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Databases: Catching Up and Keeping Up

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ONLINE DATABASES

Introducing . . .

Two new columns begin in this issue of *LJ*. They complete the quartet of automation services added to *LJ* this year, as promised in our last issue (*LJ*, January 15, p. 79). The first, "Online Databases" by Carol Tenopir, which opens on this page, brings readers expert reports on the host of developments in every aspect of the use of online databases in libraries. Details of Tenopir's future plans for her column are spelled out in the first installment below. On page 183 of this issue of *LJ* Susan Baerg Epstein, a library automation and management consultant whose experience includes introducing automated systems in several libraries, offers the first monthly installment of her new column, "Systems, Automation & Libraries." Epstein will provide expert help with the kinds of library automation decisions faced by nearly all of *LJ*'s readers. In addition to answers to such questions as whether to "buy or build" an automated system, Epstein will compare large-scale systems now used by the large libraries with massive circulation with the "turnkey" micro-based systems for smaller installations. She will discuss the best approaches to developing online catalogs, sharing systems with other libraries, and detail options for various libraries together. *LJ*'s four new automation columns are: "Mason on Micros" (January 15, p. 108), Malinconico's "Technology, Change, & People" (January 15, p. 111), Tenopir's "Online Databases" (below), and Epstein on "Systems, Automation, & Libraries." In March and April, we'll introduce new *LJ* services to help librarians with personnel management and, basic to it all, the selection of books.

DATABASES: CATCHING UP & KEEPING UP

By Carol Tenopir

ONLINE accessible databases are continuing to proliferate and are having an increasing impact on the services and operations of all types of libraries. The Cuadra Associates' *Directory of Online Databases* reported over 1000 databases in Spring 1982, an increase of over 25 percent since 1981. Librarians have an increasingly difficult task in keeping up with new databases, changes in old ones, new technologies, and the important issues related to online database searching in libraries.

This column is the first of a monthly *LJ* column on databases for reference use. Its intent is to provide information about databases to the librarian who would like to stay current. Because databases cannot be addressed without discussing search systems, issues and developments in online database searching will also be discussed.

Future columns will cover such topics as comparisons of available databases on specific subjects; new full text databases and their potential impacts

on libraries; telecommunications developments; numeric databases in the library; software for private databases; training for online searching; and choosing an online vendor. Specific information on databases will be included, as will issues of concern in online database searching.

Suggestions of topics our readership would like to see covered are welcome. Information on new products, services, or projects is also requested.

This column will concentrate on the reference uses of databases and will emphasize commercially available databases. The use of databases in technical processing and online catalogs will be covered in other *LJ* columns, but all types of databases and their use in libraries are considered "fair game" here.

Because the database searching experience among *LJ* readers is so diverse, this first column includes a list of sources for catching up and keeping up with databases and online searching in



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the library. Listed are selected recent sources (in most cases 1980 or after) that provide basic information on online searching and sources for keeping up with the online database field.

Introductory textbooks

All of these recently published textbooks offer very basic introductory overviews of online searching. They are all aimed at the library school student or working librarian who has little prior knowledge of online searching. Each includes a chapter on databases, although specific information gets out-of-date quickly. They all address policy, planning, and issues in online searching as well as introductions to techniques of searching:

- Chen, Ching-chih & Susanna Schweizer. *Online Bibliographic Searching: A Learning Manual*. Neal-Schuman, 1981.
- Fenichel, Carol Hansen & Thomas H. Hogan. *Online Searching: A Primer*. Marlton, N.J.: Learned Information, 1981.
- Hartner, Elizabeth P. *An Introduction to Automated Literature Searching*. Dekker, 1981.
- Henry, W. M., J. A. Leigh, L. A. Tedd, & P. W. Williams. *Online Searching: An Introduction*. London: Butterworths, 1980.
- Meadow, Charles & Pauline Cochrane. *Basics of Online Searching*. Wiley, 1981.

