



## Federal Trade Commission Protecting America's

Consumers

## Appendix F

### INTERNET FILTERING SOFTWARE

#### Overview

Software developers have responded to concerns about protecting children from objectionable content on the Internet by developing "filter software" to enable parents and other supervising adults to set content and access preferences for children. Most filters currently act as content filters. Software companies are now working to add privacy preferences to their content filters. In the future, label-reading software will enable consumers to set their computers to access only those Internet sites whose privacy policies match their privacy preferences.

Content screening software uses either a filtering or rating method. The **filtering** method allows access to the Internet, but blocks the site materials) that the software publisher defines as objectionable. Typically, the software recognizes a database of banned sites and searches the database, however, requires regular updating, which may be at a cost to users through subscriptions. This design is not foolproof. It prevents a user from clicking on a link to a site that is not in the database, and it cannot stop a clever search that avoids the search words in the database.

The **rating** method blocks access to sites that do not bear a particular rating. The two currently operational rating systems are the Recreational Software Advisory Council on the Internet (RSACi)(1) and SafeSurf(2). Rating programs identify a site's HTML code and only those that code with the rating are allowed through. Parents can, for example, restrict their children's access to sites that are rated as having no sexual material, foul language, or violence. This rating method uses the Platform for Internet Content Selection (PICS) specifications described in II of this Workshop report. SafeSurf and RSACi use the PICS format, but rely on Web sites to rate their own pages, while they reserve the right to verify each site's rating. Only a minority of existing Web sites is currently rated by these systems. Filtering software companies can add blocked sites to their databases on an ongoing basis. Rating systems, however, are largely relying on Web sites to insert rating labels on sites, and sites have been slow to do so.

The explosive growth of the Internet makes it very difficult for software programs to completely monitor and control access to Internet sites. Even if a list of blocked sites is installed, thousands of new sites may have appeared. Moreover, since only a small percentage of existing sites have been reviewed, unreviewed Web sites are screened using search or trigger words or phrases. Objectionable sites, however, can still slip through the filters. For example, a new site may have a Web address that appears to be innocuous, but may in fact contain objectionable content. Even if manually screened, it may not be filtered out. In addition, a site may contain explicit graphics alongside unrelated text, which cannot be filtered even by software that filters full text as it appears on the screen. Foreign languages and unusual spellings may also bypass filter software. Conversely, unintentional blocking may occur, preventing access to harmless medical and historical data. Phrases with dual meanings can also cause unintentional blocking. For example, a site containing Hitler's name or the word "fascism" may be blocked because the filter screens for hate content. To some extent, if the software can be customized, some of these problems can be alleviated by allowing the user to adjust the software's lists.

The various filtering software products offer a wide range of features. The least complicated software simply maintains a list of Web sites and blocks user access to the sites on the list. Some products offer the option of using lists and employing PICS compliant rating systems as a backup filter. Many programs offer a monitoring option, which creates a record of where the user attempted to go and when. This can be used in addition to or as an alternative to blocking access. Programs may also shut down an application entirely or e-mail the "Administrator"(3) when the user attempts to access a blocked site. Filtering can vary as well, from one-way, where only the incoming text is screened, or two-way, where both incoming and outgoing text is screened. Two-way screening is useful to prevent the flow of personally identifiable information. Two-way screening occurs in conjunction with custom lists of blocked terms, including names, addresses, birth dates, and e-mail addresses. Currently only four products, Cyber Patrol, Cybersitter, Net Nanny, and Specs for Kids, are able to prevent a child from sending personally identifiable information to blocked information. While some products are limited to interactions on the Internet, many give users the option to continue screening of word processors, games, financial managers, and any other software on the computer.

Server-based filtering options, available more commonly for business use, install filters directly on the server of a system of computers (a Local Area Network). This option serves all computers directly attached to the network, as well as those connecting through a dial-up modem. Most filtering packages created for home use, however, are client-based, meaning software is installed directly by the user and runs on their system, regardless of their mode of online connection (modem, LAN, etc.). While the difficulty of setup varies, all software packages are fairly simple. The actual installation, whether the software is downloaded from the Internet to the hard drive or by floppy disk, occurs in a matter of minutes. Configuration is more complicated, and the time needed is directly related to the complexity of the software. Those which offer customizable lists, multi-user options, PICS compliant lists, and other choices take longer to set up and master. Most instructions are clear and technical support is readily available with each package, making it possible to get any software package up and running in a short period. Though prices vary, many home and school editions are available for free or at a low cost. Many server-based online services provide filter software at no additional cost to their members.

