

Web OPAC: An Effective Tool for Management of Reprints of ARI Scientists

By

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ABSTRACT

Agharkar Research Institute, Pune is a grant-in-aid research institute of the Department of Science and Technology, Government of India. The current research activities encompass biological sciences and focus on three broad areas: Animal Sciences, Microbial Sciences and Plant Sciences. The web site <www.aripune.org> has been launched to present the scientific activities and achievements of the institute. Information about ARI library is one of the important features of the web site. The present paper attempts to discuss the planning and strategies adopted for the implementation of WEB OPAC activities of the library. The discussion is based on actual experience gained during this process. We advocate that it is not necessary to provide access to all the data or information through Internet. However, it is always better to keep separate the locally and globally accessible information. We further discuss the issue of WEB OPAC of reprints of papers published by the scientists of our institute.

KEYWORDS: Web OPAC; OPAC; Reprints; ARI, Pune

1. OPAC AND WEB OPAC

Several people have defined OPAC and Web OPAC. Two main reasons for such variations are that, some professionals look towards it as a product while others see it as a tool to exploit the collections of a library. It is therefore worthwhile to study some of the definitions available on the Web.

1.1 OPAC

OPAC stands for Online Public Access Catalog. The OPAC is the gateway to library's collection. Sabine [1] defines an OPAC is an electronic database that contains the same information: that is; author, title, and subject information about the materials that a library owns. Some OPACs are union catalogs meaning that several libraries share the same database. SIRSI: Glossary of Terms [2] defines it as 'a computer workstation used to search a library's catalog. OPAC can refer to either the actual workstation in the library, or to the interface provided by the library that is accessible from anywhere'. Another interesting definition found on Internet says that 'OPAC is an online bibliography of a library collection that is available to the public. With the arrival of the Internet, most libraries have made their OPAC accessible from a server to users all over the world [3]. Harvey [4] describes an OPAC as "knowledge access system whereby the catalogue is both a finding and access tool". According to him, with user expectations becoming more demanding in terms of access to electronic information, the OPAC reflects an organized collection of databases and web. The third generation of OPAC is what exists today with its computer/ web interface and advance searching abilities.

1.2 Web OPAC

Simply stated, a Web OPAC is a library catalog on the Web or Intranet. Users can search the required information by connecting to Uniform Resource Locator (URL) of Web OPAC anytime during the day and from anywhere in the world. A different definition can be seen on the Internet according to which a 'WEB OPAC is an independent program designed separately from the Library Program. It is programmed to facilitate the library's members to access the OPAC, through their own search, for the ease of borrowing, instead of searching through the card catalog. In addition, members would also be able to request for the information about borrowing, reservation, etc., related to their own library profile, as well as to make automatic reservations [5]. Sabine [6] defines it as ' Web Cat, which is the next generation of an OPAC. It utilizes the World Wide Web protocol to deliver a library's catalog'. A Delphi Study [7] on Web OPAC describes, 'it is one of a question-answering, decision-support, richly interactive information discovery and retrieval system that has no intrinsic limitations on the kinds and formats of information and knowledge it can find, access, retrieve, display, and distribute'.

2. INFRASTRUCTURAL NEEDS

From the above discussion it is clear that the Web OPAC is a complex term and is a convergence of two major technologies, namely, Web Technology and Computer Networking Technology. The web technology is more recent than computer technology. The Web OPAC essentially implies the availability of the following three things.

- **Web Technology:** it covers HTML, ASP, XML Web server programming etc.
- **Computer Networking Technology:** it includes LAN, WAN, Internet, and Intranet
- **Computer Readable Catalogue:** any type of database accessible through computer

These may be regarded as infrastructural needs to implement WEB OPAC. In India we are not strong enough in the first two aspects. Firstly, we do not have enough number of web servers. And web space slots available are not meant for small requirements. Secondly; we have not yet completely developed a global computer network. Further, current network speed is also not satisfactory.

