

How To Block Cookies From Unwanted Websites With SafeSquid Proxy Server

By Sean

Published: 2008-07-01 13:40

How To Block Cookies From Unwanted Websites With SafeSquid Proxy Server

Basically, cookies are pieces of information, usually personal preferences, that are stored into a visitor's system, when they visit a website. The next time the visitor accesses the same website, the cookie is transferred from the visitor's system to the website, and his preferred content is displayed to him. Cookies are also used to allow a visitor to log into his personal account on a website. Although, not always dangerous, many advertising and marketing websites gather personal information, without the user's knowledge, and use this information to display especially targeted marketing ads and banners. See this interesting article about cookies - http://www.cookiecentral.com/c_concept.htm

[SafeSquid's](#) CookieFilter Section, allows you to control exchange of cookies between users and websites. You can define what websites are allowed / denied to exchange cookies with users, either to enhance security, or to disable the users from logging into their personal accounts. For example, you can block cookies from advertising websites like [tribalfusion.com](#) and [doubleclick.net](#) to prevent private information from being transferred to them; or search engines like Google and Yahoo, so that users are able to query the search engines, but not log into their personal accounts to use their personal email and other applications.

To block cookies from specific host, first create a profile under the *Profiles* section, and specify the hosts that you would like to block exchange of cookies with.

Open the SafeSquid web interface, and go to *Config=> Profiles*.

Click on *Add* under *profile* subsection, and add the following two profiles, one for Ad Servers, and the other for Search Engines:

Option	Value
Enabled	true
Comment	Add profile 'deny-cookie' to requests from Accounts & Finance for the specified Ad Servers
Profiles	Accounts, Finance
Host	(tribalfusion.com atdmt.com hitbox.com doubleclick.net valueclick.net mediaplex.net zedo.com)
Time match mode	absolute time
Added profiles	deny-cookie

The above rule will add a profile *deny-cookie* to requests made specifically by the Accounts and Finance groups, to the specified Ad Servers. If you would

like to apply the rule to all users, then just leave the *Profiles* field blank.

Option	Value
Enabled	true
Comment	Add profile 'deny-cookie' to requests from Accounts & Finance to the specified Search Engines
Profiles	Accounts,Finance
Host	(google yahoo)..*
Time match mode	absolutetime
Added profiles	deny-cookie

Note that the regex used in the *Host* field in the above rule is *(google|yahoo)..** which means a host with either the word google or yahoo (*(google|yahoo)*), followed by a dot (*.*), followed by any character (*.*), any number of times (***). This covers all domains like google. or yahoo. followed by com, co.in, co.uk, etc.

Now, we can use the profile *deny-cookie* in the *Cookiefilter* section.

To configure the *Cookie filtering* section, go to *Config=>Cookie filter*.

Verify that the section is enabled (*Enabled = Yes*) and the *Policy* is *Allow*.

When the *Policy* is *Allow*, all cookies will be allowed, except the one defined in the *Deny* subsection.

This section allows you to control which hosts client browsers are allowed to send and receive cookies to and from.

Option	Value
Enabled	Yes: No:
Policy	Allow: Deny:

Add

Add

To define a rule to deny cookies, click on *Add* under *Deny* subsection, and create the rule as shown below:

Option	Value
Enabled	true
Comment	Block cookies to deny-cookie profile.
Profile	deny-cookie
Direction	Both
Time match mode	absolutetime

Now, in the browser, open google or yahoo page, and check whether you are able to run queries. Next, try logging into your personal google or yahoo account, or logging into your personal mail account on google or yahoo. Your password will not be accepted, and an error will be displayed. This is because SafeSquid blocked cookie exchange between the browser and the website.