Other useful monographs

A growing number of books cover databases and various aspects of online searching in libraries. Some recent general ones are listed below:

- Hoover, Ryan E., et al. *The Library and Information Manager's Guide to Online Services*. White Plains, N.Y.: Knowledge Industry Publications, 1980.
- Hoover, Ryan E., ed. *Online Search Strategies*. Knowledge Industry Publications, 1982.
- Katz, Bill, ed. *Reference and Online Services Handbook: Guidelines, Policies and Procedures for Libraries*. Neal-Schuman, 1982.
- Keenan, S. K. *How To Go Online—Guidelines for the Establishment of Online Services in Public Libraries*. London: British Library Research and Development Dept., 1980. (Report No. 5533).
- Kent, Allen & Thomas J. Galvin, eds. *The On-line Revolution in Libraries*. Proceedings of the 1977 Conference in Pittsburgh. Neal-Schuman, 1978.
- Online Bibliographic Search Services*. SPEC Kit 76. Washington, D.C.: Systems and Procedures Exchange Center, Office of Management Studies, Assn. of Research Libraries, July 1981.

Journal articles

There is a wealth of journal literature on databases and online searching in libraries. Much of this is at an introductory level. The following articles are some this author has found especially useful, selected from those published in the last three years:

- Adams, Arthur L. "Planning Search Strategies for Maximum Retrieval from Bibliographic Databases," *Online Review*, December 1979, p. 373-79.
- Bourne, Charles P. "Online Systems: History, Technology and Economics," *Journal of the American Society for Information Science*, May 1980, p. 155-60.
- Harper, L. G. "A Comparative Review of BRS, DIALOG and ORBIT," *Reference Services Review*, January-March 1981, p. 39-50.
- Hawkins, Donald T. & C. P. Brown. "What is An Online Search?" *Online*, January 1980, p. 12-18.
- Keenan, S. K., N. Moore, & A. Oulton. "Online Information Services in Public Libraries," *Journal of Librarianship*, January 1981, p. 9-24.
- Lamb, Connie. "Searching in Academia—Nearly 50 Libraries Tell What They're Doing," *Online*, April 1981, p. 78-81.
- McClure, Charles R. "A Planning Primer for Online Reference Service in a Public Library," *Online*, April 1980, p. 57-65.
- Nitecki, Danuta A. "Reviewing Online Resources," *RQ*, Summer 1981, p. 335-36.
- Roberts, S. K. "Online Information Retrieval: Promise and Problems," *Byte*, December 1981, p. 452-61.
- Weiss, S. "Online Bibliographic Services: A Comparison," *Special Libraries*, October 1981, p. 379-89.

Bibliographies

Other useful articles can be found in the following bibliographies:

- Hawkins, Donald T. *Online Information Retrieval Bibliography, 1964-1979*. Medford, N.J.: Learned Information, 1980. (Bibliography and first three updates published in March issues of *Online Review* 1977-1979.)
- Hawkins, Donald T. "Online Retrieval Bibliography, Fourth Update," *Online Review*, April 1981, p. 139-82.
- Hawkins, Donald T. "Online Retrieval Bibliography, Fifth Update," *Online Review*, April 1982, p. 147-208.
- Pugh, W. Jean & Stephanie C. John. "A Bibliography of Database and Search System Comparisons," *Online*, September 1982, p. 41-55.
- Shroder, Emelie J., ed. "Online Reference Service—How To Begin: A Selected Bibliography," *RQ*, Fall 1982, p. 70-75.