3. AVAILABILITY OF INFRASTRUCTURE AT ARI

- **The institute has following infrastructure for implementation of Web OPAC.**
- **The institute has its web site; the same server is used for global access.**
- **An institute-wide LAN facility is available and intranet installation is in process.**
- **The computer readable databases of books, reprints, and other materials are available.**

The web site of the institute is hosted on the high-speed server located in USA. It supports ASP, JAVA, Access, SQL databases and software that are required commonly. It is possible to get additional web space as per requirement. An institute-wide LAN has fiber optic cable backbone and UTP cables are used for internal connectivity. The ISDN line of 128 kbps is available for Internet connectivity at present. The leased line connectivity will be made available very soon. The library makes use of SLIM software. The current as well as retrospective data of collection is available in the digital format.

4. PLANNING AND STRATEGY FOR WEB OPAC AT ARI

4.1 Global or Local Access

Planning of Web OPAC requires deciding, firstly, access to be provided to which type of data and then to decide global or local access. It is not necessary to provide access to all information or data through Internet. It is always better to keep separate the information to be accessed globally and locally. The information that needs to be provided globally can be given through Internet, while other information of local use can be made accessible through Intranet. The principles of library science support 'broken order concepts' and advocate planning library and information services as per priority of use.

4.2 Databases Selection

The database of books, reprints, and periodical resources are different types of databases. The nature of use and users of these databases are also different. The reprint database essentially requires global access, whereas books database is more used locally. There is no harm to keep them separately as per the importance and/or priority of their use and need. The reprints database has global importance and therefore needs to be accessible globally. It was therefore decided to keep it as a part of web site of the institute under "Library" feature. Additional access is also provided under the "Publications" feature. The Web OPAC of reprints is accessible through Internet. In order to understand how WEB OPAC helps in effective management of reprints it is necessary to understand the concept of Management of Reprints and problems faced.

5. REPRINTS: PRIMARY SOURCE OF INFORMATION

5.1 Management of Reprints

Research Publications are an important outcome of research activities of any research organization. These are published mostly in the form of journal articles. The publishers usually supply only a few copies of published papers (reprints) to authors. Sometimes an author is required to purchase reprints. Reprints are preserved in the library as an official record and are also made available for reference to the interested researcher. The library maintains a catalogue for all such reprints in traditional as well as digital formats. The authors as well as library regularly receive reprint requests from scientists for the purpose of their reference. The library deals with such reprint requests and arranges to send them. Management of reprints deals with various activities like accessioning of reprints, cataloguing of reprints, sending requested reprints, compilation of monthly list of new reprints, annual list of reprints, preparing list of reprints with impact factor of concerned journal and so on.

5.2 Problems of Reprints Management

Sometimes reprints of some the papers are not submitted to the library. To keep track of reprints

submitted or not to the library is time-consuming work for the scientists as well as the library. Sometimes reprints are not available or are delayed. Further it is also difficult for the library to find out reprints not received immediately after publication. Sometimes library may receive reprints for a second time. All such factors adversely affect the authenticity of various lists prepared by the library.

6. WEB OPAC OF ARI REPRINTS

Web OPAC of reprints is simply one of kind of WEB OPAC as are books, CD-ROMs or special publications. Like other Web OPACs it is accessed with the help of web technologies. Web OPAC of reprints of papers published by ARI scientists is a part of the institute's web site. It has following features.

6.1 Features of Web OPAC

- It is accessible through Internet.
- It is possible to search independently by "Author", by "Keyword" in title or "Year".
- Combination of search keys - as Author + Year, or Keyword + Year is possible.
- Wildcard search for year is possible.
- Displays complete bibliographic information as appeared on reprints.
- The corresponding author get highlighted in all search results those are displayed
- To select search keys Author and Year drop-down list-box has been provided.
- Standardization of search key "Author" takes care to search all the related reference.

6.2 Advantages of Web OPAC

- Scientists can immediately notice the missing reprints by author search.
- Updating can be done quickly as scientists take keen interest to submit the reprints.
- It is accessible all the time, worldwide.
- Increases awareness of 'Scientific Research Contributions' made by the Institute.
- It is possible for users to send reprint requests immediately by e-mail.
- Compilation of various lists of reprints becomes very easy.

The Web OPAC of books is planned to keep under intranet environment. The Intranet of the institute is under the process of completion. The demonstrations of Web OPAC of books in LAN environment were completed successfully. The computer hardware required for Web OPAC is already available in the library. The Web OPAC of books will soon be functional.

