Based on the experiences of the National Center for State Courts (NCSC) library in employing dial access to the Online Computer Library Center (OCLC) Acquisition Subsystem (ACQS), this paper presents an overview of dial access systems as an alternative to the use of OCLC dedicated terminals. Dial access into online systems is briefly described, the considerations that go into the automation of a library's acquisition system are reviewed, acquisition problems at NCSC are discussed, NCSC staff expectations of the OCLC ACQS system are described, the advantages of dial access to ACQS are detailed, and recommendations for the improvement of dial access use of ACQS are made. The positive effects of the use of ACQS at NCSC are also discussed, as are the overall responses of the NCSC staff to ACQS. (Author/JL)
Use of the OCLC Acquisitions Subsystem in a Special Library via Dial Access

by:

Margaret Maes Axtmann
National Center for State Courts
Williamsburg, Virginia

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WHAT IS DIAL ACCESS

There are many ways for small and special libraries to participate in a bibliographic utility or library cooperative in a cost effective manner. Among the best of the alternatives to dedicated line terminals is dial access. The concept of dial access is that a system can be used with any general purpose terminal meeting the specifications of the desired system. To establish communication between such a terminal and an online system, the user dials a station-to-station telephone call either directly to the computer or through a Tymnet node to the computer. This telephone call is made on normal telephone lines. The advantage of a dial access terminal is that it can be used to connect with many computer systems and databases. For a library with a small volume of acquisitions, it can be a more cost effective method of participating in a bibliographic utility. The disadvantages of dial access terminals include the lack of special editing keys, the slow rate of transmission speed, and the dependence on heavily used telephone lines.

Dial access is one of the most popular alternatives to the OCLC dedicated package. Dial access began at OCLC in 1976 with the installation of a front end processor to accommodate the Tymnet system. Dial access libraries can take full advantage of the OCLC system using a general purpose terminal connected to OCLC by telephone lines, either through Tymnet or by direct dial. OCLC currently charges $100 per year for a dial access authorization. Tymnet costs include a password fee of $24.00 per year and a telecommunications charge of $9.00 per connect hour. Direct dial charges (for the library not going through Tymnet) are
telephone charges only, but in most cases that would mean long distance phone calls. Dial access libraries can use either a teleprinter terminal or a cathode ray tube (CRT) terminal. Requirements for a teleprinter are:

1. an acoustic coupler or a Bell-compatible data set;
2. a line length of at least 72 characters;
3. communication at a speed of 300 baud or 30 cps;
4. communication in the American Standard Code for Information Interchange (ASCII);
5. an upper and lower case keyboard set (not a standard feature on some terminals); and
6. ability to transmit an escape code (ESC) preceding any character (if the terminal is used to input or edit records).

The only additional requirement for a CRT is that it be able to display 24 lines on the screen.

Dial access can be the most cost effective way for small libraries to participate in OCLC, but it can also be used by libraries with dedicated terminals and a need for extra terminal time or hard copy records. OCLC's dial access users now number almost 20% of the total OCLC membership, but there is currently a moratorium on new dial access authorizations.

DECIDING ON AN AUTOMATED ACQUISITIONS SYSTEM

A library considering an automated acquisitions system should first evaluate its present manual acquisitions system and list its predominant strengths and weaknesses. If it is decided that an automated acquisitions system should be implemented, the library should determine its needs and establish the priorities for obtaining those needs. In order to do this it is necessary to examine existing automated acquisitions systems and compare the various features that are available.
from these systems. The library can then make a more intelligent list of features and functions desired in an automated acquisitions system, and it can evaluate available systems in terms of the functional priorities. Detailed information on the two or three systems that are thought to be most suitable should be obtained, so that the library can determine how each system would affect its operations. It is also essential to visit libraries using other automated acquisitions systems and to interview users of various kinds of systems. If the library is an OCLC user and is searching for an integrated system, it would be beneficial to talk with users of the OCLC acquisitions system.