#### Major Online Services

Each of the major online providers is increasing its efforts to create a safer environment for children using the Internet. [America Online](#) (AOL) provides a number of blocking options. Parents may limit their children's access to the "Kids Only" or the "Teens Only" areas, which consist of preselected entertainment and educational sites, as well as adult monitored chat and message areas. Users are kicked out of a chat room if a supervisor deems their language to be inappropriate. AOL's Member Profile, e-mail, and chat areas permit extensive collection of personal information. A parent may block a child from all chat rooms and Internet newsgroups on AOL. The option of presetting billing limits is also available. AOL offers its members Cyber Patrol, which is described below.

[Prodigy](#) provides parents with the option to control access to its individual bulletin boards, chat areas, or newsgroups. Parents can also limit or deny complete access to the Web for certain users. Prodigy offers kids and teen chat rooms, as well as special Web areas exclusively for children. Prodigy also makes Cyber Patrol available to its members. Within Prodigy's chat rooms and public forums, users are prevented from posting items deemed unacceptable for children.

[CompuServe](#) offers parents the option of controlling which areas members of the family can enter by using passwords. No chat areas are available for children. Parents have the option of having e-mail sent to them first for screening before a child receives it. CompuServe also makes Cyber Patrol available to its members.

Microsoft's new browser, [Internet Explorer 3.0](#), offers a built-in parental control feature. Through the "Ratings" options menu, the Administrator can select to block access to a site or single page based on a number of content categories, e.g., violence, nudity, and adult language. The default parental controls are based on the RSACi standards, but the Explorer will also support ratings from any organization that follows the PICS standard.

## **SUMMARY OF FILTERING SOFTWARE**

### **SurfWatch**

SurfWatch, by Spyglass Inc., screens for objectionable content (violence, hate crimes, drugs/alcohol and sex) on the Web and in chat rooms. SurfWatch screens using a list of objectionable Web addresses (updated monthly) and specific trigger words within an address. Unreviewed and those that do not contain the identified trigger words within their Web addresses may not be blocked. SurfWatch claims to block over 100,000 sites. SurfWatch does not work with the online services. The Administrator can independently update the SurfWatch lists or create his or her own inclusive or exclusive lists.

### **Cybersitter**

Developed by Solid Oak Software, Cybersitter filters the Web, newsgroups, chat rooms, and e-mail and also offers the option of blocking applications, including games. It blocks sites related to adult themes such as sex, hate, violence, and drugs. Most importantly, Cybersitter addresses privacy issues by offering a custom blocking service, allowing a user to create a list of words and phrases that screen both incoming and outgoing information, in addition to the default restrictions. This can prevent the transfer of information such as credit card numbers and personally identifiable information. Its "Advanced Phrase Definitions Capabilities" allows a user to offer sentence combination possibilities like "live [at, on] [1234] [Main Street]" to maximize the prevention of the transfer of such information. For additional blocking, a user can choose from the PICS standard rating systems, which are included in the package. The program does not block sites that have not been rated by one of the lists. A unique feature of Cybersitter is its "Intelligent Phrase Filtering" system, which looks at words in context to prevent accidental and unnecessary blocking of phrases with multiple meanings. It also offers the option of logging the sites visited without actually blocking the sites.

### **Net Nanny**

Trove Investment Corporation's Net Nanny emphasizes the parents' role in determining what is appropriate for their children, rather than the software company's determination. It offers a custom dictionary that is entirely defined by the Administrator. The Administrator can control access to personal information and credit card numbers. The Administrator can also control access to chat areas and Web sites, as well as to all applications executable on both Windows and DOS, including all online services. To provide assistance, Net Nanny has created a sample dictionary and a start-up point. Once the list is completed, the package screens both incoming and outgoing information. It also maintains a log of blocked sites and can display the frequency of each type of violation. On request, the Administrator can choose to have the system shut down after a pre-specified number of violations has occurred.

### **Cyber Patrol**

Cyber Patrol, a Microsystems Software Inc. product, filters objectionable material on online services, the Web, and chat rooms and controls offline filtering software programs as long as the Internet connection is maintained. It works with either an exclusive "CyberNot" list or an inclusive but more restrictive, "CyberYes" list. The Administrator can customize either list to include or exclude particular sites. The Administrator can review a series of content categories and choose those that are appropriate for each user. Cyber Patrol is not able to filter new sites with unidentifiable addresses. It can filter by time of day or by total hours allowed. Upon request, the package can generate reports and chart usage. Cyber Patrol also addresses privacy concerns with its newly added "ChatGard." This feature enables the Administrator to block the transfer of personally identifiable information using a custom list of words and phrases. When information from this list is typed in, "x" marks appear instead. Cyber Patrol is now offered by AOL, CompuServe, and Microsoft's Internet Explorer. It is also PICS compatible and can read RSACi ratings.

