UC's Melvyl Currents Content Database: Year One

Sherry Willhite & Peter Brueggeman
University of California San Diego Library

IN: DATABASE SEARCHER 7(8):28-31, October 1991

The University of California's Melvyl Current Contents database contains article citations and table of contents records from over 6500 journals in all disciplines of the arts and humanities, sciences, and social sciences. Melvyl Current Contents is comprised of two databases: CC (Current Contents Articles) and CCT (Current Contents Table of Contents). Current Contents Article citations are searchable by author, article title, journal title, and ISI subject categories. Current Contents Table of Contents records are searchable by journal name and ISI subject categories. Current Contents tapes are leased from the Institute of Scientific Information and loaded weekly onto a host computer at the University of California Office of the President Division of Library Automation in Oakland, California. The database currently has records dating back to July 1989 and became available to the University of California community in April 1990.

The Melvyl system currently offers the Melvyl Catalog (union catalog for UC and California State Library), Melvyl Periodical Titles (the California Academic Libraries List of Serials), Melvyl Current Contents (MCC), Melvyl Medline, and three IAC databases: Expanded Academic Index, Computer Database, and National Newspaper Index. The Melvyl system also provides a gateway to other library catalogs and systems on the Internet. Melvyl Current Contents uses the same basic command language as all of the Melvyl system databases.

Since the Melvyl system has been available since 1983, many users are not starting from scratch and are already familiar with the Melvyl command language and can readily search MCC. Access to the Melvyl system and MCC is available from library terminals or from offices and homes by dial-up or network connection. While anyone can access the Melvyl system and the Melvyl Catalog and Periodical Titles databases, passwords are necessary for remote access to the journal article databases. The Melvyl system is made available to the faculty, students, and staff at the nine University of California campuses and three UC-managed laboratories (Lawrence Berkeley Laboratory, Lawrence Livermore National Laboratory, and Los Alamos National Laboratory).
Laboratory, Los Alamos National Laboratory). The potential number of users are 125,458 undergraduates, 41,089 graduates, 7,429 faculty, 121,557 staff, and 20,685 employees at the three national laboratories for a grand total of 316,218 (all numbers are from Fall quarter 1990.) These figures do not include the non-UC patrons using terminals in the campus libraries.

The same mainframe computer and disk drives are used for all the Melvyl system databases. All the Melvyl databases are in contention for CPU processing. Usage data for MCC was analyzed for May 1990 (first full month of data) through April 1991. Figure 1 graphs the mean number of FIND commands and records displayed by two-hour intervals in a 24 hour period. The FIND command initiates searching and is equivalent to Dialog’s SELECT command. Figure 1 thus illustrates the mythical average day of enduser searching on MCC. The period of major usage extends from 10am to 6pm. At the peak time (2pm - 4pm), 271,014 FIND commands are issued and 2,579,294 records are displayed. An average of 9-10 records are displayed for each FIND command. Even during the wee hours, MCC gets used by die-hards with 4am to 6am being the period of least usage.

Figure 2 graphs the mean number of FIND commands and records displayed by month for the first year. One sees an expected increase in monthly demand during successive months of the academic year. In May (first full month of availability), the initial wave of publicity and staff training contributed to high use. Due to the UC academic calendar, demand falls off but remains steady during the summer and December. The peak month is April with 147,925 FIND commands and 1,528,105 records displayed. One can expect demand to increase in succeeding years and April may not prove to be the peak month as more data becomes available.

Figure 3 graphs the average response time in seconds for the FIND command and the record DISPLAY command per month for one year. The FIND command response time is the time from receipt of command until transmission of response and ranges from 0.8 to 1.6 seconds. The DISPLAY command response time is the time from receipt of command until transmission of complete screen and ranges from 0.2 to 0.6 seconds.

For the first year, 1,215,042 FIND commands were issued and 11,635,545 records were displayed. These aggregate figures measure both remote access and library-based access to MCC. A large volume of use occurs but it is unknown how
much can be attributed to enduser searching. Staff searching is not distinguished from enduser searching in the Melvyl system statistics; however, from the authors' experience at UCSD, enduser searching dwarfs staff searching. For Melvyl Current Contents, the meter is off. Endusers can search as many search terms as they want and display as many records as they want. With the meter off, one sees an average of ten records displayed for every search. In the authors' experience, endusers are not using every record displayed with many records irrelevant to their interests.

These 11,635,545 records would cost $8,144,881 at $0.70 per record (Dialog's July 1991 rate). These figures lead one to wonder if commercial databanks and database producers are pricing themselves out of the enduser market and/or simply making themselves unavailable to the enduser market? Why are reduced-cost enduser-oriented database services (eg Knowledge Index, BRS After Dark) only available in the evening when this data shows peak enduser searching during the day? Limiting access to the evening hours is a weak attempt to capture the enduser searching market. Perhaps the true intent of limiting access to the evening hours is to get someone, anyone to use online databanks at night. So who can capture that elusive enduser? The database producer can go for the institutional market for enduser searching by leasing tapes. What about the non-institutional market? Who is going for the lone endusers? Where do the online databanks fit in or do they? With the meter off, this article presents the user load on one multidisciplinary journal article database. With the meter on, one wonders what the user or enduser load is for a multidisciplinary journal article database eg Current Contents?