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PROPOSAL FOR DISTRIBUTED AUTHORITY DATABASE MAINTENANCE

BACKGROUND

At the annual DALNET Board meeting, the Database Standards Committee was charged with developing a proposal to distribute the responsibility for shared authority control among all the DALNET participants.

Although DALNET members have individual bibliographic databases, all members share the same indexes for authors, titles and subjects. All share a common authority file. The NOTIS security tables are structured to allow all members to share the same authority file, but only allows the library which input the authority record and those few persons with high authority clearance to modify the record. As the tables are currently structured, once the Wayne State University (WSU) authority librarian touches an authority record it becomes a WSU record. Unfortunately, for series authority records the next library coming along cannot even add its own series treatment information! While the Blackwell North America (BNA) tape processing brought many out-of-date headings into current form, there are still a number of conflicts in the database. Many of these conflicts result from changes in LC practice since our tapes were manipulated. Last year, Oakland University submitted over 500 requests for authority record modification and an additional several hundred conflicts to be resolved. In the first two months which Detroit Public Library has been actively cataloging on line, the library has submitted about 100 series treatment updates.

As more DALNET member libraries begin to catalog on NOTIS, the work of updating authority records with series decisions and adding cross-references, etc. to existing authority records will grow as will the number of conflicts requiring resolution. The presence of multiple subject heading systems on the database will also increase the amount of maintenance needed. The task of maintaining special subject headings will remain the responsibility of the library or libraries which use those subject thesauri.

This proposal presents three models by which this work could be distributed.

CENTRALIZED MODEL

In this model the work of making the alterations to authority records and notifying DALNET members to resolve conflicts between the authority records and the database is centralized. This is the current model. Libraries submit all changes to records they did not input to the central authority unit for correction and/or routing. The libraries cataloging on NOTIS submit all changes, updates and conflicts to the Database Management Section of WSU Libraries Technical Services for revision and keying. While this model provides the greatest consistency and the highest quality control possible, it also requires additional staff at WSU. This model concentrates the expertise in a single group of individuals keeping the costs of training and personnel to a minimum. The centralized model also allows for a more standardized approach to the early revision of original input records by new DALNET libraries. (Current procedures call for the original authority records input by libraries just beginning on NOTIS to be submitted to WSU Database Management Section for review until all are agreed that the library is comfortable with the creation of original authority records.) This early revision process is an extension of the training process begun with the DALNET Cataloging Training and concentrates on real problems encountered in cataloging.

Use of the centralized model allows for the use of global updates. By properly marking the appropriate authority record, all instances of a given heading can be changed across all processing units. The local library does not have to spend time on this type of correction. While this sounds wonderful, it must be remembered that the global change is only useful in certain cases and cannot be used universally. In fact, the NOTIS programs do not allow the use of the "cataloger generated" global command for subject headings or for all types of series corrections.

Maintaining the centralized model as more DALNET libraries begin to catalog on NOTIS will require the addition of at least two more staff members at WSU. Staff already in place, one librarian, two senior Library Assistants and part time services of two Office Assistants will still be required. The number will be dependent upon the volume of work generated when all current members are working at capacity. The staff would probably be at the Library Assistant level. If two staff members could be added, one could be a Library Assistant while the other could be an Office Assistant II. The additional staff members would be

working on corrections generated by the authorities librarian and the subject specialist in addition to the edits submitted by the DALNET members and setting up and running things like the "GLOB" program for global updates and changes.

Funding for the staff required: two additional library assistants, 75% of the authorities librarian's time, 75% of the subject specialist's time, and 50% of the other library assistants time and 50% each of the two office assistants' time could be divided among the DALNET members. This could be divided evenly, or, on the basis of the size of each member's data base. Perhaps, in time, less time may be required as we get beyond the "creative cataloging" found in much of the retrospective cataloging we have done. Another alternative would be to base the share on the quantity of new title cataloging done each year.

COMBINATION MODEL

DALNET member libraries find the combination model the most desirable. This model will allow DALNET members to handle routine work in a timely manner reducing the need for central control. This would require alteration to the NOTIS security tables to allow specified fields on the authority records to be modified by any cataloger in any member library. This has been proposed to NOTIS, but seems to be a very low priority. The fields proposed to be opened are those for local holdings, the group of note fields, the cross reference field for "see" references, and the group of fields which contain series treatment decision information. WSU would retain central control over any field which could be a heading in the database.

