

Cataloging Remote Electronic Resources*

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Despite previous difficulties encountered by law librarians trying to catalog LEXIS and Westlaw databases, Ms. Breeze argues that the time has come for libraries to catalog remote access electronic resources. She discusses the various choices that need to be made once the decision to catalog such resources is reached.

¶1 Organizing access to remote electronic resources could be the greatest challenge faced by modern cataloging. Not only are there numerous obstacles to providing such access, but many librarians raise the issue of whether resources whose availability and maintenance are controlled by external agencies should be cataloged at all. This article will attempt to examine some of the reasons why cataloging remote access resources is a desirable activity, as well as discuss the factors that make this process so frustrating.

¶2 Remote access is defined by the Library of Congress as “. . . access to an electronic resource resident in a carrier that a user cannot physically handle, i.e., a resource accessed, processed, executed, etc., remotely. This type of access is often referred to as ‘online’ access.”¹ The World Wide Web is currently the medium by which most remote resources are accessed. Its rapid growth as a source of research materials has many libraries grappling with ways to manage access for the greatest benefit to its primary patrons. Although the prospect of providing full-text source material electronically is a relatively new phenomenon for most libraries, law libraries have many years of experience in using the full-text remote resources provided by the LEXIS-NEXIS and Westlaw databases. This might lead one to think that law libraries have a headstart on others in providing catalog access to these resources. The answer is yes and no.

LEXIS and Westlaw Cataloging Project

¶3 In 1987 a subcommittee of the Law Program Committee of the Research Libraries Group (RLG) was appointed to organize a cooperative effort to catalog

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1. Cataloging Policy and Support Office, Library of Congress, *Draft Interim Guidelines for Cataloging Electronic Resources* ¶ B19.3b (visited Oct. 26, 1999) <http://lcweb.loc.gov/catdir/cpsol/dcmb19_4.html>.

the resources available through LEXIS and Westlaw.² With funding from the respective database vendors, the State University of New York at Buffalo and the University of Minnesota law libraries agreed to catalog those databases. The University of Minnesota Law Library hired a cataloger and began to catalog the Westlaw database in 1988.³ The project of the University at Buffalo Law Library to catalog the LEXIS database was initiated in June 1989. Online Computer Library Center (OCLC) and RLG agreed to devise ways to offer these catalog records for purchase.

¶14 The cataloging experience at the University of Buffalo has been well documented.⁴ The University of Buffalo staff began their project expecting to catalog the thousand or so LEXIS files in a little over two years time. By August 1991, they had cataloged over two thousand LEXIS files but, faced with a rapidly growing database, found they were far from completing the project. Not only did the LEXIS database grow, its files were constantly reconfigured as sources were added or deleted. Maintenance of existing catalog records became an overwhelming task for the University of Buffalo cataloging staff.

¶15 Although the catalogers' experience at the University of Minnesota has not been as well documented, Gail Daly's retrospective look at the project shows that researchers were also frustrated.⁵ Many of the Westlaw records created by Minnesota's portion of the project contained information that quickly became outdated or was considered extraneous to researchers' needs. There was also dissatisfaction with the way these records indexed in the local online catalog.⁶

¶16 Other law libraries that might have considered purchasing the records were discouraged by the mounting problems, and OCLC and RLG discontinued their efforts to offer the records as batch products. Funding for the projects was not renewed, and the law libraries at Buffalo and Minnesota eventually removed these records from their catalogs. Today, the only tangible result of this project is a few hundred records that remain in the OCLC database but are not maintained to reflect changes. They appear to be used by only a few, perhaps unwitting, libraries.

2. The Law Program Committee was composed of law libraries that were members of the Research Libraries Group. This group still exists, although it no longer uses this title.

3. For further details about the Westlaw portion of the project, see Gail M. Daly, *Library-Vendor Cooperation in Cataloging Legal Research Databases: The Minnesota/WESTLAW Experience*, 82 L. LIBR. J. 331 (1990).