To verify if the cookies are getting blocked, click on *View log entries* from the *Top Menu* in the web interface. You should see entries similar to these:

```
2008 06 21 13:43:31 [597] cookie filter: blocked incoming from us.f362.mail.yahoo.com
2008 06 21 13:43:31 [597] request: GET http://us.f362.mail.yahoo.com:80/ym/login?.rand=fjao5ijaa5cgc
2008 06 21 13:43:31 [597] cookie filter: blocked outgoing to us.f362.mail.yahoo.com
2008 06 21 13:43:30 [597] profiles: Added Profile: uncacheable
```

2008 06 21 13:43:10 [597] **cookie filter: blocked incoming from login.yahoo.com**

2008 06 21 13:43:10 [597] request: GET http://login.yahoo.com:80/config/mail?.intl=us&rand=1936909884&i=IWZkZHNKIXRzZnNyd

If you see too many entries, and would like to filter out entries related to cookies, enter *cookie* in the *Regularexpression match* field, and click on *Submit* below it. You should see entries similar to these:

```
2008 06 21 13:43:10 [597] cookie filter: blocked incoming from login.yahoo.com
2008 06 21 13:43:10 [597] cookie filter: blocked outgoing to login.yahoo.com
2008 06 21 13:43:10 [596] cookie filter: blocked incoming from us.f362.mail.yahoo.com
2008 06 21 13:43:09 [596] cookie filter: blocked outgoing to us.f362.mail.yahoo.com
2008 06 21 13:42:54 [596] cookie filter: blocked incoming from mail.yahoo.com
2008 06 21 13:42:54 [596] cookie filter: blocked outgoing to mail.yahoo.com
```

Although, now you are able to block cookies from unwanted websites, like ad servers, there is a drawback in this method, as it would be a challenge to get a list of all such websites, and be able to update them regularly. One way to overcome this is, to download the database from a service provider like [Shallalist](#), and get the data from a specific category like *adv*.

There is a better and more efficient way of achieving the same - [cProfiles](#). cProfiles is a categorized database of more than 3 million websites, and allows you to add a profile to websites belonging to a specific category, in real-time. 'In real-time' means that you do not need to download huge databases, either during installation, or for updates. Using cProfiles, you can add a profile to websites belonging to a specific category, and use the added profile in any of SafeSquid's filtering section, to take appropriate action, like blocking access in *URL filtering* section, throttling speed in *Limits* section, redirecting requests in *URL redirecting* section, etc.

For blocking cookies, you could use cProfiles, to add a profile 'Ad-Server' to websites belonging to the *ads* category, and add a profile 'Search-Engine', to websites belonging to the *searchengines* category, like this:

Option	Value
Enabled	true
Comment	Add profile 'Ad-Server' to requests from Accounts & Finance to 'ads' category
Profiles	Accounts, Finance
Category List	ads
Score Range	2-100
Added profiles	Ad-Server

Option	Value
Enabled	true
Comment	Add profile 'Ad-Server' to requests from Accounts & Finance to 'ads' category
Profiles	Accounts,Finance
Category List	searchengines
Score Range	2-100
Added profiles	Search-Engine

Then, in the *Cookie filter* section, add a rule under *Deny* subsection, to block cookies for these profiles, like this:

Option	Value
Enabled	true
Comment	Block cookies to the specified profiles.
Profile	Ad-Server,Search-Engine
Direction	Both
Time match mode	absolutetime

Now, since the database in cProfiles is updated in real-time, you do not need to worry about the list of websites, or updating them.

Also see:

- [Deploying A Content Filtering Proxy Server To Distribute Controlled Internet Access With SafeSquid](#)
- [Set Up Gateway Level Virus Security With ClamAV And SafeSquid Proxy](#)
- [How To Set Up Internet Access Control And Internet Filtering With SafeSquid Proxy Server](#)
- [How To Control Access To Unwanted Websites Using URL Blacklist With SafeSquid Proxy Server](#)
- [How To Configure Granular Bandwidth Management Rules In SafeSquid Proxy Server](#)
- [How To Control Download Of Files And Mime Types In SafeSquid Proxy Server](#)
- [How To Block Ads And Banners In SafeSquid Proxy Server](#)