

NO TIME TO WAIST, BRINGING LOCAL LIBRARY FRIENDLINES TO THE INTERNET*

By Repke de Vries

Internet is an increasingly popular electronic way to communicate, travel, shop, gather information, to be educated - and inevitably to get annoyed or bored too. It is used privately, for scientific research, by established organizations, in initiatives ranging from local to global relevance and both to gather information and to provide it. The Internet in short, is now linking anybody with anyone for anything. It does so with just a few software tools that either bring electronic material and services to the net or let the user explore and make use of them. Gopher, World Wide Web and WAIS are relevant here. They all come for free and each in dual fashion : part of the software is for those who wish to build a Server for the net, the other half of the story is the accompanying (Client) program installed at home or work to get access, browse, search and retrieve over the net.

The early release at no charge of this combined software contributed significantly to the success of Internet. The millions of users of the net that now can be expected to have at least Gopher available are a positive development, the parallel explosion of thousands of Gopher servers is a mixed blessing. As a global infrastructure the Internet is a success : in analogy with the telephone system does it have cheap and easy access, it can establish links to anywhere and the interface is simple. A telephone is basically the same the world over, so is Gopher or Mosaic enough to talk to the net.

But beyond that the analogy fails : no friendly operator to ask for information, only recently attempts at Yellow Pages and directories. Once having found a relevant source, organization and presentation of electronic material on an Internet Server can prove to be another hurdle.

In all fairness are information providers still learning too how to make the transition to the new medium and to benefit from new possibilities not existing before.

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It is interesting to note that the history of resources on the Internet started with a kind of mild anarchy, followed by professional attempts to classify and give "navigational aid for finding relevant information" (the UK ESRC funded Social Science Information Gateway, SOSIG).¹⁾ Likewise: the establishment of a Government Information Locator Service (GILS) to "help the U.S. public locate and access information".²⁾ Followed in turn by the formulation in April 1995 of the "Mission and Goals for a National Digital Library Federation".³⁾ The latter by librarians, scholars and information specialists. This digital library will be a professional undertaking, considering all the new possibilities and (among other things) comparing with the usage of traditional libraries.

The Digital Library Federation extends the idea of SOSIG by helping establish better information servers in the first place. One of the Federation's goals is formulated as follows: "the adoption of common standards and best practices to ensure full informational capture; to guarantee universal accessibility and interchangeability; to simplify retrieval and navigation; and to facilitate archivability and enduring access".⁴⁾

The very need to formulate that goal and the very need for SOSIG show that the Internet still cannot match some of the friendliness and ease of use that makes an old fashioned (public) local library such a nice place to be.

Elements of that friendliness are : easy to reach, very recognizable ; convenient opening hours ; help available for general questions ; recognizable policy behind collection and selection ; material is classified and organized according to some standard ; easy searching and browsing ; and one can count on continuity.

The librarian Karen Coyle in her „ACCESS: Not Just Wires“ evaluates Internet information services on some of these same principles and comes to a rather negative conclusion for much of what is provided on the net.⁵⁾ Neither does she value WAIS as an Internet tool very much: „Unfortunately, documents do not define themselves. The idea of doing WAIS-type keyword searching on the vast store of textual documents on the Internet is a folly .. and non-textual items do not respond at all to keyword searching".⁶⁾

¹⁾ SOSIG can be found at : <http://sosig.esrc.bris.ac.uk> Or Telnet to: info.bris.ac.uk Login as : www

²⁾ May 1994, Eliot Christian "Toward a Global Information Locator Service" Email: echristi@usgs.gov

^{3,4)} April 1995, Scott Bennett et al. "America's Heritage - Mission and Goal for a National Digital Library Federation" Email: [M. Stuart Lynn, mslynn@cpa.org](mailto:M.Stuart.Lynn@cpa.org)
The Digital Library Federation can be reached at: <http://www.dlib.org/>

^{5,6)} November 1994, Karen Coyle "ACCESS: Not Just Wires" Email : kec@stubbs.ucop.edu

Focussing here on social science information and data, the author's own experience is that WAIS has a role to play in making Internet resource centres a friendly service. Of the elements mentioned makes the Internet itself such (electronic) places reachable on a global scale with 24 hours access - but not always easy to find without navigational aids. WAIS as an Internet database that can be queried with natural language accomodates the element of help with general questions. But WAIS in its capacity to index many types of text and other electronic material and allowing queries on fields, also brings easy searching, browsing and automatic downloading to the user of search results: be it documents, scanned journal articles or datasets.

Gopher and certainly World Wide Web can bring the element of classification and organization with their build in possibilities of structured presentation and hypertext - but only after the human effort of selecting, classifying and making descriptions. They both are easily integrated with WAIS. The remaining elements of (electronic) collection building or selection of information to present to the net and continuity of the service over time, are policy decisions shared alike between traditional and Internet information providing.