Keeping up

Librarians who are experienced searchers still need to spend several hours each week on keeping up with new databases, techniques, and issues. Reading journals in the field, attending local or national meetings, scanning vendor's newsletters and directories, and keeping involved in professional organizations are all important to keep up with databases and online searching developments. The following are the most important sources for keeping up:

Periodicals

- Database: The Magazine of Database Reference and Review*. Weston, Conn.: Online, Inc., 1978-. (11 Tannery La., Weston, CT 06883.) Four issues per year. \$56.
- IDP Report: Information and Data Base Publishing Report*. White Plains, N.Y.: Knowledge Industry Publications, 1980-. (2 Corporate Park Dr., White Plains, NY 10604.) Biweekly, \$225 per year.
- Information Intelligence Online Hotline*. Phoenix, Ariz.: Information Intelligence, Inc., 1982-. 24 issues per year hard copy or daily editions available online through the publisher. \$325 per year including free online access or \$100 per year for online access only.
- "Messages from MARS" in *RASD Update*. Machine Assisted Reference Service Section, Reference and Adult Services Division, American Library Assn., 50 East Huron St., Chicago, IL 60611. Six times per year, RASD members \$3 per year, nonmembers \$6 per year.
- Monitor*. Learned Information, Ltd. (Besselsleigh Rd., Abingdon, England.) Monthly, L98.
- Online: The Magazine of Online Information Systems*. Weston, Conn.: Online, Inc., 1977-. (11 Tannery La., Weston, CT, 06883.) Six issues per year, \$78.
- Online Chronicle*. Weston, Conn.: Online, Inc., 1981-. Available online via DIALOG (file 170). Updated twice a month. \$35 per hour.
- Online Database Report*. New York: LINK Resources, 1979-. (215 Park Ave. South, New York, NY 10003.) Monthly, \$120 per year.
- Online Newsletter*. Phoenix, Ariz.: Information Intelligence, Inc., 1978-. (P.O. Box 3108, Phoenix, AZ 85046.) Ten issues per year, \$45.
- Online Review*. Medford, N.J. and Oxford, England: Learned Information, 1977-. (143 Old Marlton Pike, Medford, NJ 08055.) Six issues per year, \$70.
- RQ*. Reference and Adult Services Division, ALA. Quarterly. Includes reviews of new databases in the "Sources" section.

Vendor periodicals

- BRS Bulletin*. BRS, 1200 Rte. 7, Latham, NY 12110. Monthly newsletter, free with BRS account.
- Chronolog*. DIALOG Information Services, Inc., 3460 Hillview Ave., Palo Alto, CA 94304. Monthly newsletter, free with DIALOG account.
- Inforum*. The Information Bank of the New York Times Information Service, Suite 86035, One World Trade Center, New York, NY 10048. Monthly newsletter for Information Bank accounts.
- Search Service News*. System Development Corp., 2500 Colorado Ave., Santa Monica, CA 90406. Monthly newsletter, free with ORBIT account.

Directories

Several directories of databases provide invaluable aid as reference tools for finding out about databases. Regular updates or new editions keep these directories current.

- "Databases Online," *Online Review*, August 1982, p. 353-90.
- Directory of Online Databases*. Santa Monica, Calif.: Cuadra Associates, 1979. Quarterly.
- Directory of Online Information Resources*. Capital Systems Group Pr., Rockville, Md. New editions published regularly.
- Kruzas, Anthony Thomas & John Schmittroth, Jr., eds. *Encyclopedia of Information Systems and Services*. 4th ed. Gale Research, 1981.
- Williams, Martha E. *Computer-Readable Databases: A Directory and Data Sourcebook*. White Plains, N.Y.: Knowledge Industry Publications, 1982.

See also:

- Smith, Linda C. "Data Base Directories: A Comparative Review," *Reference Services Review*, October/December 1980, p. 15-21.
- Database Search Aids*. Online Inc., 11 Tannery La., Weston, CT 06883. Search aids on several subjects. \$25 each or \$120 for six topics. Shows copies of print versions of and printouts from online searches for databases and compares them.

Professional groups

- Machine Assisted Reference Service Section (MARS), Reference and Adult Services Division, American Library Assn., 50 East Huron St., Chicago, IL 60611
- Online Section, Division of Information Technology, Special Libraries Association, 235 Park Ave. South, New York, NY 10003.
- Online Users Groups are located in many areas. For the groups near you see:

"Online User Group Directory," *Online*, January and July issues.