4. For further details about the LEXIS portion of the project, see Ellen McGrath, *Cataloging Legal Databases Available Through LEXIS*, CATALOGING & CLASSIFICATION Q., 1992 no.1, at 3; ELLEN MCGRATH, GUIDELINES FOR CATALOGING THE FILES AVAILABLE THROUGH LEXIS (Am. Ass'n of Law Libraries Occasional Paper No. 11, 1992) [hereinafter MCGRATH, GUIDELINES].

5. Gail M. Daly, *Bibliographic Access to Legal Research Databases Reconsidered*, 87 L. LIBR. J. 192 (1987).

6. For an analysis of why the projects failed, see *id.* at 195-98.

Why Catalog Remote Electronic Resources?

¶17 While the LEXIS/Westlaw cataloging project certainly “placed law librarians on the cutting edge,”⁷ it has also fostered a great deal of caution and even trepidation among law librarians toward cataloging remote access electronic resources. The abandonment of this project in 1991, after four years of continuous effort (two years of planning and two years of cataloging) has been a major deterrent to similar attempts.

¶18 Despite these fears, there are still some good reasons why we should catalog these materials. An obvious one is that advances in technology have enabled online catalogs to operate within the World Wide Web environment. Catalogs that are Web compatible provide the means to “hotlink” from catalog records to remote resources. The online catalog can thus serve as a direct gateway to selected Web sites.

¶19 As use of the World Wide Web to deliver information products continues to grow, librarians are beginning to collect these virtual resources in much the same way they collect print resources. Increasingly, libraries rely on electronic documents and databases to fulfill the guidelines established for developing their collections. Many of these resources, such as the titles offered through Westlaw and LEXIS-NEXIS, duplicate titles that libraries already purchase and provide in paper format. There are many others, such as the *Richmond Journal of Law & Technology*,⁸ which, though published exclusively online, are still the sort of material libraries would purchase if they were available in paper format. Some argue that “if a library takes steps to provide access to a resource, then it should also publicize to its clientele that it is available in the same way it does for other material, by including it in the catalog.”⁹

¶10 By cataloging remote electronic resources, a library provides access to its “collection,” whether virtual or not, through one local index. For decades, librarians have spent countless hours planning and developing a model for the valuable reference tool we know as the library catalog. The result is a tool designed to economize searching in ways that do not exist among current Web search engines. According to a Library of Congress manual on conversion of serials, “while local networks and networks of networks such as the Internet have menu helps, directory structures, and searching tools to aid their users, they don’t yet provide the precision of a controlled vocabulary or the variety of search capabilities available through a MARC cataloging record residing in an online catalog.”¹⁰ Whether Web

7. McGRATH, GUIDELINES, *supra* note 4, at 9.

8. *Richmond Journal of Law and Technology* (visited Oct. 29, 1999) <<http://www.urich/~jolt/>>.

9. Pamela Simpson & Robert Seeds, *Electronic Journals in the Online Catalog: Selection and Bibliographic Control*, LIBR. RESOURCES & TECHNICAL SERVICES, Apr. 1998, at 126, 127.

10. Melissa Beck, Library of Congress, *CONSER Cataloging Manual, Module 31, Remote Access Computer File Serials* §31.3.1 (last modified Sept. 10, 1999) <<http://lcweb.loc.gov/acq/conser/mod31pt1.html>>.

search engines will ever provide this level of access is questionable. Researchers are warned that “before relying too heavily on automated devices to navigate through masses of digitized personal and archival research information, it is worth examining the computing industry’s track record for developing interface and other access software.”¹¹ There is a great deal of interest in using MARC-like records such as Dublin Core¹² to structure the Web for better searching, but establishing a record standard and then getting Web composers and editors to use it accurately will not be easy. Further, given the penchant of Web publishers to tally hits to their sites, any searchable metadata they create might be designed to capture attention rather than provide description. Even if a metadata standard is established and widely adopted, researchers are unlikely to find authority control other than through the online catalog.