ACQUISITIONS PROBLEMS AT NCSC

Twenty libraries participated in an evaluation of the OCLC acquisitions subsystem from April 1 - June 30, 1981. As the smallest special library and the only dial access library, the National Center for State Courts was a unique evaluating institution. Although we have a very small volume of acquisitions work, with approximately 1,000 orders being processed annually, we were interested in an automated acquisitions system for two reasons. First, there have always been many suppliers from whom it is difficult to order without telephoning or writing a letter. These procedures are effective in obtaining the desired material, but they cause great complications in our recordkeeping systems. We could not seem to make a standard multiple part order form comprehensible to small organizations, state agencies, legislative committees, and short-term research projects. The result was that we were making telephone calls, writing letters, and making personal contacts in order to obtain publications. We were then duplicating our
work by typing multipart order forms in order to have a uniform record for our acquisitions files.

Secondly, although our accounting department has a sophisticated inhouse minicomputer, we have never been able to convince them that the fund accounting information we need is important enough to be programmed and added to the inhouse accounting system. We receive monthly computer printouts from our accounting department detailing expenditures from the previous month and showing cash balances for all of our funds. These cash balances are usually a month behind our actual expenses, and there is no system for reflecting encumbered monies. In a special library with a small budget, it is important to spend money steadily throughout the fiscal year and to know to the penny how much money is actually available at any given time. We therefore set up a manual ledger system which required entering encumbrance amounts for each item ordered, a notation when the item was received and submitted for payment, and the amount that was paid by the accounting department. We never came to grips with an accurate encumbering system for serials expenditures, both because of the enormous inflation factor related to periodicals in the last few years and because of the large number of serials titles we ordered and received directly from the publisher. Somehow we always manage to come in right on budget at the end of our fiscal year, but, before we joined the OCLC acquisitions subsystem, it was with a great deal of manual recordkeeping, duplication of work, and planning for a large percentage increase due to inflation.

In spite of our acquisitions problems, however, we applied to be an evaluating institution for the OCLC acquisitions subsystem mainly because
of our concern that dial access libraries be represented in such activities. OCLC has been more responsive to the needs of small and special libraries than have other utilities and vendors, and we were very happy that OCLC had decided to continue that practice by including a dial access library in the evaluation. We did not expect the OCLC acquisitions subsystem to be the answer to all our acquisitions problems. We did expect, however, that an automated acquisitions system would perform several functions.

EXPECTATIONS OF THE SYSTEM

First, we hoped that the system would provide reports on the length of time it takes to receive ordered material, so that we could evaluate our problems with obtaining material from non-traditional vendors. We also wanted a system that would either list items ready for claim or perform claiming automatically, since we could not take the time to monitor our order file for this purpose. In other words we hoped that an automated acquisitions system could provide us with information which would enable us to make more intelligent decisions. We were interested in knowing how and where we spent money, what our spending patterns throughout the year were, the performance of our vendors, and the potential for collection development and cooperative acquisitions.

Secondly, we hoped an automated acquisitions system would provide current information on encumbrances and payments for all of our funds. We wanted a detailed listing of all expenditures and more accurate information on the amount of money available in any budget category at any given time. We did not expect to do a lot of work in order to get this information, so it was essential that this feature should be part of the system.
Third, we expected a system that would link with other OCLC subsystems to provide a common file of information about acquisitions and cataloging. We viewed this feature as one which had the potential to enhance future development of automated systems in our library.

The OCLC acquisitions subsystem lived up to our expectations in many ways. Its integration with the online union catalog and the name address directory provided the links to other subsystems that we were interested in. The online fund records and the fund reports helped to provide information on encumbrances and payments. The system does not provide information on the length of time it takes to receive orders, however, and the automatic claiming function is not yet part of the system. The management information we were seeking, then, is available, but we must compile much of it ourselves from the reports provided by the system. It took several months of system use before we became accustomed to the format and content of those reports, and we still do not find them particularly useful.

ACQS FOR DIAL ACCESS USERS

The advantages and disadvantages of dial access terminals can be viewed in greater detail and related to the OCLC acquisitions subsystem. The chief advantage of a dial access terminal is that it can be used to access other systems and databases. Many libraries already own general purpose terminals that are used to access reference databases. These terminals, if compatible, can be used for many other purposes. Many of these terminals are also small and portable, thus facilitating use in several areas of a library. Teletypewriter terminals provide hard copy of all transactions in all subsystems, enabling terminal operators to check
work that has been done and to keep necessary records. General purpose terminals are available in all sizes and price ranges, with a variety of capabilities. In general, however, dial access terminals are lower in cost than dedicated terminals, and their cost effectiveness is increased by their capability to work with systems other than OCLC.

