

Klein ISD Internet Content Filter

A new content filter will go into affect Monday, April 14, 2008. Total Traffic Control, a multi-faceted product line from Lightspeed Systems (<http://www.lightspeedsystems.com>), includes content filtering, anti-virus, security, reporting, remote filtering, and more. Lightspeed Systems focuses on the needs of K-12 school systems offering a unique working relationship seldom found with vendors. The product line is generally referred to as Lightspeed.

Overview

Lightspeed offers better performance and more features compared to Bess. To begin, Lightspeed's database contains over 1 billion URLs, and sites can easily be checked for categorization at <http://www.lightspeedsystems.com/Search/>. In direct comparison with Bess, our preliminary testing demonstrated the instances of Lightspeed not having a site categorized was dramatically less. But the number of sites categorized by Lightspeed is only part of the improvement Klein users will realize. Lightspeed offers a wide range of categories and subcategories for creating policies. Grouped under Custom, Normally Blocked, or Normally Allowed there are twelve core categories:

Adult	Forums, chat, email	Security
Advertising	Business and work	Education
Family Life	Kids and teens	Miscellaneous
Recreation	Reference	Society

Each of the twelve categories has subcategories ([see appendix A](#)) which provides for more flexibility in creating policies.

Flexibility with policies only matters if more than one policy can be created and easily assigned to different users. Bess does not have an easily configurable way to differentiate between a teacher and a student so one filtering policy has to address the most vulnerable users, the students. Lightspeed uses two desktop applications, the Security Agent (SA) and the Content Guide (CG), easily identify users and computers making it possible to implement separate filtering policies based on variables such as username, group membership, computer name, and more.

Like its name implies, the Security Agent manages computer security, therefore it must be installed on all district computers. It communicates with the Lightspeed servers to determine which security policy should be applied. The SA inventories installed software, can identify running applications, and protects the system from viruses. Lightspeed's anti-virus detection competes very well against more known products such as McAfee, Symantec, and CA. Visit Lightspeed to see live data at <http://www.lightspeedsystems.com/Compare/AntivirusComparison.aspx>. Depending on configured policies, the SA can protect computers and users from unsafe or illegal software by only allowing approved software or limiting use of removable media such as pen drives.

Vistas and Krimmel tablets along with most new mobile computers purchased since late 2007 have had version 6 of the SA installed. Version 6 handled anti-virus, security, and remote content filtering. Version 7 no longer performs remote content filtering, that task is now handled

by the Content Guide. Users that have experienced remote filtering with version 6 will appreciate the CG. One of the limitations of version 6 was the inability to apply user based policies when outside the district network. The CG provides the necessary mechanism to accurately report user and computer information to the policy server in order to apply the appropriate user or computer filtering policy. The CG will be installed on all district owned mobile computers regardless if “assigned” to a student or employee. PDA’s are not supported at this time.

The CG and SA may be installed on an employee’s home computer but does not have to be configured to follow district filtering. Information on how to obtain, install, and configure each application at home will be released soon.

What to Expect on the Inside

From a computer connected to the district network whether wired or wireless, users will find that more sites are accessible with far fewer blocks, especially uncategorized sites. And with so many granular subcategories available to create policies there will be improved access to K-12 relevant blogs, forums, and other sites that were lumped together under a single category in Bess. However, because categorization of sites is subjective, sites may still be blocked if categorized under a category that a user’s assigned policy is configured to block.

Figure 1 shows an example of a Lightspeed block page from an attempt to reach Hotmail from inside the Klein ISD network.