Cataloging Choices

¶11 So where do we begin? If we have learned nothing else from the LEXIS/Westlaw cataloging project, we at least know how difficult this process can be and how carefully we must make choices about what and how to catalog remote access resources. Complicating the matter is the sheer number of choices that need to be made and the lack of guidance on how to avoid making the wrong ones. The latter is partly the result of how new this type of catalog access still is and the fact that choices need to be tailored to the needs of individual libraries. “Rather than arbitrarily attempting to catalog Web resources, libraries must learn to use their limited resources in providing control in a way that is most advantageous to their own institutional purpose and mission.”¹³ Libraries may choose to provide catalog access to resources that are licensed or available as a result of other subscriptions.¹⁴ Libraries that are members of the Federal Depository Library Program may decide to provide catalog access to those federal document titles that fall within the areas they select. Another choice that individual libraries may make is to catalog journals and other publications that are available at no charge, provided they meet collection development guidelines.¹⁵

11. Richard Danner, *Redefining a Profession*, 90 L. LIBR. J. 315, 348 (1998).

12. For more information on the Dublin Core, see *Dublin Core Metadata Initiative* (last modified Sept. 27, 1999) <<http://purl.org/dc/>>.

13. Roger Brisson, *The World Discovers Cataloging: A Conceptual Introduction to Digital Libraries, Metadata and the Implications for Library Administrators*, J. INTERNET CATALOGING, 1999 no. 4, at 3, 15.

14. Oxford University Press, for example, offers online access to its journals for those who subscribe to the print versions.

15. One choice made at Duke Law Library was to provide catalog access to the online versions of all journals published at Duke Law School, and to create analytic records to provide links to faculty articles contained within these journals.

¶12 Regardless of which remote resources a library chooses to catalog, decisions concerning how to represent this access in a catalog record will require a cooperative effort between public service and technical service librarians. Close attention must be given to a variety of issues, such as whether to create separate bibliographic records for electronic versions of concurrent paper publications. Careful consideration should be given to what notes are needed, where they should display, and how they should be worded. How to represent the hotlink may be another issue. These are not trivial matters to libraries which strive for consistency and clarity in their online catalogs, and some solutions will depend on the particular library system being used.

Maintaining the Records

¶13 The greatest hurdle to providing successful catalog access to remote electronic resources, both ten years ago with the LEXIS/Westlaw project and today, is record maintenance. Catalog record maintenance is nothing new to law libraries where collections consist overwhelmingly of serials and continuations, but the lack of *physical control* over the materials cataloged is new. At least with nonvirtual materials there is evidence when titles change or issues are added; once in our possession, they do not usually disappear and certainly will not relocate without our knowledge and intervention. With remote electronic resources, however, any of these events can happen and the cataloger may never have a clue to their occurrence. Given this uncertain situation, catalogers must find ways to minimize the risk of an online catalog filled with records that provide nothing more than a hint that the title may be out there somewhere.

¶14 First of all, libraries must be selective in determining which resources to catalog. Some libraries may decide to avoid cataloging potentially high-maintenance resources such as the contents of database products. These “aggregations” of information are an easy way to enhance library collections, but are seldom “fixed,” as the content of such databases may change without warning for a variety of reasons.¹⁶ This is doubtless the primary reason many libraries do not provide online catalog access to LEXIS-NEXIS and Westlaw.

¶15 For those remote resources that a library does choose to catalog, careful thought must be given to constructing the catalog record so that maintaining these records does not become too burdensome. While detailed description may in general serve to enhance record usefulness, it also increases the chances that the record will become dated and less useful. A catalog record that concentrates on identification and subject collocation to provide basic access may be more

16. See John Webb, *Managing Licensed Networked Electronic Resources in a University Library*, 17 INFO. TECH. & LIBR. 198, 202 (1998).

practical for remote resources than one that strives to be fully descriptive.¹⁷ Perhaps information that is readily available at the site could be eliminated from the catalog record. For instance, if dates of coverage are apparent from the Web page, is it necessary to include this data in the catalog record? After all, the Web-based catalog user can move from the catalog to the resource and back again in seconds.

