WAYNE STATE UNIVERSITY Computing Services Center MEMORANDUM

SUBJECT: Notis site visit of 17Oct85 TO: Notis implementation team

FROM: Frank Burejsza

DATE: 220ct85

This is a synopsis of the 17Oct85 site visit to the University Of Illinois at Chicago by Art Gloster, Kelly Dazsi, Tony Falzon, Jerry Kasiowniak, and myself. The main purpose of this visit was to review a production Notis system. We intended to learn about the mechanics of Notis, pitfalls of implementation, how an installation manages Notis and, to find out what the University of Illinois like and do not like about Notis. It was, also, our intention to have them review our plans.

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The university's academic computing center was represented by Harriet Gorney, Dennis Bartley, and George Yanos. The library was represented by Louis Schultheiss and Nancy John.

The University of Illinois has two major computing facilities. Its Notis system is supported by the academic computing center. This was done despite that fact that the university is already supporting a library circulation system (dubbed LCS) at its administrative center. This was apparently the result of dissatisfaction with the administrative center.

The academic computing center is operating the following configuration:

- 1. IBM3081K with enhanced performance and 64 megabytes of memory
- 2. VM/SP3 with HPO
- 3. MVS/SP 1.3.1
- 4. 1 CICS 1.5 region
- 5. Notis release 3.4
- 5. TSO/ISPF
- 6. Wilbur
- 7. Several protocol converters including IBM 7171s, & IBM Series 1s

They support the following load on this system

- Over 300 CMS users (growing)
- 2. 15 to 20 TSO users (being moved to CMS)
- 3. Over 30 Wilbur users (being moved to CMS)
- 4. Over 20 Notis users (growing)
- 5. Over 415,000 bibliographic entries (approximately 1 3380 volume)
- 6. 8 batch initiators running a variety of jobs including some number crunchers.

The academic center acquired CICS for this, and only this, application. The only special feature being used is temporary storage. Screen mapping, transaction back-out, and other functions are supported by Notis. The staff at Illinois has done very little to tune CICS.

The Notis system is used only for its on-line catalog, called LUIS. The circulations and acquisitions systems were not available when the University of Illinois purchased Notis. Furthermore, the university already had a circulations system. The purchase of other Notis components is being considered.

The on-line portion of the Notis system is written in IBM 370 basic assembly language (BAL). The staff at Illinois said that the code is well written and runs very efficiently. They have made very few modifications to this code. As a matter of fact, they continue to call the on-line catalog LUIS because changing this name would require changing many "screens".

They have been very fortunate in finding their applications programmer. They found an ex-librarian (masters degree in library science) who had left library work for a job writing CICS BAL programs. CICS programmers with BAL experience are hard to find. I suspect that few also have degrees in library science.

They reported that maintaining their applications was a full time job. It should be noted that they have written their own programs to load data from OCLC tapes. They said that many Notis shops had two or three applications programmers.

The batch portion of the Notis system is written in a combination of BAL and PL/I. They have not yet established a production schedule. Nightly batch runs are very short. They do not plan to use a scheduling package to manage the batch portion of the system.

We discussed the need for frequently rebuilding the various indices maintained by Notis. They felt that there is little reason to rebuild an index unless new entries are loaded from an OCLC tape, which happens at most once a week. They believed that, even with infrequent rebuilds the indices will probably be updated long before a book is placed on the shelves anyway. Finally, the on-line system is so much faster than current manual systems that even with infrequent rebuilds its an improvement upon current systems.

They confirmed that some of the batch system has not yet been converted from DOS to MVS. They believe that Northwestern is making progress on this task. They are confident all components will soon be available for MVS.

The library is using SAS to produce a few batch reports. They have been very pleased with it. A roadblock to increased use of SAS is that record descriptions of Notis files are not generally available. We

discussed ways of sharing these record descriptions as they are developed (more on this later).

Access to Notis is provided both via Telex 476L terminals as well as via assorted ASCII terminals. Of special interest to us was the Telex 476L. Both, because of its character set and because of reported dissatisfaction with this device.

