OVERVIEW OF PORTALS

An increasing number of requests for proposals (RFPs) for automated library systems now include specifications for a portal module. A portal is a single user interface for access to many electronic resources. It may include:

- A library's own catalog
- The catalogs of other libraries
- Online reference services to which the library subscribes
- Selected websites
- Even the Internet as a whole

Most library patrons want information regardless of where they find it. They don't want to limit themselves to their library's collection. A portal offers them one-stop shopping that takes them from the initial need for information through its delivery—without having to use several different tools. If welldesigned, a portal also provides effective navigation of complex, multiple, and disparate collections.

In the words of Vinod Chachra, president of VTLS, a vendor of automated library systems:

> "It's not if libraries should be portals, it's not when libraries should be portals, it's how libraries should be portals."

Despite the growing interest in portals, fewer than one-half of 1% of libraries have implemented them, which is why only limited information is available at this time. The consensus among vendors is that widespread implementation is at least two years away.

History

Portals were first developed by large companies seeking to provide employees with a single interface by which they could access corporate information from multiple computer systems. Although the first portals were developed by or for a specific company, commercially produced portal software soon became available.

A portal can be mounted either on a dedicated server or on a Web server that supports other applications. The software is generally described as a portal server or enterprise portal product.

Major portal software vendors include BroadVision, Epicentric, iPlanet, Oracle, Plumtree, Tibco, and Thunderstone. Plumtree is the market leader with a 39% share; none of the others has more than 9% market share. The products of these companies are not discussed in this report because few libraries have entertained the idea of building their own portals from scratch.

Thunderstone is the only vendor that claims a library (an ARL member) as a customer. The library, which was not identified, selected Thunder-stone before library portal options became available. The library had to do much development work to tailor the portal to the needs of its faculty and students.

Appendix C lists contact information for these seven corporate portal software vendors.

Four smaller vendors (Auto-Graphics, Fretwell-Downing Informatics, MuseGlobal, and WebFeat) have developed portal software they sell directly to the library market. (See Chapter 3 for more information.)

Elements of a portal

A portal typically contains the following:

Intuitive and customizable Web interface

A portal provides an easy-to-navigate interface that can be designed to match the look and feel of an organization's existing applications. Although most portals are implemented with Web browsers, they can have another client interface, such as a graphical user interface (GUI).

Personalized content presentation

A portal can access user profile information to deliver personalized content. Each user can gain a view tailored to his or her access privileges. The personalization can be for a person or a category of people. In most organizations, each employee is provided with personalized content; customers and suppliers are provided content personalized for a category.

Security

User profiles can be used to increase the security of the systems being accessed because most portal servers use caching to improve performance. The users access the cache, rather than the back-end server that is the source of the information.

Patron authentication is another security feature that can be used not only to determine rights to access that information stored on the local system, but to access remote resources that are limited to specific people or categories of people.

Communication and collaboration

A portal can be used to provide chat, e-mail, shared calendars, and Web meetings.

Library portals do not always have all the elements described above. They tend to be less personalized because they will be used by many people with diverse needs. Library portals have less emphasis on communication and collaboration because libraries emphasize access to information, rather than providing chat, e-mail, and so on.

Sources for library portals

A small minority of libraries—fewer than one-half of 1%—has implemented portals. Most libraries with portals rely on a vendor that specifically serves the library market to undertake the substantial tailoring necessary for the portal to work well with the automated library system.

Lexis-Nexis was a pioneer in developing portals with content management for use by libraries and law offices. It selected Plumtree's Corporate Portal 4.0 platform and added a structured taxonomy to enhance and simplify navigation across legal resources, websites, news feeds, and local documents.

GUI: A program interface that takes advantage of the computer's graphics capabilities to make the program easier to use. (Source: www.webopedia.com)

Westlaw, Lexis/Nexis' major competitor in the legal market, has developed a similar portal.

Gale, a major publisher of electronic information, also developed a portal to facilitate access to its diverse databases. It recently responded to an RFP from a Canadian library that uses GaleNet to access many Gale publications with a proposal to broaden the scope of the portal to include the library's own databases and other online reference services. SwetsBlackwell and others also might consider broadening the scope of their portals.