### **Net Shepherd**

Net Shepherd, marketed by Net Shepherd Inc., enables the Administrator either to independently rate Web pages using an onscreen, point-and-click ratings bar or to screen sites using any of the PICS compliant rating systems, such as SafeSurf or RSACi. The Administrator can

sites as "general," "child," "pre-teen," "teen," "adult" or prohibited. Net Shepherd can be configured to block unrated material or to create selected sites. It is not designed to screen sites that do not bear ratings, and it only block sites on the Web and not newsgroups or chat r Shepherd Inc. plans to extend the same rating and filtering capabilities to newsgroups.

### Parental Guidance

Providence Systems markets Parental Guidance, which categorizes sites as "child," "adolescent," or "parent." Parental Guidance has aq over 100,000 sites and offers the option of downloading approximately 20,000 new sites each month. The list of approved Web sites is p the McKinley Group, which publishes the McKinley Internet Directory. The program also enables the Administrator to restrict access to s newsgroups and chat areas. While Parental Guidance does not directly target the collection of personal information, the Administrator m sites to the McKinley list that he or she feels are inappropriate. Another product, Parental Guidance Plus, permits the Administrator to bl user's access to offline programs, control the amount of time spent on the computer, and monitor its usage.

### Specs for Kids

Newview, Inc.'s Specs for Kids creates an inclusive environment in which children can explore the Internet. The Specs for Kids home pa includes a search tool and links to reference tools, news sources, entertainment, and other pages approved for children's access. In add Administrator can customize the software to create a dictionary of restricted words and phrases to override the default inclusive list. Adr may choose between five different levels of restriction within 15 rating categories, including a whole range of adult topics. Specs for Kids compliant and has added such screening categories as credit cards and advertising, preventing the transfer of some personally identifiat information. One limitation of the program is that it does not prevent a child from transferring information on a site approved by Specs for reviewers. Upcoming editions plan to support blocking of individual newsgroups and chat rooms and to include an encryption capability f messages. Specs for Kids is not compatible with the online services.

### InterGo Communications

TeacherSoft's InterGo Communications is a filter and an Internet access package designed to appeal to adults and children. After install: view a "desktop" home page: a literal image of a desk from which point and click functions lead the user to various online functions. Incl e-mail, educational resources, and Internet search functions. Administrators can set up multiple users with individual settings, dependi and preferences. InterGo's "KinderGuard" system filters sites based on five levels ranging from EC (early childhood) to AO (adults only). addition, SafeSurf ratings can be selected. InterGo screens out objectionable material from the Web, chat rooms, newsgroups, and maili The Administrator can customize the KinderGuard list by adding specific Web addresses to block; however, it cannot screen for words o thus limiting its ability to block the transfer of personal information. It also supports SafeSurf. Its "Cybrarian Search" feature is an Interne tool that checks sites (including Web documents, reference materials, news and discussion groups) for offensive words and assigns a ra

### Bess

Bess is a server-based filter, which is available for online subscription. Subscribers dial into Bess and use the Bess browser. Bess offers preselected sites and blocks entire Web sites or individual pages, depending on the amount of inappropriate material. Access to selecte newsgroups is an option, but chat areas are not accessible. Both incoming and outgoing e-mail are screened for inappropriate language offers the benefits of a continually updated service provided through the server and is resistant to tampering, since the controls are locat server.

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1. The Recreational Software Advisory Council (RSAC), an organization initially formed by software publishing companies in 1994 to rat game software for violence, adapted its rating system to the Web and expanded the categories to include ratings for the level of violence nudity, and offensive language. The RSAC asks Web sites to create ratings for their own pages by answering a questionnaire at the RS/ page. After completing the questionnaire a PICS-compatible HTML tag is designated and the site can insert it into its pages. The tag is tl to the RSACi ratings system. The RSAC reserves the right to verify the accuracy of each rating. A number of the filters described in this support the RSACi ratings system, including Cyber Patrol, Microsoft Internet Explorer 3.0, Net Shepherd, and SurfWatch.

2. SafeSurf was begun by a group of parents in 1995 to create a "child safe" environment on the Internet. Its Web site provides HTML ta Web sites can use to rate their sites according to SafeSurf's criteria.

3. This appendix uses the term "Administrator" to refer to the person who controls the implementation of the filtering software, *i.e.*, the p teacher or employer who installs and configures the software program.