The chief disadvantage of dial access to OCLC is that the terminals do not have the advanced editing capabilities that an OCLC dedicated terminal has. Any field that requires a change, addition, or deletion of even one character must be completely reentered. Dial access terminals are not equipped with special keys, such as the send or produce buttons, and these commands are achieved through a combination of keys. Similarly, characters such as the subfield delimiter are transmitted through use of a combination of keys, and this combination can differ from terminal to terminal. Many of the diacritics from the MARC character set are not available on the keyboards of standard terminals. Another problem with dial access to OCLC is that the transmission speed is at 300 baud or 30 characters per second. The transmission speed of an OCLC terminal is about ten times faster, which results in a significant difference in online time spent searching and editing records.

As a dial access user of the OCLC acquisitions subsystem, therefore, a library has the advantage of the system's link to the online union catalog, but, because of the slow transmission speed, the capability of moving back and forth from the name address directory to the acquisitions subsystem is an advantage that greatly diminishes in value. A teleprinter terminal can alleviate some of this problem, since the terminal operator does not have to see an entire record print in order to
know what has already been done with the record. The choice between a
teleprinter terminal and a CRT terminal can also be significant,
depending on the library's recordkeeping procedures.

WHAT ACQS DID FOR US

During our evaluation of the acquisitions subsystem, we found several things that the system did and several things it did not do for us. Some of the tasks it did not perform are not necessarily faults of the system, and some of the problems we had were the result of our internal workflow. The system did not reduce the amount of key stroking necessary for an initial order. Although most of the pertinent bibliographic information is present in the acquisition record when it is retrieved from the online union catalog, the various ordering and encumbering fields that must be filled in require additional typing. The constant data function which was useful to so many libraries in the evaluation period did not prove to be helpful for a dial access user, especially with all orders being placed directly with publishers rather than with a jobber. Only if an entire field remains the same for every unit order can the constant data function be utilized, because even a change of one character in a field means that the entire field has to be reentered. In addition the constant data fields do not automatically print in a retrieved record but must be merged by a separate command.

We chose not to eliminate our paper order file, a single access file arranged by title. The decision to retain a paper file is one that most dial access users would make, because of the dependence on telephone lines and Tymnet nodes to access the system and the resulting limitations on how quickly an online file can be viewed.
The system did not enable us to claim faster than we had been claiming previously. The process for finding out what to claim using the online system is to check the fund commitment register, which is a report that the system will supply either monthly or quarterly. We did not find this any faster or less cumbersome than manually checking our order file. We do feel, however, that the automated system makes it easier to claim once we have determined which materials need to be claimed.

The OCLC acquisitions subsystem did not change our relationship with any vendor, with one notable exception. The U.S. Government Printing Office now processes our deposit account orders faster and provides us with more accurate billing information. We had not anticipated a change in our relationship with any vendor, but we certainly consider that improved service from GPO is a positive change.

As a counterpart to our list of the things the acquisitions subsystem did not do, we found that there were many tradeoffs. While we did not realize the time savings in the initial production of a unit order, neither did we lose any time. The information that was entered into that unit order resulted in the automatic encumbering or expenditure of funds in our online fund accounting system. At the point of a produce or an update to a record, fund information was automatically added or transferred to our fund records. Additionally the system provided up to the minute information on cash balances and fund balances for all existing fund records. We were able, therefore, to eliminate the manual ledger of encumbered funds that had been kept so painstakingly for the previous three years. The cost effectiveness of the system for our library, then, has been in the fund accounting component.
We have also found that the action forms, which are by no means
perfect, have provided some helpful changes. The all purpose action form
has enabled us to use one standard form to perform a variety of
functions, whether it be to produce an order, request a price quotation,
renew a subscription, or claim material not received. Production of
followup forms, such as claims, requires only a few key strokes and a
push of the produce buttons. There are also a number of ways to provide
special instructions to the vendor on the action form.