The DALNET programmers should be approached first to see if the needed security table modifications could be done locally. If they can be modified locally, then we would not have to wait for NOTIS to make the requested enhancement. Another alternative would be to pay NOTIS to do the work for us under a separate contract. A third option would be to contract out the programming to be done. This would require that we can identify and come to an agreement with a programmer familiar with the NOTIS programming code who would be willing to do the work.

In this model, catalogers would add the most common information, i.e. those not involving a change of heading, themselves. The only time records would have to be sent to the central authority unit would be if:

1. The heading has been changed (form) by LC, and the record needed to be overlaid and headings had to be changed in files other than those belonging to the processing unit which discovered the update. [If it put in both the authority record and all the bibliographic records, it could do the change itself, as at present.]
2. The record has been considerably updated and the overlay technique of revision is the best.
3. There is a conflict between the authority record and the form used in the database by several DALNET members.
4. Multiple forms of the same heading have been used in the database.
5. Certain types of subject heading changes have occurred which can best be handled by global changes. Global changes should be done only after the most careful scrutiny. The only type of global change which currently works on subject headings is the type which the programmers must generate. We have not, as yet, tested this type of global change.

This model would require the least amount of additional staffing at WSU, but would require a full-time Library Assistant with input from the authorities librarian and the subject editor. The person added would be handling most of the changes submitted from our DALNET partners. The authorities librarian would retain her continuing education and conflict resolution functions. At this time that would be about 75% of the authorities librarian's time and about the same for the subject editor. The added staff member would be concentrating on DALNET work. There may be some need for added staffing within DALNET member libraries to keep up with the volume of work these changes might generate, but it would most likely be in hours per week needed for keying. With the combination model, most of the changes currently sent to WSU now could be directly keyed into NOTIS.

Funding for the staffing for such a model could be obtained by dividing the cost of the staff needed by the proportion of the titles in the database which belong to any given library. Another means of obtaining funding would be to

divide the cost evenly with the assumption that all would benefit evenly from a better database. The third option would be to base the cost on the number of new titles cataloged each year.

DECENTRALIZED MODEL

The decentralized model would divide all authority maintenance work among the various member libraries. Each library would agree to be responsible for names and series within a certain portion of the alphabet and for subject headings either by topic or by alphabet. Another alternative would be to assign names only to one library while another would be responsible for series and another for subjects, etc. It would also be possible to divide responsibility for some classes of materials, i.e. law, music, religion and so forth. It will be most difficult to choose a method to divide the work evenly. If authority work were divided, doing global changes would not be possible unless we gave everyone this capability. That does not seem reasonable unless we wish to abandon all hopes for quality in the database. By the time all the DALNET libraries are cataloging on the system, each library would have to devote at least half the time of one person to this task, updating the changes submitted by others and routing requests for maintenance on to others.

Although this model divides the work among many, the level of knowledge, staffing and expertise varies among our participants. Not all participants catalog their own materials! Should we expect these libraries also to carry their own workload? The amount of training to bring all libraries to the "expert" level will be considerable, the results will be inconsistent. The quality of the work and the resulting database could vary greatly based on which section of the file someone is in. In some institutions, the staffing levels could be such that the work just will not get done. Some of our member libraries do not have professional staff members working three months of the year! This model will probably be the most costly as more people will be spending more time performing database management tasks. The disadvantages of this model include the lack of a central monitor to insure quality, the uneven levels of

expertise and training among the staff doing the work, the lack of the educational component inherent in review, and the uneven levels of staffing which could allow some work to remain undone.

RECOMMENDATION

The Database Standards Committee endorses the combination model as it allows for decentralization of appropriate functions while maintaining control of the functions critical for consistency and access. We feel it is important to encourage NOTIS to work towards that goal. We would encourage the DALNET board to seek funding to pay either the DALNET systems office staff or the NOTIS staff to modify the NOTIS security tables to allow the combined model to operate. The centralized model is the most cost effective. In addition, it will insure a quality bibliographic database, DALNET's most valuable asset.

The committee prefers the combination model, but since that is not possible at this time, the committee strongly endorses the centralized model for reasons of economy and scale. The the committee is convinced that the decentralized model would be most destructive to the quality of the database, the asset we are trying hardest to preserve.

Approved by the Committee
for Submission to the Board

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