



WEBSEARCH MINER

– Query tracking and reporting

Search is the core of our business ...and yours too.

Unlock the Gold Mine behind your Search Engine

Search engines have become the main vehicle for people to find information or answers to questions. A study conducted by Keen.com and Lewis, Mobilio & Associates in 2001 showed that 31% of the respondents used Internet search engines to find answers to their questions – 2 percentage points higher than the first runner up, namely, friends, family and neighbors.

Contrary to browsing, when people search they have in their mind specific questions expressed in the form of queries. Knowing the queries your customers type into your search engine gives you a clear understanding of what your customers want from you.

Websearch Miner tracks user queries, analyzes the data and gives you an array of information, ranging from statistics such as the most frequently asked queries, search response time, etc., to deep knowledge such as related queries, related pages and user communities of related interests, which lay the cornerstones for knowledge management in corporations.

Improve Customer Satisfaction with Websearch Miner

Websearch Miner helps you – the web site owner – to understand how people are using Websearch to search your web site. It also helps your users to make more effective use of Websearch.

Websearch Miner's extensive query tracking and reporting helps you understand what the user is trying to find and if your web site is meeting their needs. For example, you can find out:

- ❑ What are the users querying? Are they finding what they want and what *you* want them to find?
- ❑ Does your hardware provide adequate response time to the users?
- ❑ How many queries are submitted and what is the busiest time?
- ❑ Which pages do the users click after a query?
- ❑ What queries and URLs are related as judged from what users queried and clicked?

Websearch Miner keeps track of the most popular and most recent queries submitted. Queries and click-throughs are analyzed to obtain clusters of related queries and URLs. You can display them on your web site so that users can click on them to obtain results without typing in the queries. It is convenient for the users and satisfies their curiosity (and yours) too!

Main Features

- ❑ **Query tracking:** Automatically records all submitted queries, their originating IP addresses, and the document categories selected; you can configure the search parameters to be recorded
- ❑ **Click-through tracking:** For each query, automatically records the page(s) that the user clicks on
- ❑ **Query reporting:** Reports the most recent and most popular queries by search categories (e.g., most recent queries for the “product” category and most frequent queries for the “support” category); several reports can be displayed simultaneously
- ❑ **Click-through reporting:** Reports for each query the pages (URLs or filenames) that the users click after seeing the search results; both the most recent and most popular click-throughs can be displayed
- ❑ **Performance reporting:** Produces detailed and summary reports on the number of queries received, average response time, most popular queries and most popular click-throughs in the period; reporting period can be daily, weekly or monthly
- ❑ **Related queries and URLs:** related queries and URLs are derived from analyzing the click-through record; Websearch can query Websearch Miner and display search terms related to the user query to enhance the search precision and recall
- ❑ **User communities:** by analyzing what users search for, Websearch Miner identifies user communities with similar interests, which can be used to identify human experts on particular topics
- ❑ **Full integration with Websearch:** Websearch Miner operates independently and asynchronously with Websearch; it is easy to install and doesn't affect an existing Websearch installation or its speed
- ❑ **Fully web compatible:** All displays and reports are in HTML and the layouts can be customized
- ❑ **Multi-user support:** More than one user can connect to Websearch Miner simultaneously to request different kinds of information to be displayed

Applications of Websearch Miner

The example below is a directory search system employing Websearch Miner to help call-center operators to identify popular queries and answer them without typing in the queries again. The company records in this example consist of several fields, e.g., company name, location, and business categories. A search can be conducted on specific fields (e.g., company name = Suntek, location = Hong Kong, category = restaurants). Having recorded all of the received queries together and the search criteria selected in the queries, Websearch Miner can display the most popular and most recent queries for different company categories (e.g., by different locations and businesses). The operator can change the display anytime with the pull-down menus. Clicking on any of the displayed queries brings up the result immediately.

The screenshot shows a web-based search system titled "公司資料搜尋系統". It features a search bar with a "搜尋" button and a search history section. The search history is divided into two columns: "經常搜尋的資料" (Frequently Searched) and "最後搜尋的資料" (Last Searched). Each column has a dropdown menu for "類別" (Category) and a list of search terms. Annotations point to these elements:

- Top right: "Displays the most frequent 10 queries searched on all categories" (points to the "經常搜尋的資料" header).
- Middle right: "Displays the most frequent 10 queries searched on Cinemas" (points to the list of terms under the "電影院" category).
- Bottom right: "Displays the last 10 queries searched on all categories" (points to the "最後搜尋的資料" header).
- Bottom right: "Displays the last 10 queries searched on Cinemas" (points to the list of terms under the "電影院" category).

The search results section shows a search for "元朗戲院" (Yuen Long Cinema) with details: 類別: 電影院, 地區: 元朗, 地址: 炮仗坊8, 電話: 2476 2432, 傳真: 2478 9606.

The Websearch administrator can display much more detailed information to monitor the queries submitted to the search engine in real time. A summary report can be generated daily, weekly or monthly to show the search engine performance and activities. The example below is part of a monthly report, which shows the number of queries received, the average response time and the number of click throughs for each of the 31 days. Not shown in the example are the most frequent queries and click throughs, the total number of queries and the average response time over the entire month.

Detail Report: 2002/10 (monthly)															<SUMMARY REPORT>		
HITS															Total: 7387, Average: 238.29		
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15			
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
0	0	165	593	598	623	597	624	622	659	662	629	592	618	405	0		
TIME SPENT (in seconds)															Total: 66.93, Average: 2.16		
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15			
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
0.00	0.00	5.53	5.72	5.28	5.30	5.87	3.58	7.46	6.11	3.45	4.61	5.71	3.27	5.04	0.00		
CLICK THROUGHS															Total: 3181, Average: 102.61		
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15			
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
0	0	118	419	423	436	433	462	485	386	0	0	0	0	19	0		

Company Profile

Suntek is a software company specializing in search and content-management solutions for Asian languages, especially Chinese. Owning all the source codes, Suntek can provide high-quality, fast turnaround support for and customisation of its products. Major customers include *The Hong Kong Police Force*, *The Hong Kong Government Information Center*, *Independent Commission Against Corruption (ICAC)*, *Hong Kong Securities and Futures Commission (SFC)*, *TVB.COM*, *Orange Hong Kong*, *The University of Hong Kong*, *Hong Kong University of Science and Technology*, *City University of Hong Kong*, and *Hong Kong Institute of Education*.