Inter-Institutional Library Borrowing in Nova Scotia Higher Education Institutions - some possibilities in system configuration, by

Lillian D. Beltaos, St. Francis Xavier University, Antigonish, NS

Abstract

Three different cases are discussed based on various levels of centralization of data and processing. The paper deals with a classic integrated library system which, among other applications, includes circulation, cataloguing and online catalogue. While common communications standards are required commonality of application software is not. Assumptions include province wide inter-institutional borrowing privileges and existence of online catalogues and circulation modules for all institutions. The paper concludes that while accommodation for the inter-institutional borrowing is necessary, significant system development might not be justified.

Preamble

Given increasing demands on libraries to expand and enrich collection resources with no parallel increases in acquisitions budgets, the libraries and patrons are reaching out to other higher education institutions to "complement" their resources in order to fulfil their information needs. The traditional inter library loan operations experience difficulties in responding to numerous demands within reasonable time limits. Presently, inter-institutional borrowing is fully established only among NOVANET[1] libraries in Nova Scotia. The borrowing privileges are "linked" to the system by required membership in NOVANET.

[1] NOVANET is a network of seven Halifax area libraries and one non - Halifax library

Assumptions

- Inter-institutional borrowing privileges are in effect and a valid borrower of a higher education institution in Nova Scotia is entitled to borrow library items from ALL higher education institution within the province; for each borrower, there is a single library card identifying patron's unique code, name and the parent institution.[2]

- Online catalogues and circulation subsystems are operational in all libraries and patrons have access to holdings and circulation status from their workstations.[3]

- All inter-institutional data traffic is facilitated by NSTN (Nova Scotia Technology Network).

- NSTN supports TCP/IP communications protocol.

- Z39.xx standards are not fully developed and implemented.[4]

- A reasonable (physical) document delivery system is functional in the province.[5]

Case A - Centralized System Configuration

When all institutions share the same centralized system, such system provides for interactive processing (*Figure 1*). Transactions resulting from materials and/or patrons from non-owner/parent institutions could be handled by appropriate system table mappings. For example, at YPLN (York Public Libraries Network), each library maintained its own circulation and fines policies with full "multi-institutional" borrowing in effect (*Appendix*). NOVANET libraries provide a similar transaction tracking, with inter-institutional borrowing privileges for patrons of member libraries.

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2 CONSUL (Council of Nova Scotia University Librarians) is working on this goal

3 All institutions already have an online catalogue or are currently in process of acquiring one

4 Acadia University is involved with National Library in testing these standards

5 CONSUL and Nova Scotia Resource Sharing Committee are working on this goal

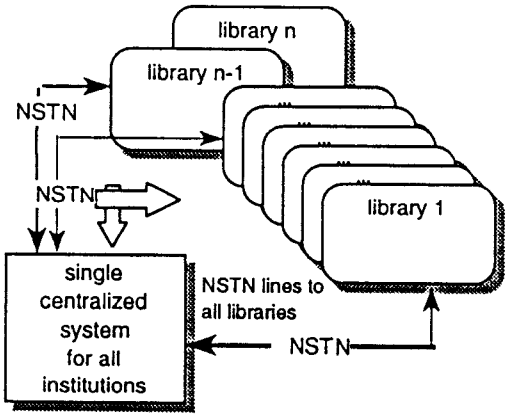

Figure 1
Centralized System

Advantages of this system design are evident, however, there are some disadvantages as well. For the remote sites, cost and efficiency issues become a factor as each transaction for ALL patrons is a remote one. Response rate on the host system is degraded as the database of patrons and items is significantly larger than for each institution. Index/ file maintenance and seek times become an issue as again, larger files are maintained. The data communication capacities, reliability and costs become the concerns.

Case B - Distributed System Configuration

This case addresses a distributed system where the application software is common to all institutions. When a patron initiates a transaction at a non-parent institution, his/her unique identifier sends the patron query to the patron's parent institution; once the validation process is complete (and includes address information), circulation transaction is processed in the library which owns the material (*Figure 2*). System records indicate

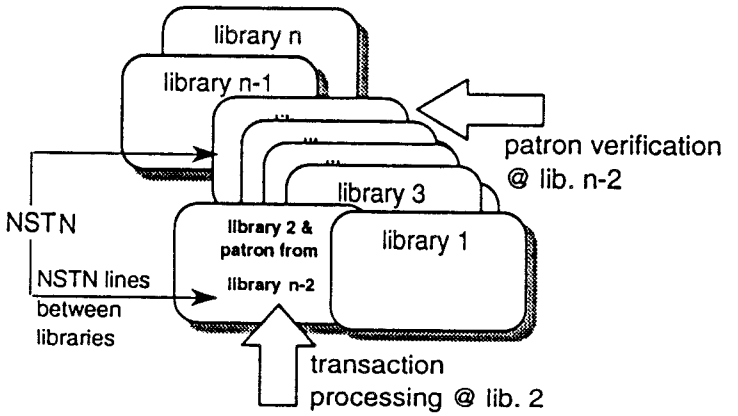

Figure 2
Distributed System

where the patron is registered. No matter where returned, the material is shipped back to the institution which owns it. It is here where the material is discharged. Should there be any fines or recalls involved, these are subject to policies of the library where the transaction takes place.

