

A brief guide to **Web searching**

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There is a wealth of information available on the Internet and it is frequently the first source of open-source information for a researcher. There are a large number of search engines that can help you access it. Developing an understanding of how search engines work can help you get the most of searching online.



Content

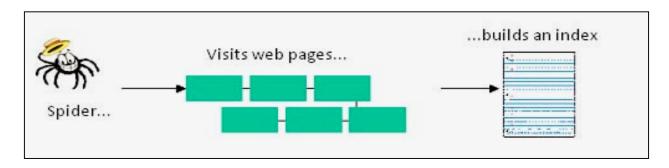
- 1. How a search engine works
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Be suspicious!

Remember to approach web-based information with a critical eye. You will frequently have to sift through a lot of information to find what you need and learning how to recognise what is authoritative or false 'news' is an invaluable skill.

1. How a search engine works

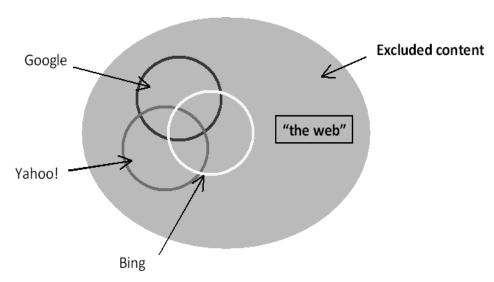
Search engines use small, automated computer programs known as 'spiders' (or 'crawlers') to index web pages. The spiders travel around the web following hyperlinks from one page to the next and take a snapshot of each page they visit. These snapshots are used to make up the search engine index – what you're really searching through when you run a search in Google, Yahoo!, Blurb or any available engine.





2. Web search engine coverage

Remember that web search engines do not search the whole web in real time – they only search that portion of the web that they have indexed.



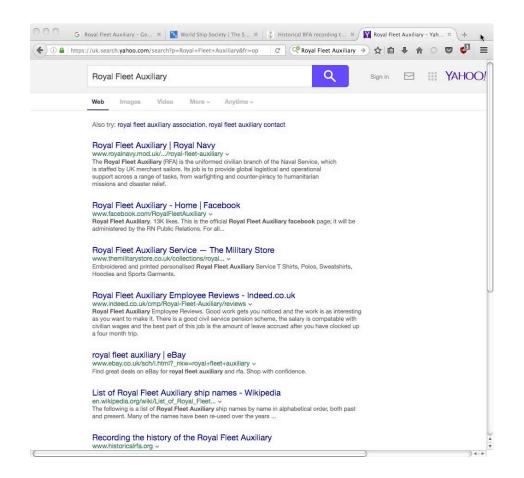
Different search engines have indexed different areas and quantities of web-based material. They also apply different ranking mechanisms to your search results.

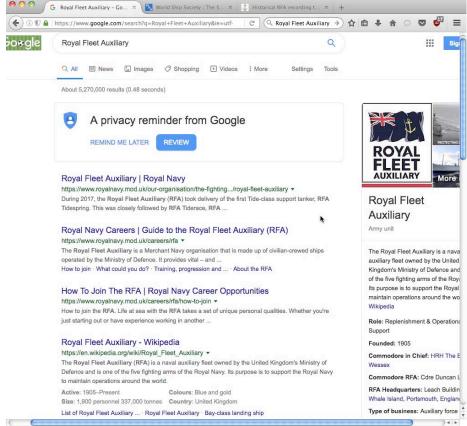
Searching in more than one search engine can often produce surprisingly different results! To see this for yourself, try some searches in 'Thumbshots Ranking': http://www.thumbshots.com/

Compare the results of a search for example 'Royal Fleet Auxiliary' in Yahoo v Google v Bing!

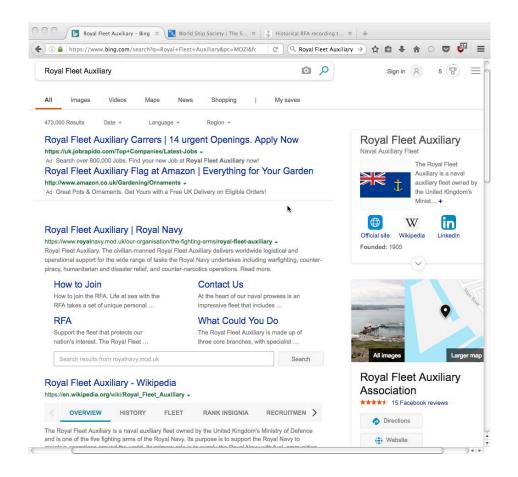
The following illustrations show you the first results actually delivered by the searches:

