

Searching the World Wide Web

The size of the World Wide Web is both a blessing and a curse. With web pages numbering in the billions, the Web is the largest collection of information on the planet. However, there is no standard system for cataloguing its content, which can make it very difficult to get to all of those great resources. It is like being in the world's largest library, but all the books have been placed randomly on the shelves.

To help sort through all of this info, we have **search tools**. Each tool has its own way of searching through the information, so different tools may be appropriate depending on what you are looking for. Below we will look at several major search tools and how to get the most out of them.

Types of Search Tools

There are two main divisions of search tools, although several tools may blend the two together to create a more powerful site. The two main types are **Subject Directories** and **Search Engines**.

1. SUBJECT DIRECTORIES

Subject Directories are when web sites are organized into **hierarchical, tree-like groupings**, with each group being divided into more specific sub-groups. For example, a web site on penguins could be found at the end of this tree:

Home > Science > Biology > Zoology > Animals, Insects, and Pets > Birds > Species > Penguins

The most important aspect of subject directories is that each web site is added based on **review by an actual human being**. This editorial input means a few things for Subject Directories:

- Subject Directories will have **fewer web sites in their database**, since it takes much longer for a person to review each site and decide upon its proper placement.
- Subject Directories will have **more appropriate listings**, since someone took the time to verify the actual content of the site.

Common examples of subject directories include Yahoo and Ask Jeeves.

2. SEARCH ENGINES

Search Engines allow the user to **enter keywords to search through a database** of web sites and other resources. The big difference here is that the database is **not compiled by humans**, but rather through some **automated program that systematically collects web site information** from all over the Internet. These programs are often called spiders or bots. Because there is not human intervention in the creation of this database, the following is true of Search Engines:

- Search Engines will have **many more web sites in their database**, since the automated bots can cover much more ground than a person. Current databases contain over two billion sites.
- Search Engines may have **inappropriate listings**, since an automated spider cannot determine the accuracy or value of the sites it indexes.

Common examples of search engines include AltaVista, Alltheweb, Google, and HotBot.

Meta-search Engines also fall into this category, but are different in that **they get their results by searching through the databases of many other search engines**. It is common for a Meta-search Engine to bring together the power of ten to fifteen other search tools.

Common examples of meta-search engines include Excite, Dogpile, IxQuick, Metacrawler, and ProFusion.

Tips for Better Searching

Regardless of what type of search tool you use, there are many common tips you can use to make your request more accurate. Several of these are explained below, although a user should check the help section of their search tool to make sure it is available.

1) **Boolean terms** - You can insert the words AND, OR, and NOT to limit or expand your search.

- a) **AND** - this will require that all your search terms are found in the document.
- b) **OR** - this will require that at least one of your search terms is found in the document.
- c) **NOT** - this will required that a specified term is not found in the documents.

Example: dolphins NOT miami (so you get the animals, not the team)

Example: dolphins OR whales (either one will do)

Example: dolphins AND whales (both have to be on the page)

2) **Plus and Minus Symbols** - These can be used as an alternative to some Boolean terms

- a) **Plus (+)** - Put this in front of a term to require that word to be in the document
- b) **Minus (-)** - Put this in front of a term that you do not want to be in the document.

Example: +dolphins -miami

3) **Exact Phrases** - If you want to make sure that certain words are in a specific order, such as a title or proper name, you can specify that by putting the phrase in quotes.

Example: eric curts (will give you any page with both names on it somewhere)

Example: "eric curts" (will only give you pages with my name)

4) **Wild Cards** - If you wish to search for grammatical variations of a word, you can put an asterisk on the end of the root word.

Example: educat* (will find pages with education, educational, educator, and educate)

Specific Search Tools

Below are descriptions of individual search tools with explanations of what makes each unique. Please realize that this list is in no way comprehensive. There are dozens of other excellent searching sites on the Internet, with these being the few I have chosen to focus on for this guide.

1) **Yahoo** - *www.yahoo.com*

- Type: Subject Directory
- Yahoo is the largest subject directory.
- You can browse through the subject categories or do a keyword search of them.
- After Yahoo finds all the matches in its database, it turns the search over to Google's extremely large automated search engine.
- A keyword search will result in:
 - Categories - Yahoo categories that match the search
 - Web Sites - Sites in Yahoo's database that match the search
 - Web Pages - Sites in Google's database that match the search
- Suggests related search to help focus your topic.
- Yahoo also serves as a web-portal with access to many excellent Internet resources.

2) **Ask Jeeves** - *www.ask.com*

- Type: Subject Directory with a Meta-search Engine
- Allows the user to type in "natural language" questions.
- The results of a search give the user the following:
 - Questions created by human editors that best match the user's query, with reviewed and approved sites that answer those questions.
 - Sites that match the search request from an automated search engine.
 - The option to pass the search to another meta-search engine.
 - Suggested refinements to the search request.