A distributed system could have a central database of patrons so that each library could send a verification request to the central database instead of the parent institution of the patron. This method could be implemented once the central student registry system is in place in Nova Scotia. However, this is only a variation of the method described in a fully distributed system. The responsibility for tracking of materials and collecting of fines rests with the institution owning the material. Should a system not have a patron validation capability, alternatives do exist. These are described in **Case C** .

There are no disadvantages to patrons in a distributed model. They move freely throughout the province and acquire information they require. There is no major data communication traffic between remote institutions as network queries are minimized to essential levels and only sent in instances of visiting patrons. However, inter-institutional policies on delinquent borrowers must be fully implemented so that libraries can maintain control of their resources. **Case B** is an ideal scenario and it is not likely to be achieved in Nova Scotia for some time as some libraries have already invested in distinct automated systems.

Case C - Multisystem Configuration

This case addresses a scenario where there is a multiplicity of applications software involved. As such, it reflects the current situation in Nova Scotia. In particular, there are two major systems in use: Acadia University system [6] and NOVANET. Similar to **Case B**, a patron validation process would have to occur with transactions processed locally. Each system would have to be capable of accepting a patron validation and flagging/ inputting visiting borrower information so that temporary records would be created and local circulation policies enforced. A visiting patron's record could be automatically deleted either when all transactions are complete or if a patron is inactive for a specified period of time (*Figure 3*).

While patron validation is essential, current systems in use in Nova Scotia do not provide patron validation (with address transfer) to other systems. Also, current systems do not accept system generated temporary records. Until further developments take place to accommodate for an interactive model described above, there are other means which could be employed:

i. Temporary records could be created, or "copied and pasted", at the time of the first transaction request from a visiting patron. If a visiting patron wishes to borrow an item, a borrower validation process could be established by use of a *telnet* session and a transaction processed on the local system.

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[6] Acadia University has one additional member institution

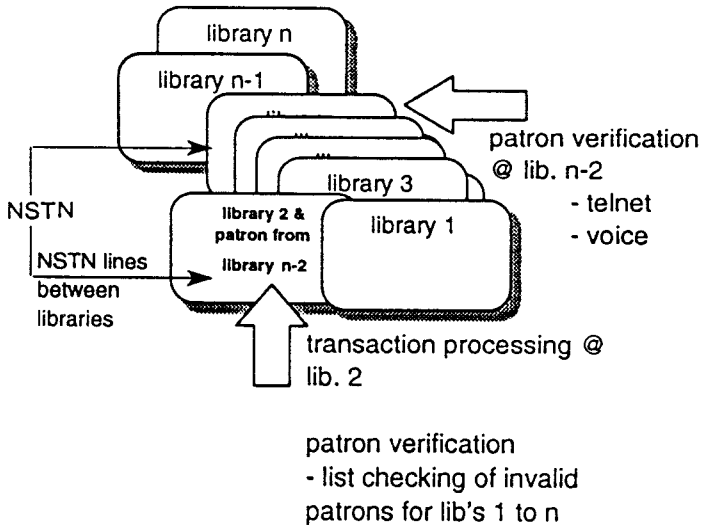

Figure 3
Multisystem

ii. Validation process could be performed by *voice mail* and subsequently information entered into the local system.

iii. An online version of a list of delinquent borrowers could be generated so that the validation process is against delinquent patrons only. In this case, the visiting patrons would be accepted in non-parent institutions provided that their identification number does not appear on the list.

All of these alternatives have associated inefficiencies. However, these illustrate that, no matter where we stand with our system capabilities, we should be able to accommodate our patrons throughout the province.

Closing Remarks

While each one of these cases has its advantages and disadvantages, one must keep in mind that inter-institutional borrowing is a well overdue concept for Nova Scotia and should be addressed as soon as possible. By itself, it does not justify a major system investment. For example, an ideal distributed system is described in **Case B**, but the author does not suggest that a distributed system should be introduced only to accommodate inter-institutional borrowing. There are other strengths of distributed library systems, over and above the issue discussed here. Is it necessary to design a system around few instances when, with proper policies, even a manual system has much to offer? A study should be put in place to evaluate the potential amount of inter-institutional borrowing and its impact on inter library loan operations. The author's

experience suggests that current situation remains unacceptable for many faculty and students who do not see a significant difference between an inter- institutional library loan or a self serve inter- institutional patron borrowing.