Fig. 1

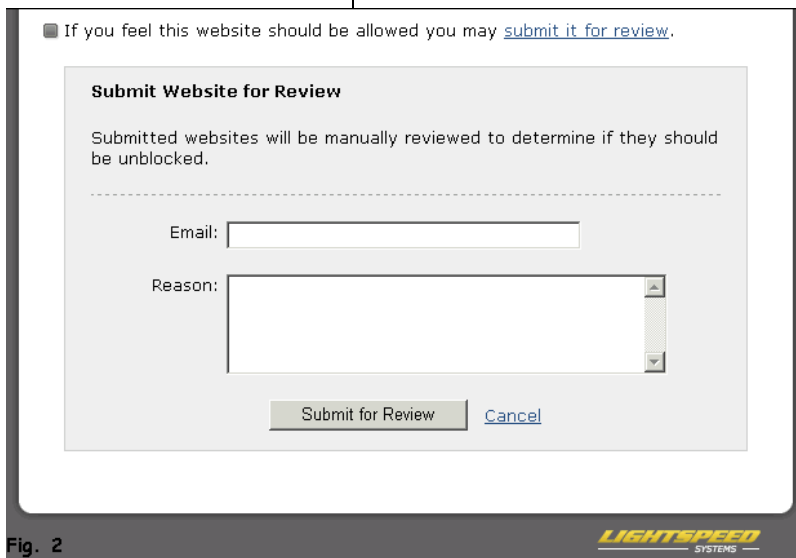


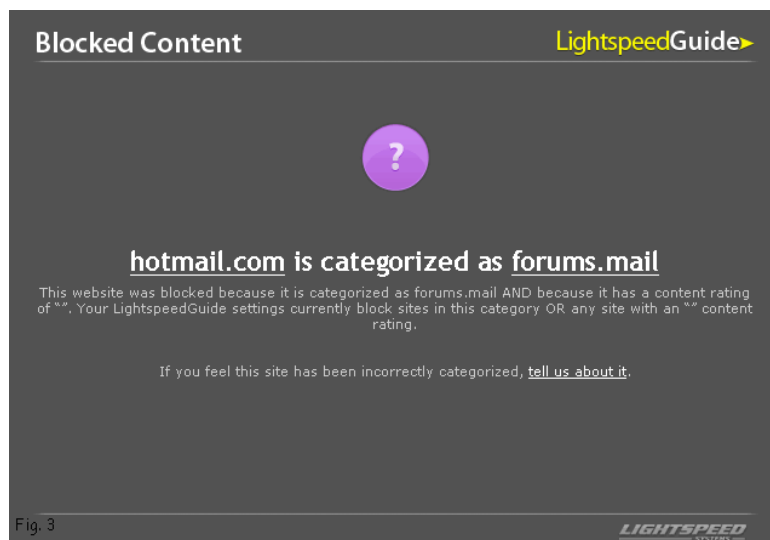
Fig. 2

Notice in Figure 1 the link for “submit it for review”, when clicked, the necessary form to have a site reviewed is revealed as seen in Figure 2. Students and users on systems without the SA will not see the link.

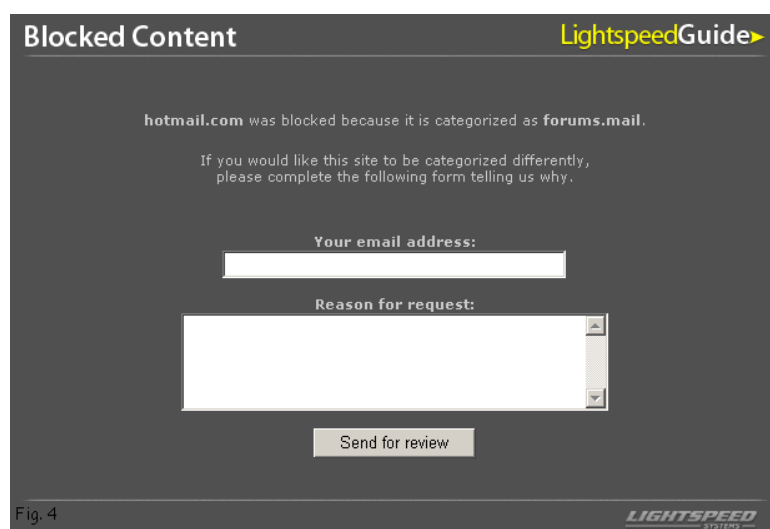
Sites submitted for review are monitored by Lightspeed Systems staff in Bakersfield, California and Klein IT staff. If a blocked site is moved to another category by Lightspeed the change should be reflected within 2 hours. Sites that Lightspeed does not categorize differently will be reviewed by Klein IT staff and, if deemed appropriate, categorized as “local allow”. Conversely, if a user discovers a site that should *not* be accessible by students or students and staff, the user should contact the district help desk to report the site.