The ALA character set specifies not only standard ASCII characters but, special control characters, foreign language characters and diacritical characters, as well. The diacriticals are implemented as dead-key characters. When a dead-key character is typed or displayed the cursor does not advance as it normally would. Instead the next character is superimposed upon the dead-key character. Examples of dead-key characters are the umlaut and the Icelandic thorn.

Usage of the Telex 476L keyboard seemed to be very confusing. Many of the keys serve triple and even quadruple functions. The exact meaning of any key was determined by pressing a combination of shift, "alt", and "cntrl" keys. Also, typing a foreign language character might require several key strokes for the diacritical and then, a keystroke or two for the character that is modified by the diacritical. Even the library staff appeared to be confused by it (they may have been intimidated by the audience).

Illinois reported that there are times when the Telex terminals will stop communicating with Notis. The only known correction to the problem is to quiesce all terminals on the line and then to restart the line. Illinois employs BTAM to drive these terminals. As we intend to use VTAM as our access method we may not experience the problem.

The CICS terminal control table must be coded in a special way in order to accommodate the Telex terminal. Harriet said that she would send us the specifications when we need them.

It should be noted that the Telex 476L is Illinois's workhorse terminal. The Illinois staff felt that most librarians would require the use of the Telex terminals. They also recommended that a few be made available for use by library customers.

The University of Illinois library has contracted with the university's physical plant department to install up to 10 more of the 476L terminals. Physical plant has in turn contracted the work to a commercial firm.

Attached to the Telex 476L terminals are bar code and mag strip readers. The university has been coding student ID cards with mag strips. So it was nessasary for the library to handle both bar code for books and mag strip for customers.

Besides the Telex terminals, access to Notis is provided for ASCII terminals. The ASCII terminals are used by students, faculty and staff. These terminals do not support the ALA character set.

The ASCII terminals are connected to the campus wide local area network. Dial-up access is also provided. The local area network connects to CICS/Notis via 3270 protocol converters. These converters make ASCII terminals appear as IBM 3270s to CICS/Notis.

The University of Illinois relies upon standard CMS electronic mail facilities. All staff at the university have been encouraged to use CMS and many are regular users. They do not provide any mail facilities on CICS itself.

Security for the on-line portion of the system is provided by Notis. It uses standard three character CICS operator IDs to do this. They are planning to use ACF2 for CICS signon security. When this is done, ACF2 will supply the CICS operator ID to CICS from ACF2's LIDREC database.

They recommend that several Notis users be assigned the same CICS operator ID. For instance all staff working the checkout desk would have one and only one CICS operator ID whereas the staff working on acquisition might have another.

Batch security is provided by ACF2.

Use of the Notis system at the University of Illinois is free. Therefore, they have not implemented a charge-back system.

The library does not have any written agreements with the computing center. Nor have they established any formal reporting procedures.

Notis users have formed a users group. This group meets yearly. Some of the sessions are specifically targeted at librarians, applications programmers, or systems programmers. Harriet and Nancy found this conference to be useful.

The University of Illinois is a member of BITNET. We discussed ways in which BITNET may be used among university libraries. George Yanos will try to establish a LISTSERVE list for university libraries. This BITSERVE facility is used to distribute CMS notes and files to a group of people. In this way all interested installations may be kept informed of library issues including Notis problems, user modifications and SAS report jobs.

Dr. Gloster suggested that Wayne State might establish a CMS disk for use as a repository for Notis user "mods" as well as SAS report programs. This minidisk would be available to all interested libraries via BITNET on a real-time basis.

Louis reviewed our plan for implementing Notis at Wayne State. He said that our schedule was very optimistic. He does not believe that the work can be completed in the short amount of time allotted.

The staff at Illinois is pleased with Notis. At times they were almost boosterish in their support. They said that Notis operates reliably according to specifications and performs well. They expect that as more MVS installations install Notis, the MVS version will become dominant over the DOS version.