¶16 Some items of descriptive information must be included in the catalog record, and techniques will need to be devised for keeping this data current. Internet addresses that provide the hotlink are a prime example of such information. Web addresses as they are currently constructed will not remain constant. These addresses, or Uniform Resource Locators (URLs), are tied to a particular file in a particular computer and will change each time a Web site is reorganized, moved to a different hardware, or ownership of the site changes.¹⁸ Until there is a standard system for identifying Web resources that can solve this problem, much vigilance is needed to ensure that records provide accurate links.

¶17 A working group on Uniform Resource Names (URNs) of the Internet Engineering Task Force¹⁹ is currently studying ways to define a framework for URNs that will offer the means for persistent names for resources that are not dependent on location as is the case with URLs.²⁰

¶18 As libraries wait for a more global solution to the address problem or for online catalog vendors to implement URL checkers, they look for other methods of keeping links current. Some are using OCLC's PURL (Persistent Uniform Resource Locator) Service which was developed in anticipation of guidelines for URN implementation. A PURL is an address that points to a record in a database where the address is matched or resolved to the appropriate URL for the resource being searched. As long as this registry of records is maintained so that changing URLs continue to match the associated PURLs, the links in catalog records will remain valid.²¹ OCLC operates a PURL server for this purpose but also offers the

17. Ingrid Hsieh-Yee, *Modifying Cataloging Practice and OCLC Infrastructure for Effective Organization of Internet Resources*, OCLC Internet Cataloging Colloquium (1996, San Antonio, Texas) <<http://www.oclc.org/oclc/man/colloq.toc.htm>>.

18. Nat'l Digital Library Program, Library of Congress, *The Relationship Between URNs, Handles, and PURLs* <<http://lcweb2.loc.gov/ammem/award/docs/PURL-handle.html>>.

19. "The Internet Engineering Task Force (IETF) is a large open international community of network designers, operators, vendors, and researchers concerned with the evolution of the Internet architecture and the smooth operation of the Internet. It is open to any interested individual. The actual technical work of the IETF is done in its working groups, which are organized by topic into several areas (e.g., routing, transport, security, etc.)." Internet Eng'g Task Force, *Overview of the IETF* (visited Oct. 27, 1999) <<http://www.ietf.org/overview.html>>.

20. For more information about this working group, see Internet Eng'g Task Force, *Uniform Resource Names (URN)* (last modified June 3, 1999) <<http://www.ietf.org/html.charters/urn-charter.html>>.

21. For more information about PURLs and OCLC's program, see Online Computer Library Ctr., *PURL* (visited Oct. 27, 1999) <<http://purl.oclc.org/>>.

source code free of charge to anyone who wants to set up and run their own PURL server.

¶19 Other libraries are attempting to solve the problem of changing URLs by using automated traversal programs to check for broken links. This type of software essentially acts as a robot that is instructed to test links for a given infostructure, in this case, the online catalog. It then passes that information along as directed. The main drawback of this strategy is that human intervention is still necessary to determine why links are broken and to fix them. Automated traversal programs also are no help in determining if the content of the site continues to represent what is described in the catalog record.²²

Conclusion

¶20 While the prospect of providing one access point for all of a library's research resources, even remote electronic resources, is attractive, there are obvious problems with using the online catalog as that gateway. But these problems should not keep libraries from taking advantage of the powerful access tool a Web-based OPAC provides. The answer is clearly to compromise between providing catalog access to all resources and providing none, and striking this balance by careful planning. This planning should include clear reasons for cataloging these materials, a policy for what categories are to be included, guidelines for record content, and strategies for maintaining accurate data. Above all, it should be predicated on providing access to resources that meet the collection mission of the library.

22. See Roy T. Fielding, *Maintaining Distributed Hypertext Infostructures: Welcome to MOMspider's Web* (May 25–27, 1994) <<http://www.ics.uci.edu/pub/websoft/MOMspider/WWW94/solution.html>>.