What to Expect from the Outside

Mobile users will have a slightly different experience when connected to a non-KISD network such as at their home, public library, or local Wi-Fi hotspot. When a site is attempted, a small, rectangular, green box appears indicating the CG is looking for a policy server. The CG *must* find a district policy server in order to work; otherwise, the Internet *will not* be accessible. For safety reasons, the CG must default to block mode if it cannot determine whether a site is allowed or denied. Every effort will be made to ensure a policy server is accessible at all times but factors beyond Klein ISD’s control may impact the effort.



A blocked site will trigger a CG block page that differs from the block page received internally (Fig. 3).



The CG block page offers the “tell us about it” link that reveals a form for submitting a site that may be incorrectly categorized (Fig.4).

Search Engines

Search engines have become very sophisticated and powerful at scanning the Internet for images and video for nearly any topic of interest; consequently, they easily reveal content that is pornographic or at the very least inappropriate for schools. Lightspeed forces Google's "safe search" feature regardless if disabled by the user through the web browser. The advantage of forcing Google safe search will allow access to Google search categories including images and video. MSN, Yahoo, Dog Pile, and others offer a safe search feature but unfortunately those engines cannot be forced "on" like Google. When another search engine is used the user will be automatically redirected to Google.

Deployment

More information will be released pertaining to deployment of the SA and CG.

Lightspeed Categories

Normally Blocked Categories

Local Category

Name	Description
local-block	Local override of allowed domains

Adult

Name	Description
access-denied	access-denied
adult.art	Adult art
adult.bodyart	Body art, tatoos, body piercings
adult.games	Adult games
adult.language	Strong language
adult.lifestyles	Adult lifestyles
alcohol	Production, promotion and sale of alcoholic beverages
drugs	Sites promoting illicit and illegal drug use
offensive	Websites considered to be offensive to both adults and children
porn	Pornography related sites
porn.child	Porn sites involving children
porn.de	German pornography sites
porn.es	Spanish pornography sites
porn.fr	French pornography sites
porn.it	Italian pornography sites
porn.jp	Japanese pornography sites
porn.nl	Dutch pornography sites
porn.pl	Polish pornogrphy sites

porn.pt	Portuguese pornography sites
porn.ru	Russian pornography sites
suspicious	Recently discovered sites with suspicious words or phrases
suspicious.script	Websites whose only content is javascript - frequently used to hide porn sites
violence	Sites promoting violence and anarchy
violence.hate	Sites that promote hate against different groups
violence.weapons	Web sites about guns, swords, knives, and other weapons
adult	Adult products, services, situations and humor
gambling	Gambling, casinos, betting, lottery and play-for-cash/sweepstakes

Forums, chat, email

Name	Description
forums	Unmoderated personal expression
forums.blogs	Webblogs
forums.dating	Dating websites like friendfinder, eharmony, and match.com
forums.mail	Email sites
forums.newsgroups	Newsgroups, usenet and subscription newsletters
forums.personals	Personal web pages and personal ads
forums.social_networking	Social networking and related websites such as myspace, facebook, and orkut.
forums.im	Instant messaging
forums.p2p	Peer to peer sites