3) **About** - *about.com*

- Type: Subject Directory
- About has over 1 million links for 50,000 subjects organized into 23 channels.
- Each subject is run by a professional Guide who personally chooses the best web sites for that topic.
- The user can browse through the directory or run a keyword search of the database.
- The site has a human feel as each topic is presented in an organization similar to a magazine.
- One drawback is that web sites do not open in their own window, but are trapped inside a frame with About.com at the top.
- Also, the site does seem to have quite a lot of advertisements, including annoying pop-up ads.

4) **Google** - *www.google.com*

- Type: Search Engine
- Has over two billion pages in its database as of 2002.
- Allows the user to search through web pages, images, Usenet newsgroups, and a subject directory.
- Has both a simple and advanced search mode.
- Ranks its search results based on the number of links to that page, based on the idea that the more a page is linked to, the more useful it should be.
- If it has more than two results from a web site it only lists the first two, with a link to see more results from that site.
- Has cached copies of the web pages in its database, so even if the site no longer exists, you may be able to see an old version of it.

5) **AltaVista** - *www.altavista.com*

- Type: Search Engine
- Allows user to search through web pages, images, audio, video, news, and a subject directory.
- Has both a simple and advanced search mode.
- Has a "Family Filter" to help weed out potentially offensive web sites.
- Can translate web pages to and from a variety of languages.

6) **HotBot** - *hotbot.lycos.com*

- Type: Search Engine
- Has both a simple and advanced search mode.
- The simple mode is more advanced than most sites as it allows the user to specify which language to use, the date of the page, whether or not there is multimedia in the page, and how much info to return about each result.

7) **Ixquick** - *www.ixquick.com*

- Type: Meta-search Engine
- Searches through 13 different search engines.
- Allows user to search through web pages, MP3's, news, and pictures.
- Ranks each page by giving it one star for each time it shows up in a search engine's top ten results. This visible star rating is a helpful way to distinguish recognized web sites.
- Clicking a link open the page in a new window.

8) **ProFusion** - *www.profusion.com*

- Type: Meta-search Engine
- Searches through over 1,000 web sources.
- Allows the user to choose smaller subject oriented search groups with search engines specific to that topic.
- Suggests additional searches after displaying its results.
- Has a "Printer Friendly" option to format results for printing.
- Allows the user to set "Search Alerts" which will email the user whenever the results of their search has changed.
- Allows the user to set "Page Alerts" which will email the user whenever a web page changes.
- Has the option to open links in a new browser window.

Kid-Oriented Search Tools

In addition to the general search tools described above, there are some that specialize in web sites for kids. The benefits of having children use these tools are:

- The search tools are kid-friendly in that they are usually **colorful and easier to use**.
- The sites in their database are written on a **level appropriate for children**.
- The sites have been reviewed with children in mind and **should not include offensive material**.

Below is a listing of several good search tools for kids. Just like the general tools, however, this is not a complete listing as there are many other excellent sites that have not been included in this brief guide.

- 1) **Yahooligans** - *www.yahooligans.com*
 - From the folks at Yahoo (see above).
 - Geared towards ages 7 to 12.
- 2) **Ask Jeeves for Kids** - *www.ajkids.com*
 - From the folks at Ask Jeeves (see above).
- 3) **KidsClick!** - *sunsite.berkeley.edu/KidsClick!/?*
 - Created by a group of librarians at the Ramapo Catskill Library System.
 - Allows searching of web pages, pictures, and sounds.
- 4) **Awesome Library** - *www.awesomelibrary.org*
 - Awesome Library organizes the Web with 19,000 carefully reviewed resources, including the top 5 percent in education.
- 5) **Berit's Best** - *www.beritsbest.com*
 - This is a directory of safe, recommended Web sites for children up to age 12. Each selected site has been carefully reviewed and given a rating out of 5.

Searching for Graphics

Besides searching for web sites, you can find great graphics on the Internet. Although there are many great sites to find images, here are a few of the best:

- 1) **Google Images** – *images.google.com*
 - Millions of images from all over the Internet can be found through here.
 - Type in a search term for the image you want to find and click “Google Search”.
 - Browse through the thumbnails of the matching images.
 - When you find one you like, click on it to see if it is still available.
 - If it is, click on the image one more time to open it alone on the page.
 - Now you can right-click on the image and choose “Save Picture As...” or “Save Image As...” to save the graphic to your hard drive.
- 2) **Microsoft Design Gallery** – *office.microsoft.com/clipart/*
 - Here you can search for clipart, photos, animations, and sounds that can all be downloaded into the Microsoft Office Clip Gallery for use in any Office application.
 - Type in a term to search for and click the green search button.
 - Browse through the matching items to find what you like.
 - Click in the checkbox for each item you want to download.
 - When you have all the items selected, click the “Download items” option.
 - If asked if you wish to “Open” or “Save” the files, choose “Open”.
 - Now the items are in your Clip Gallery and available for use.

So How Do You Choose?

There is really no right answer to this question, but there are a few suggestions.

- If you have a very **specific search** in mind, like "short haired chihuahuas", then you should use a **search engine or meta-search engine**.
- If you don't have something that specific in mind, but instead have a **general topic** you are exploring, like "dogs", then use a **subject directory**.
- Try several search tools to find the one(s) you like best.
- Read the help screens for the search tools you like best to get the most out of them.

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