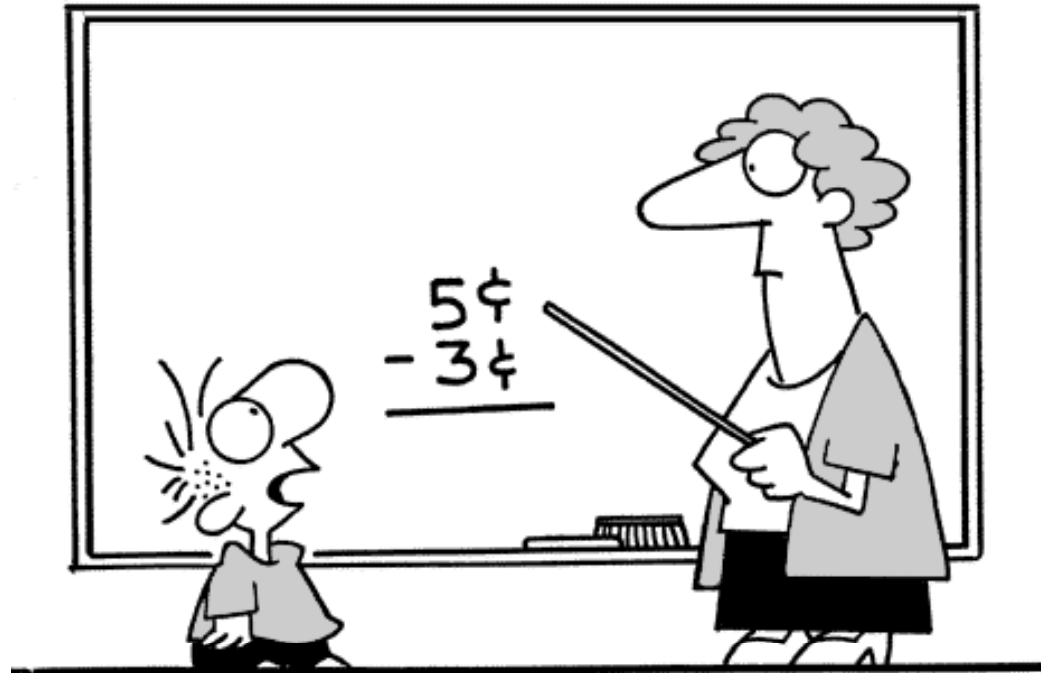
Filters allow kids to surf online without constant parental presence

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www.glasbergen.com



**“A lot of girls hang out in the chat rooms.
Does our virus software scan for cooties?”**

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"Thanks, but I'd rather get my financial advice off the Internet."