National Online Circuit (NOC) Coalition of online users groups. For further information contact: Rebecca A. Gonzalez, IIT Research Institute, 10 W. 35th St., Chicago, IL 60616.

Special Interest Groups on Computerized Retrieval Services and User Online Interaction, American Society for Information Science, 1010 Sixteenth St. NW, Washington, DC 20036.

Conferences

In addition to the national meetings of the American Library Association, Special Libraries Association, and American Society for Information Science, special online conferences dedicated solely to online searching issues are now held. Even if you cannot attend these conferences, published proceedings are valuable sources for keeping up with the latest developments in online searching and finding out what other libraries are doing. Additionally, online vendors hold annual updating meetings, often in conjunction with professional society annual conferences. Many local and regional meetings are announced in the publications of the professional organizations mentioned above.

National Online Meeting. Yearly, New York in April. Contact: Thomas H. Hogan, National Online Meeting, c/o Learned Information, Inc., 143 Old Marlton Pike, Medford, NJ 08055. The published proceedings are excellent.

Online '83 ('84, etc.). Contact: Online Inc., 11 Tannery La., Weston, CT 06883.

Database learning aids

Keeping up with the growing number of databases is often frustrating for even the most experienced searcher. The periodicals mentioned earlier provide reviews and some detailed information on databases, but in most cases it is not enough to allow a searcher to feel really expert on a new database.

Database manuals and vendor's publications have been the traditional way to learn more details about a particular database. A number of database producers also offer training sessions on their databases. (Schedules of these sessions are listed in the vendor's newsletters and online journals.)

Learning to search a database just by reading about it is difficult, however, and attending a training session, inviting a database producer to your site or spending adequate amounts of time online can be expensive. The new audio training kits produced by Data Courier, Inc. are thus especially welcome. *Learn Inform*, the guide to ABI/IN-

FORM, was published in 1981 and *Learn PNI* came out in 1982. Both are looseleaf manuals with accompanying audio cassettes and are meant to be used in conjunction with new searching manuals. The learning kits combine introductory information with sample searches. Especially valuable are the search strategy exercises that allow the user to develop searches on a given topic, then compare his/her search strategy with Data Courier's recommended strategy. This is a good way to learn about peculiarities of the individual databases and to develop search skills specific to these databases.

Some of the material will seem too elementary for the experienced searcher and the library scenario on the cassette tape gets a little silly, but this is balanced by the fact that everyone can go through the manual at his/her own pace. Most searchers who are unfamiliar with ABI/INFORM or PNI will find the investment of half an hour to an hour worthwhile.

As travel gets more expensive and as more people in each library learn to search, it is to be hoped that other database producers will develop innovative training packages. Training packages that provide more in-depth information on a database than do these by Data Courier would be especially welcome.

Learn Inform and *Learn PNI* are available from Data Courier, 620 South Fifth St., Louisville, KY 40302 for \$25 each. Multiple copy discounts are available.

ONTAP files

Another recent event in database teaching aids is DIALOG's addition of four new Online Training and Practice (ONTAP) files. ONTAP databases offer a subset of a particular database that is searchable for \$15 per hour. Practice topics are given so a user can match his/her search strategies against a suggested complete retrieval set. Recall and precision ratios for each trial search are computed. ONTAP files can also be used to gain general familiarity with the databases.

Many DIALOG searchers have tried out the ONTAP ERIC and ONTAP Chemical Abstracts databases that have been available for several years. ONTAP Chemname, ONTAP DIALINDEX, and ONTAP PTS Prompt were added later. The addition in late 1982 of four more ONTAP files expands the ONTAP program to databases in medicine, business, engineering, and physics. ONTAP ABI/INFORM, COMPENDEX, INSPEC, and Medline are now available. New searchers who are not familiar with these databases should try out the ONTAP versions. For only \$15 per hour they provide a valuable training aid for experienced and novice searchers.