WAIS stands for (Internet) Wide Area Information Server and is available in a free and commercial version. The following overview of WAIS possibilities and examples of usage, is based on the freely available Dortmund FreeWAIS-sf.⁷⁾ The WAIS server holds one or more WAIS databases and handles searching of these databases together with keeping a log of queries and retrieved material. WAIS databases can be registered by their owners in a central "directory of Servers and Databases" - itself in WAIS format and maintained on a voluntary basis.⁸⁾ The indexing software takes text material or other computer files and creates indexes for fast searching and retrieval over the net. Indexing can be done on the whole text body but also with keywords or synonyms. Keywords make it possible to create a database of images from scanned documentation or a picture collection and index on the attached keywords as descriptors. When the logging of a database shows searching with terms that are relevant but not present as such, synonyms help improve success in asking information from WAIS. The Dortmund WAIS also added indexing on particular fields or items of information within text files that have some form of structure.

⁷⁾ Documentation and software: <http://lsw6-www.informatik.uni-dortmund.de/freeWAIS-sf/>

⁸⁾ Directory of servers and databases by the commercial WAIS providers : <http://www.wais.com> or FTP and Gopher to www.wais.com. Also for WAIS information in general.

The user queries WAIS by first choosing one or more databases that can be located anywhere on the Internet, followed by typing in search words - with the possibility to search in certain fields (like a title) or to compose a query with boolean operators. All this is done in one, natural language sentence. For example by typing : "Title = Unemployment and Europe". Results come back over the net in two steps : first a list with short lines of text describing each item found. Secondly the choice to browse or download one of these items. If nothing is available in the database, WAIS has very limited possibility for further guidance. Getting help or general information on the contents of a WAIS database is possible, but not self evident. In Gopher or World Wide context needs this additional information to be presented together with offering the WAIS searches it self.

The possibility to choose more than one database at the same time to perform a search on, is a strong WAIS feature that ties in well with the trend to have decentralized databases on the Internet, that are maintained with local and dedicated expertise but still need to be searched as if it is one, central database. These automatic "multiple searches" can either be done with WAIS specific software that a user needs to have or can be made part of a WAIS - World Wide Web integration. Meaning that any WWW browser and server can help the user choosing one or more WAIS databases and perform the search. Results now coming back have a list with items coming from different places and databases : reason for the data archiving world to introduce identifiers in indexed material, showing from which country and institution a particular result is coming from.

Evaluating some Internet services for the social sciences that use WAIS databases, best demonstrates the principles.

The Social Science Information Gateway ⁹⁾ is intended as a navigational aid with over 500 links to social science resources on the Internet. Users either walk a subject tree (classification according to the UDC system or in alphabetic arrangement) or by doing a single WAIS search on descriptions and other items of information on the resource centres covered. This design helps both the novice (WAIS queries in general terms) and the experienced researcher familiar with classifications. The choice of World Wide Web furthermore means that a search for "data" in WAIS not only reveals Internet sites with empirical data material in

⁹⁾ SOSIG : see note 1

Another interesting example of sidestepping is at: <http://ssdc.ucsd.edu/index.html>; here one goes from catalogue information to study documentation to real data. Alternatively, search SOSIG for „San Diego“ and step from there to the San Diego Social Science Data library.

their collections. Most of the descriptions in the database also have an Internet link written into them that permits to sidestep from browsing and visit the resource centre over the net for further specific information.

The Scottish Academic Libraries Serials service (SALSER), not only tells which (journal) serials are held where, it also connects to relevant OPAC's and has further general information on libraries concerned.¹⁰⁾ SALSER brings classic arrangements to the net with alphabetic listings and directories but also has the WAIS multiple search possibility on titles and contents of the separately WAIS indexed serials. Designed within World Wide Web the user fills in a form : not only typing in the topic that a journal should cover (for example "oil") but also checking boxes to search all serials or a selection. The automatic multiple search for "oil" shows in one list all relevant periodicals with identifiers indicating the library and serial.

The Dutch Social Science Information and Documentation Centre has an integration of Gopher and WAIS databases.¹¹⁾ In Gopher menus do WAIS searches show up as items with question marks, but only a single database can be searched at a time. Both the Gopher and the WAIS server have logging facilities that are analyzed to determine the relative usage of the different services, by whom on the Internet, repeatedly or not and how information in Gopher fashion is used relative to information in WAIS databases. For WAIS the logging tells how often the "help on WAIS searching" is browsed and all the search words are analyzed to isolate misunderstandings about the database or popular items. An advantage in general to have a separate WAIS server and databases, is the possibility to make these part of a multiple WAIS search from anywhere on the Internet. The disadvantage to have to export from the main SWIDOC databases to a WAIS format, proved minor.

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¹⁰⁾ SALSER is at : <http://datalib.ed.ac.uk/SALSER/index.html>.

¹¹⁾ SWIDOC can be found with Gopher at : <gopher.swidoc.nl>
With WWW SWIDOC is at: www.swidoc.nl. The Steinmetz archive has both fielded searches with WAIS and multiple WAIS searches to catalogues of other national data archives.