Auto-Graphics, Fretwell-Downing, MuseGlobal, and WebFeat have no databases of their own but develop library portals. The first two also offer automated library systems, but most of their sales have been to libraries that have those systems supplied by other vendors. The products of all four vendors are described in Chapter 3.

For vendors of automated library systems to sell to the customers of competitors is unusual. Regardless, Auto-Graphics targets small libraries, and Fretwell-Downing targets special libraries, although its portal products appeal to large public and academic libraries. Nevertheless, as the other automated library system vendors improve their portal products, Auto-Graphics and Fretwell-Downing may find competing more difficult.

Most major vendors of automated library systems now offer a portal as part of their automated library system. Endeavor and Ex Libris, vendors that focus on the academic and special library markets, were among the first. Sirsi, a vendor with a significant share of the public library market, also was an early entrant. Its iBistro is the most widely installed portal with some 160 sites, although the scope of the product was initially narrower than those of Endeavor and Ex Libris. epixtech, Gaylord, Innovative Interfaces, TLC, and VTLS introduced their portals in the past few months, and several other vendors are planning introductions in 2003. The offerings of all eight vendors are described in Chapter 4.

Four vendors, Endeavor, Innovative Interfaces, TLC, and LIBIT of Germany (not described in this report because LIBIT markets its product only in German-speaking countries), have selected Muse from MuseGlobal for incorporation into their systems as a portal. MuseGlobal is a portal server product designed for retrieval of information by library users. epixtech has an agreement to use WebFeat, a major competitor to MuseGlobal. TLC is the first vendor to sign an agreement with both MuseGlobal and WebFeat to provide libraries with a choice.

Fretwell-Downing is working with a group of research libraries to develop a scholars portal that will be multi-institutional. The project and two others are described in Chapter 5.

Since a portal product is positioned between the browser and the vendor's patron access catalog, an interface must be written between the portal product and the patron access catalog so features, such as placing a hold, are not lost.

Working with the vendor of the automated library system assures better integration of the portal and the automated library system, but many libraries have chosen to work directly with the portal developer, especially when that developer specializes in the library market.

The University of Illinois at Chicago (UIC) chose to work directly with WebFeat because UIC was planning to migrate from its NOTIS system to a new clientserver system, and because UIC wanted to limit the scope of WebFeat's use to searching only the online reference services to which the library subscribes.

The scholars portal will tailor the search engine to the needs of faculty and students in academic institutions, rather than rely on a general search engine such as Google.

The King County Library in Washington also chose to work directly with WebFeat because epixtech, the vendor of its Dynix system, was not yet ready to offer a portal product. The library is using the portal to access its patron access catalog and online reference services to which it subscribes, but the library decided against using it for searching the Web.

SEFLIN, a Florida consortium of libraries, chose to work directly with WebFeat because the consortium's 25 libraries have several different automated library systems. The portal accesses all the patron access catalogs and many selected websites. SEFLIN also uses TownSource Interactive, a turnkey solution for producing community portals.

The New York Public Library—Branch Libraries has chosen to work directly with MuseGlobal, but most libraries using the MuseGlobal product have contracted with their automated library system vendor to minimize the effort required to implement their portals.

Library portal products are still new—most were introduced in 2001 and 2002. The keyword-based search tools employed in most of them usually deliver excessive quantity, poor quality, and inaccurate results. The solution to the problem of excessive quantity usually is relevancy ranking, filtering for relevancy, and ranking the search results according to predetermined criteria. The most common of the solutions uses the frequency with which the search terms appear in the search results to determine relevance. Much of the ongoing development focuses on solutions for these problems. So far, the problems of poor quality and inaccuracy are being controlled by the preselection of links by librarians.

Portal products are complex and differ significantly from one another, which creates the necessity for libraries to develop specifications for inclusion in an RFP or other procurement document. Chapter 6 provides specifications to use in an RFP. These specifications can be included in an RFP for an automated library system as the specifications for a portal module. They also can stand alone if only a portal is being purchased.

SEFLIN's portal is at www.My LibraryService.org.

TownSource Interactive, www.townsourceinteractive.

Relevancy ranking is a determination of the degree to which the information retrieved matches the search information entered.