Security

Name	Description
parked	Pay per click hosting web sites that park expired domains
security.proxy	Web proxy servers and open SMTP relays

security.test	Used for testing virus signatures and registry controls
security.warez	Sites promoting illegal access and sharing of software and other copyrighted material
security	Security risks
security.hacking	Computer hacking
security.nettools	Net tools, remote admin tools, internet server and client applications
security.phishing	Web sites of internet scams that try to get personal information
security.potentially_unwanted_applications	Potentially unwanted applications
security.spyware	Spyware - advertising supported software
security.virus	Viruses, malware, trojans, backdoors, hacker tools

Normally Allowed Categories

Local Category

Name	Description
local-allow	Local override of blocked domains

Advertising

Category	Description
ads	Ad servers and advertising companies
ads.banner-ads	Banners ads
ads.html-ads	HTML ads
ads.popup-ads	Popup ads
shopping.spam	Shopping websites that use spam email for marketing
spam	Sources of spam mail that does not involve porn, gambling, or drugs

Business and work

Category	Description
ads.javascript-ads	Javascript ads

automobile	Automobiles and motorcycles
business	Business
business.construction	Constuction, building, plumbing, home improvement
business.finance	Banking, stock markets, insurance, and financial news
business.jobs	Employment search, offerings and support
business.manufacturing	Manufacturing, industrial, and shipping companies
business.real_estate	Real estate, homes, offices
computers	Computers & Internet
ham	Legitimate sources of email
law	Law firms, courts, and legal matters
microsoft	Microsoft and related sites

Education

Category	Description
education	Education and reference sites
education.arts	Art, art history, architecture, graphic design,and illustration
education.games	Educational games for kids
education.history	History
education.lifestyles	Education about lifestyles - gay, lesbian, alternate
education.literature	Literature, libraries, writers
education.music	Music education, history, instruments, marching, and museums
education.science	Science and technology
education.sex	High school level sex education websites
education.social_science	Social sciences

Family Life

Category	Description
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family	Family life, cooking, gardening, home improvement
family.food	Restaurants, grocery stores, recipes
family.health	Health care
family.religion	Religion & Spirituality

Kids and teens

Category	Description
kids_and_teens	Kid safe web sites
kids_and_teens.animals	Cats, dogs, horses and other animals
kids_and_teens.chat	Monitored chat websites suitable for kids

Miscellaneous

Category	Description
errors	Content database errors waiting to be purged
expired	Domains whose registration has expired
general	General interest
plagiarism	Web sites that sell term papers, research papers, and other ways to help students cheat

Recreation

Category	Description
hobby	Hobbies, crafts, collecting
humor	Humor, puzzles, and brain-teasers
music	Bands and artists, concerts, DJs, lyrics, songwriting, and record labels
shopping	Shopping sites
shopping.auctions	Auctions
shopping.office_supplies	Major office supply websites
sports	Sports sites
sports.fantasy	Fantasy football, baseball, soccer, etc.

sports.martial_arts	Martial arts
sports.youth	High schools sports teams and youth sports leagues
travel	Hotels, resorts, cruises, transportation and vacation offerings
audio-video	Sources of MP3s, mpegs, and streaming audio/video
entertainment	Movies, television, radio, and celebrities
games	Games, anime, cartoons, wallpapers and screen savers

Reference

Category	Description
directory	Directories and portals about specialized topics
news	News and magazines
search	Major search engines

Society

Category	Description
government	Federal, state, local and international government
society	Culture, issues, ethnicity, people
society.crime	Crime and the justice system
society.politics	Politics, political activism, political issues
world	Sites about regions and languages of the world
world.cn	World websites - Chinese
world.de	World websites - German
world.es	World websites - Spanish
world.fr	World websites - French
world.it	World websites - Italian
world.jp	World websites - Japanese
world.kr	World websites - Korean

world.nl	World websites - Netherlands
world.pl	World websites - Polish
world.pt	World websites - Portuguese
world.ru	World websites - Russian