OVERALL RÉSPONSE TO ACQS AS APPLIED AT NCSC

Our experience with the OCLC acquisitions subsystem has been for the
most part a most positive one. We have made several changes in our
acquisitions workflow to accommodate the use of an automated system. As
dial-access users of the cataloging and interlibrary loan systems, we
have been very accustomed to batching our work in order to make the most
efficient use of time on the terminal. Our entire acquisitions process,
however, had been a very scattered and piecemeal one. We have learned to
coordinate the various tasks relating to preorder searching, order
production, and receipt of materials. Preorder searching now includes
searching our online and manual order files and card catalogs to check
holdings, searching the online union catalog for holdings information and
bibliographic records, and searching the name address directory for
vendor information. OCLC control numbers and vendor name address control
numbers are recorded on our paper order work form at the time of
searching. We have attempted to streamline the entire process by
batching orders in larger numbers. Although it took some initial
organization, this has greatly improved the efficiency of our
acquisitions workflow. The increase in the tasks involved in preorder searching has resulted in greater time savings at the point of order, and in the fund accounting process.

RECOMMENDATIONS

The valuable features of the acquisitions subsystem for our library are the online order file, the easy availability of online fund information, the automatic system of encumbrances, the in-process file attached to the acquisitions record, and the monthly and quarterly fund reports we have elected to receive. Most of the features of the acquisitions subsystem that we did not like are features that are to be expected in an evaluation period of a new automated system. A major problem that we found with the system, for example, was the existing documentation for training and use of the system. Some new documentation has appeared since the evaluation, and we expect more and better documentation in the near future. We also recommended the enhancement of the claiming function, so that claiming could be done on an automatic or semiautomatic basis. This feature is in the development stage at OCLC. We also hope to see the action forms and fund reports redesigned, to be more legible and allow for faster processing.

We had very few problems with the 0 level records that were created by libraries not finding bibliographic records in the online union catalog. It is easy to see, however, that the problems of authority and quality control in 0 level records are very pressing now that the system is available to the general membership. A final specific problem we had as dial access users was the length of the mnemonic field tags and the variation in the use of punctuation following those field tags. In the
acquisitions subsystem, for example, the mnemonics are not followed by colons in the acquisition record, but the mnemonics in all fund records are followed by colons. In the name address directory one mnemonic tag is followed by a colon; the rest are not. Those are frustrating inconsistencies for the dial access user who must type in entire fields.

Our library has been a dial access user of OCLC for five years. We use the system for both cataloging and interlibrary loan, and we have become very accustomed to the amount of typing that goes into editing or entering a record. Using the OCLC acquisitions subsystem was like learning about dial access all over again. There was an initial investment of time required to set up our fund records, to make expenditure adjustments, and to determine which fields within an acquisition record were important to us and which could be eliminated. Some of this was accomplished by trial and error, but it forced us to look at what was important in our entire acquisitions process. When the time savings in the fund accounting portion of the system became apparent to us, the initial time spent in preparing orders was clearly worthwhile.

I can recommend the OCLC acquisitions subsystem to libraries who are presently dial access users of other OCLC subsystems or similar systems. I would certainly hesitate to make such a recommendation to a library that presently had no automated systems. To that library I would go back to my initial recommendation, that is, to examine all the existing systems in the market today and to evaluate the needs and priorities of the acquisitions system within the library. The OCLC acquisitions subsystem works for our library, but we once again learned the lesson that to automate even a small portion of a library's work is to evaluate
the entire system as well as the needs of library staff and library users. It is a lesson that should not be forgotten, for no matter how small the library, how unsophisticated the equipment, or how simple the procedures, the introduction of automation is a serious step. It is only with appropriate planning that a potentially traumatic experience can be turned into one of great joy and satisfaction.

CONCLUSION

Everyone on the library staff found that it was a tremendous experience participating in an evaluation of a new system. It is very easy to sit at the terminal and complain about the information retrieval systems we use, whether it is OCLC or another utility or service. It is much harder to pinpoint specific changes that can be made to enhance a system for the benefit of all users of that system. It also creates an excellent opportunity for evaluating internal procedures and determining the value of paper files. We hope to see more libraries, especially more dial access libraries, have the opportunity to participate in a project of this kind.