7. CONCLUSION

Web OPAC is a systematic application and not exploitation of information technology. The concept of Web OPAC is very well established and practiced successfully in developed countries especially in USA and UK. Majority of their libraries are well equipped with it and offer regular service to their members. The development of Web OPAC activities can be seen as evolution of OPAC activities into Web OPAC. Further their culture, desire to lead, need to overcome problems arising out of information explosion, availability of state of the art technology, and professional attitude towards work converts their dreams to reality. Web OPAC is technology intensive, involving high-speed networks like LAN, WAN, Internet, Intranet with broad bandwidth, extensively web server-based application. According to Dempsey [8] without building richly inter-connected services, based on emerging content infrastructure, libraries will not provide effective services within that space and they will betray their longstanding legacy. Technology alone cannot help bring the required changes; attitudes, practices and policies need to be changed, if the librarians in India are to benefit themselves and their community of users by the application of new technologies

Finally, to fully utilize the potential of web technologies, we must keep exploring new areas for improving library services. More often than not, ideas are to be implemented in stages, depending on the needs of the user community. One of the key applications for library is Web OPAC.

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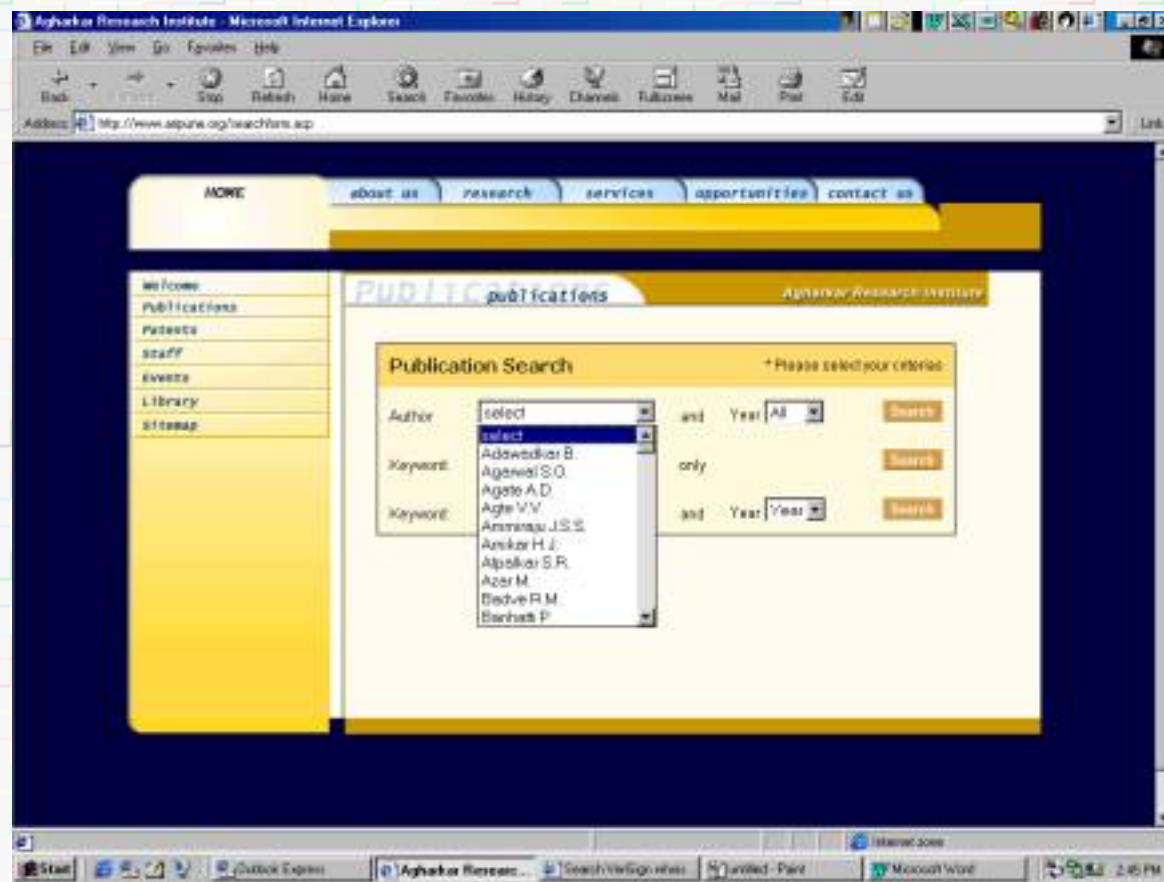


