# Still Searching for Privacy

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## ABSTRACT

There is an increased trend towards the publishing of privacy information on corporate (and other) websites[1]. The initiative is taken by industry but largely because of pressure from the U.S. Federal Trade Commission (FTC). Industry has taken it upon itself to make an effort to alert users to privacy practices in hopes of remaining self-regulated. Unfortunately, most privacy policies are lengthy, written by lawyers, and use complicated language. Thus, many users either refuse to take the time to read them or simply cannot comprehend them when they do. The Platform for Privacy Preferences Project (P3P) was developed to allow end-users to gain information about the privacy practices of a given website without having to actually read through a natural language privacy policy. Users set their personal privacy preferences, and a P3P user agent (commonly a web browser) will interpret the privacy policies and alert the user to any conflicts[2]

Unfortunately this system is designed to aid the user in learning the privacy practices of a given website. But what if he or she does not have a particular website in mind, and is therefore using a search engine? At the 2004 Privacy Enhancing Technologies (PET) workshop, a "P3P-enabled search engine" was revealed[3]. Recently we have been optimizing and reworking the code for increased usability in hopes of conducting user studies.

Our search engine is based on the Google API. A user is presented with an interface very similar to Google with the addition of a selection box for their preferred level of privacy. Currently there are three defaults of low, medium, and high, but we hope to soon allow users to customize their privacy preferences. Once they enter a search term and their preferences, they are presented with a page containing results. Before this happens though, the program contacts every site that is returned from Google, and searches for a P3P policy. Before presenting the user with this information, every P3P policy that was located is evaluated against the user's preferences. The sites are then displayed in order based on which ones matched the preferences, which ones contained preference conflicts, and which ones did not contain P3P policies.

At the heart of this project are usability concerns. The goal is to increase awareness of privacy related issues. Therefore, such a system must be intuitively easy to use, improve the user's online experience, as well as provide useful information. The interface that we have adopted is very similar to the Google interface. As most users are familiar with Google, this lowers the learning curve to using our P3P-enabled version. Another feature of this system is that the user can easily view the privacy policies of each website. The privacy policy that can be seen is machine-generated from the P3P policy; thus all of the policies viewed in this way will have similar language. Opt-out information is also displayed in this window.

We hope to use this software for a series of user studies. Users will be asked to buy items off of the Internet using our search engine to select a merchant. They will be given money so that price will not have an impact on their decisions. Afterwards they will be surveyed in hopes of determining whether the privacy policy information played a role in their selection. Finally, this tool can also be used for studies of P3P adoption and industry privacy practices. Many search engines release lists of popular search terms. We can automate this study to see how many of the most popular search terms result in sites not just with agreeable policies, but any P3P policy.

## 1. REFERENCES

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[3] Lorrie Faith Cranor, Simon Byers, David Kormann, and Patrick McDaniel. Searching for Privacy: Design and Implementation of a P3P-Enabled Search Engine. In *Proceedings of the 2004 Workshop on Privacy Enhancing Technologies (PET2004)*, May 26-26, 2004.