The paper does not discuss inter-institutional "borrowing" of online electronic information. Nevertheless, the time of online electronic "borrowing" is approaching and any inter-institutional patron set up put in place for traditional-physical item borrowing, would be a step forward in preparing the libraries to deal with processing, registration and validation of requests for online information.

The author concludes this paper with a remark that, when planning new systems inter-institutional borrowing issues should be addressed. Vendors should be asked to meet the basic requirement of patron validation and temporary record creation for the purpose of inter-institutional borrowing.

Information Resources

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FINES
SYSTEMS FLOW CHART

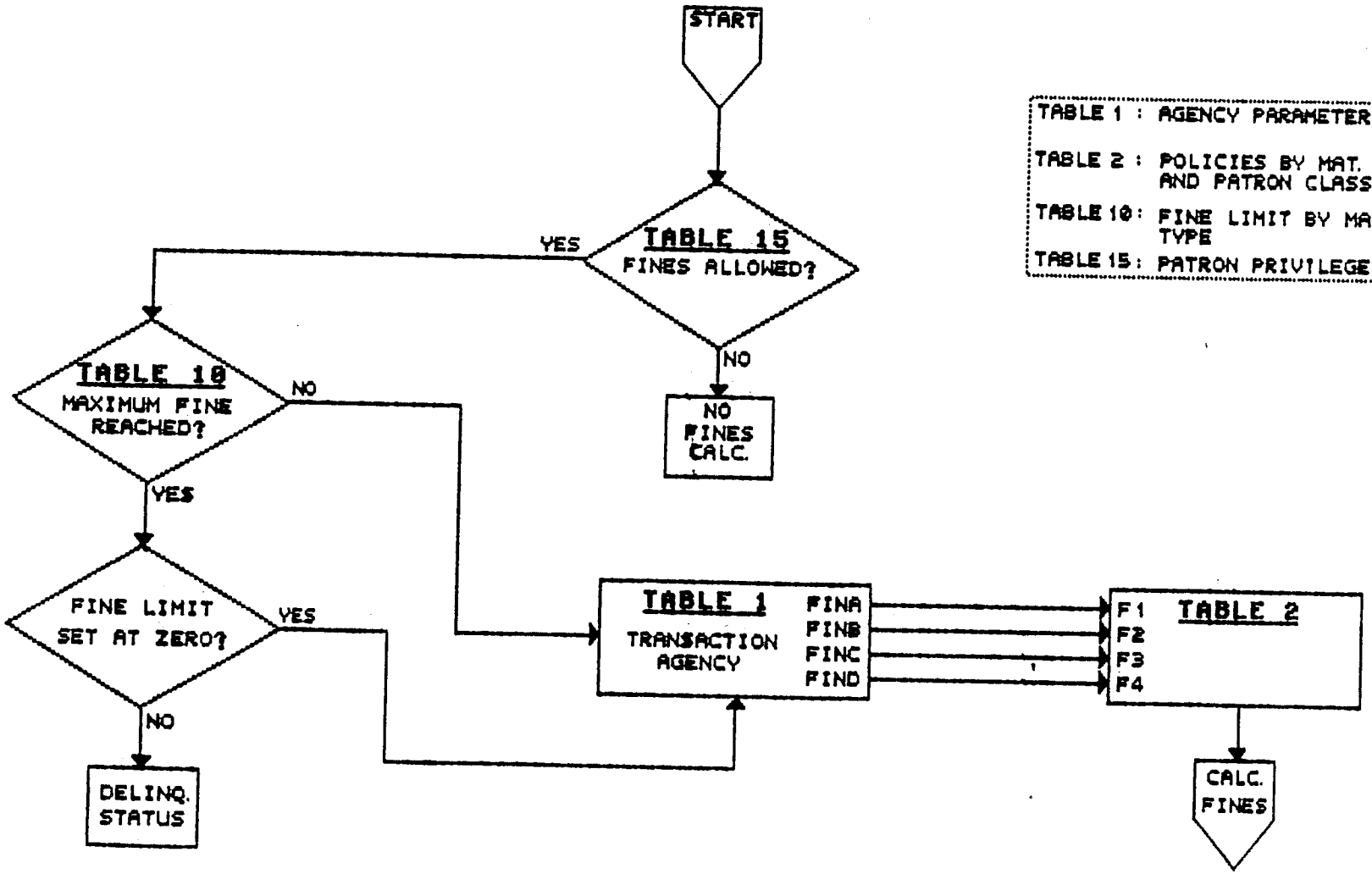

TABLE 1 : AGENCY PARAMETERS

TABLE 2 : POLICIES BY MAT. TYPE AND PATRON CLASS

TABLE 10: FINE LIMIT BY MATERIAL TYPE

TABLE 15: PATRON PRIVILEGE BITS

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DESIGNED BY: Lillian D. Beltaos
DRAWN BY: Douglas J. MacLean