

# Search Engines

**I. What are they?** An Internet Search Engine allows the user to enter keywords relating to a topic and retrieve information about Internet sites containing those keywords. No matter what kind of information you're looking for, the WWW is an excellent starting point for tracking it down. But the explosive growth of the Web - some estimates put the number of Web pages at 100 million and growing daily - has resulted in a bewildering array of choices. This is where search engines and directories come in. These are tools to find the needle in the haystack.

Web search engines consist of three components:

**Spider:** Search engine databases are selected and built by computer robot programs called spiders. Although it is said they "crawl" the web in their hunt for pages to include, in truth they stay in one place. Also called bot or crawlers.

**Index:** Database containing a copy of each Web page or title gathered by the spider.

**Search engine:** Software that enables users to query the DB and that usually returns results in relevancy ranked order. With most search engines, you fill out a form with your search terms and then ask that the search proceed.

Source: <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/SearchEngines.html>

**II. Search Engine Syntax:** All search engines have rules for formulating queries. It is imperative that you read the help files at the site before proceeding. Online tutorials can also help you learn the rules.

The most common form of search syntax employed on Web search engines is keyword searching with implied Boolean syntax. **AND** and **OR**. **AND** meaning all words or items must be true or included, **OR** meaning any of the words or items will be included.

**NOTE:** In this type of search on the Internet, the absence of a symbol between words is also significant:

Search engines defaulting to **OR**: Alta Vista,(main screen); Excite; Infoseek; MetaCrawler

Search engines defaulting to **AND**: HotBot; Lycos; Northern Light, Google

Another type of syntax is to put quotes around items to search for; also try + and - before terms to include or exclude.

Some search engines ask: All terms, Any terms, etc; another is wild cards (\*) to add to the end of the word root..

Source: <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/SearchEngines.html>

**III. Subject Directories vs Search Engines:** Search engines are actually databases of thousands of Web pages. Some databases contain only the titles and keywords of Web pages. Other databases contain an index of the entire contents of a page.

Directories also contain databases, but are organized differently, like the table of contents of a book (the web). You can browse through categories to find Web pages related to a particular topic, or you can search on keywords. Two popular directories, for example, are Yahoo & Google, at <http://dir.yahoo.com> and

<http://www.google.com/Top/Reference/Directories/>. Each of these search tools has strengths and weaknesses.

Source: InfoAlert, The Economics Press, Issue 106, January 1997

**IV: Search Engines** - The Internet offers many search sites/programs to choose from. How can you tell which one is best for your particular search? Many search sites are also becoming increasingly cluttered with features that have less and less to do with Web searching: weather reports, maps, free e-mail, chat forums, and more. No single search engine will probably solve or find your solution.



**V. Web Sites for information:** Just search comparison+search+engines. Below are a few I've found: Be sure to check dates.

Directories by subject: <http://www.internettutorials.net/subject.html>

Cnet Metasearch more than 800 specialized engines from around the Web – <http://www.search.com>

Internet Tutorials: <http://www.internettutorials.net/>

Search Engine Watch: <http://www.searchenginewatch.com>

2,000\_ Search Engines, Indices and Directories: <http://www.beaucoup.com/>

The Mother of All Search Engines <http://www.mamma.com/>

Searching the Internet – Tutorials - <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/FindInfo.html>

The Internet Sleuth - chooses from over 300,000 databases: <http://www.isleuth.com>

Great information from Santa Rosa JC: <http://www.santarosa.edu/library/Refs>

See Web Site for all of the above and more: <http://www.sonic.net/donna/searchen.htm>

Search Engines Differ: <http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/SearchEngines.html>

Search and Rescue Engine – <http://www.dogpile.com>

Updated 10/20/08

We'll add to these & I'll put on the web.