Figure 1. *www.aripune.org* - Web OPAC of Reprints showing drop-down menu of authors

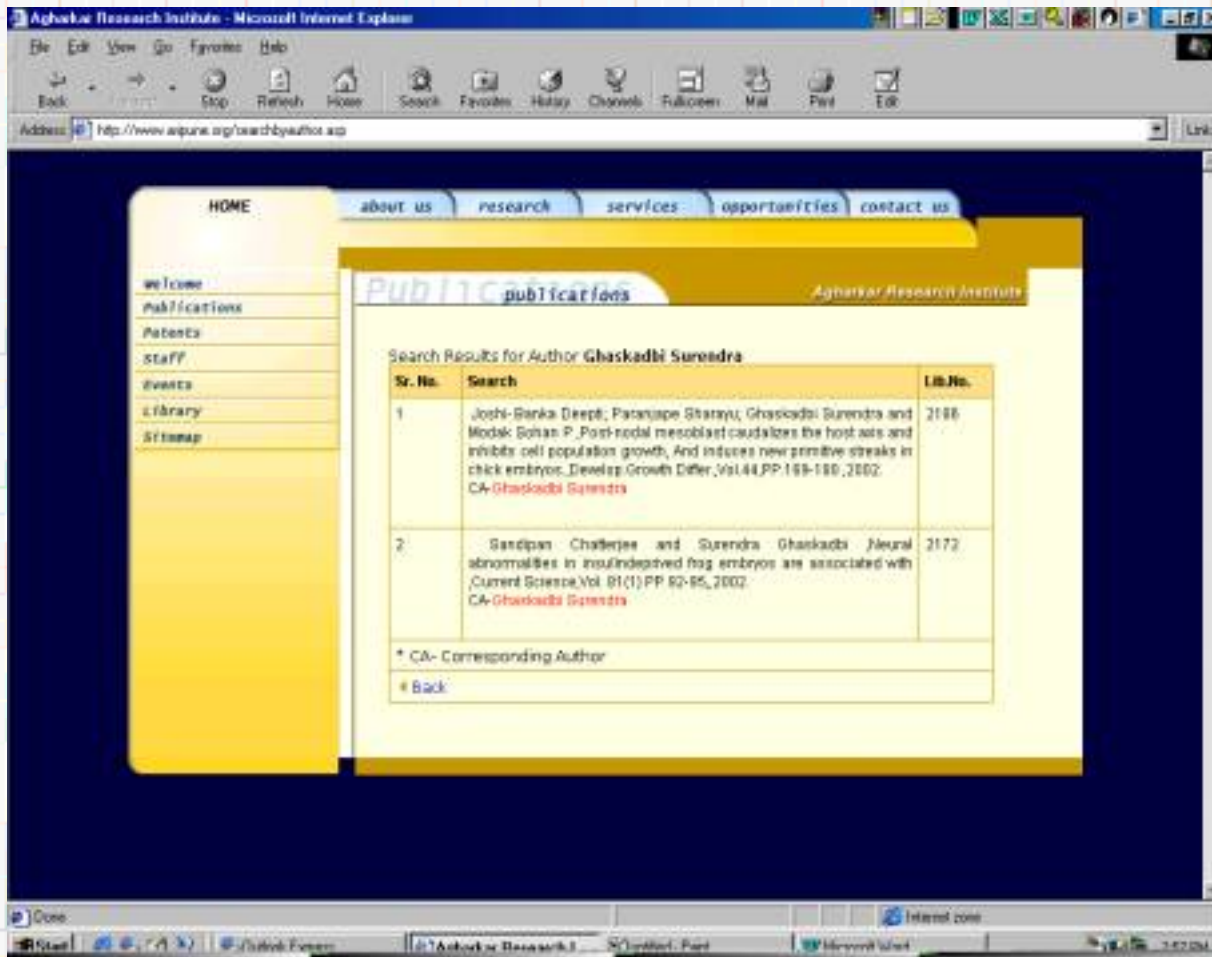


Figure 2. www.aripune.org - Web OPAC of Reprints showing search results.

BRIEF BIOGRAPHY OF AUTHOR



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