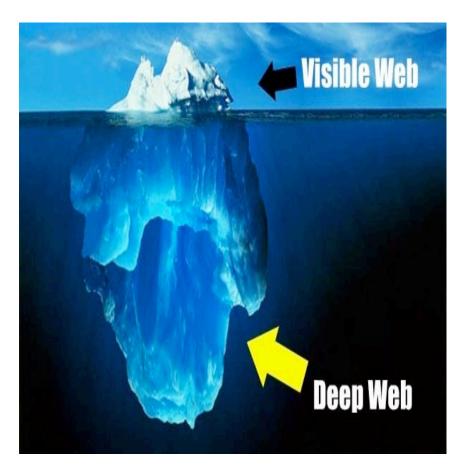










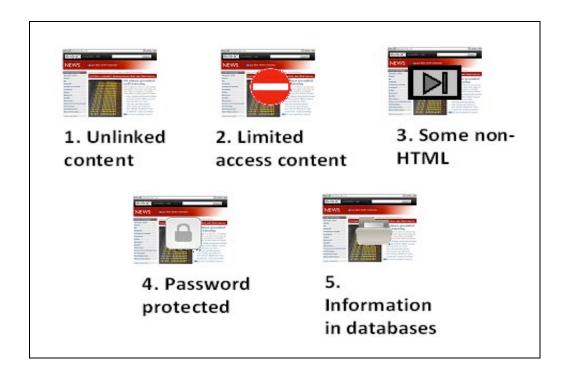


Screen grabs of search results taken from Yahoo, Google and Bing using the same term within minutes of each other. How good are they? Judge for yourself – Goole says the RFA is an Army unit?



3. The 'Dark Web'

The 'dark web' (also known as the 'invisible' and 'deep' web) today a much referred to term that is used to describe content that is not indexed by the standard search engines. It is made up of material that is hidden to search engine crawlers for various reasons; and not necessarily 'covert' as sometimes implied by main stream media. It may simply be unlinked content, in a database, or it could be concealed behind passwords or simply a CAPTCHA image.



 Unlinked content: search engine crawlers need links to access web pages so unlinked content will not be found by them.



- Limited access content: when creating a webpage, webmasters can add code to prevent crawlers from taking a snapshot of their page.
- Some non-html content: text in images, videos and animations may not be indexed by the crawlers.
- Password protected content: search engine crawlers cannot type in a password where it is required to access the information behind it. CAPTCHA is an imagine actually designed *to prevent* automated software, like crawlers.
- Information in databases: search engine crawlers are not able to fill in a form to query a database where this is needed to get information out!

Various attempts have been made to estimate how much material the deep web contains – these have suggested that it may range from 100 to 600 times the size of the 'visible' or 'surface' web. That is a lot of material that can be easily missed if you stick to a normal web search.

4. Accessing information in the 'Deep Web'

The most important thing is to be aware that not everything will appear in your search engine results.

There are some procedures you can use to access 'hidden' information:

Take a step back: instead of searching for what you're looking for, try looking for help on your subject or specialised databases in your area. For example, instead of searching for 'naval', try a search for 'naval database' or 'naval portal'. You are now searching for the places you might find the information you need, rather than the information itself.

Useful words to add to a web search Adding words like 'database' to your web search query can change your results significantly. database gateway 'subject guide' 'reading list' portal library



Search engines will often apply various enhancements to your search without telling you, such as:

Automatic word stemming – search engines will use the 'root' of words and search for alternative forms of a word e.g. a search for 'listen' may also search for 'listened' and 'listener'.

'Fuzzy' or 'pattern' searching – some search engines will also search for similar terms using an in-built thesaurus.

Spelling suggestions or corrections – "did you mean...?"

Options to 'find similar', 'more like this?' or 'related searches' to locate similar documents (according to the search engine index).

Options to view 'cached' pages – saved older versions of web pages that have since been updated.

6. Advanced Web search options

Search engines do offer 'advanced' search options – you do not have to rely on the 'one box search' you're offered on their front page!

A comparison of web search engines advanced options

Feature	Google	Yahoo	Bing
Boolean operators	Automatic AND OR - (for NOT)	Automatic AND OR - (for NOT)	Automatic AND OR () - or NOT
Phrase search	un	""	un
Proximity search	Use the phrase wildcard *	Use the phrase wildcard *	none mentioned
Search with wildcards	Only for words in phrases	Only for words in phrases	none mentioned

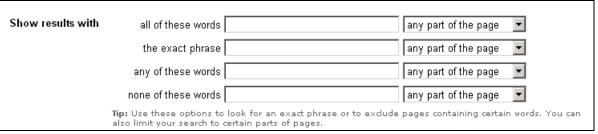


Web search engines will also offer advanced options that are designed for the web environment. Some common and extremely useful examples include:

Add or exclude terms from your search with Boolean logic

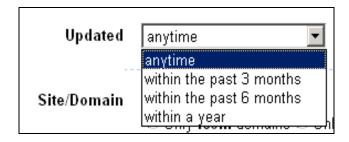
Find web pages that have	
all these words:	
this exact wording or phrase:	
one or more of these words:	OR

From http://www.google.co.uk/advanced_search?hl=en



From: http://search.yahoo.com/web/advanced

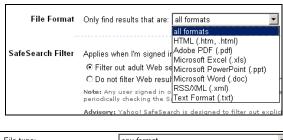
• Limit your searches by date (usually 'last updated' for a webpage)

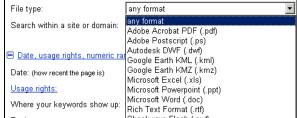






• View results only in a particular **file format** for example, .pdf, .doc, .ppt





• Search within particular websites or domains



From: http://search.yahoo.com/web/advanced



Use options like this to search for sites with particular domains, or within particular websites. This is especially useful if a website you need to use does not have its own 'search' function (or if it's search doesn't work well).

Note: if you limit your searches to country-specific domains (or use other search options to limit by location), you need to be careful. It is frequently not difficult for someone or an organisation to register a website with a particular country domain without having any connection to the location!

Domain	Type of website	
.gov.uk	UK government sites	
.gov.au	Australian government sites	
.gov	US government sites	
.edu	US educational institutions	
.mil	US military institutions	
.ac.uk	UK educational institutions	
.org	Largely non-profit organisations	
.eu	Largely sites registered in the EU	

• Find pages that **link** to a page of interest

If you don't see this option immediately with a search engine, try typing "link:" followed by the URL of the page you are interested in straight into the search box.



Resources



Admiralty/Ministry of Defence /Board of Trade/Ministry of Transport/Ministry of Shipping/Ministry of War Transport/War Office records:

The National Archives (formerly Public Record Office), Ruskin Avenue, Kew, Richmond TW9 4DU

Web: www.nationalarchives.gov.uk

Search: https://discovery.nationalarchives.gov.uk/



Merchant Service records, including log books and crew lists (up to 1973):

The Registry of Shipping (aka Registry of Shipping and Seamen)

MCA Cardiff, Anchor Court, Ocean Way, Cardiff CF24 5JW

029 20448800

Web: www.mcga.gov.uk



The originals of some Merchant Service records are held by:

Southampton Archives Services,

Southampton City Council, South Block, Civil Centre, Southampton SO14 7LY

023 8083 2156

Web: www.southampton.gov.uk



Ship plans (Admiralty Ship Covers), photographs and construction files:

National Maritime Museum

(Royal Museums Greenwich)

Maritime Information Centre, Romney Road, Greenwich SE10 4422

Web: https://collections.rmg.co.uk/





Lloyd's Register (including British Shipping Corporation) also holds some copies of the Mercantile Navy List.

Lloyd's Register Foundation

71 Fenchurch Street, London EC3M 4BS 020 7423 2531

Web:https://hec.lrfoundation.org.uk/archive-library/lloyds-register-of-ships-online



Information on wrecks:

UK Hydrographic Office

Wrecks Section, Admiralty Way, Taunton, Somerset TA1 2DN

01823 337900

Web: www.ukho.gov.uk



Information on marine casualties and shipping movements worldwide; this collection forms part of the archive of the insurance market (Lloyd's of London); collection also includes the Lloyd's Confidential Index 1886 to date; Lloyd's War Loss Records for First and Second world wars and Lloyd's Marine Loss Records 1939-1970 record cards:

Lloyd's Marine Collection

Guildhall Library, Aldermansbury, London EC2P 2EJ

020 7332 1868/1870

Web: www.cityoflondon.gov.uk



War graves information

Commonwealth War Graves Commission

Marlow Road, Maidenhead, Berks SL6 7D

Web: www.cwgc.org/

The Tower Hill Memorial, London

The memorial registers, providing details of those commemorated and a fuller account of the role of the Merchant Navy and Fishing Fleets is held at:

The Corporation of Trinity House

Trinity Square (Cooper's Row entrance), Tower Hill, London Ec3N 4DH

010 7481 6900

Web: www.trinityhouse.co.uk





Information on ship movement/location:

Merchant ship movement cards (1939-1945)

See The National Archives entry above

ShipIndex – a vessel research database

www.shipindex.org

Miramar Ship Index

www.miramarshipindex.nz

Vessel Finder (based on AIS)

www.vesselfinder.com

MarineTraffic (based on AIS)

www.marinetraffic.com

Historical RFA

http://historicalrfa.org/