Customised Web-based Services at SERC Library with Special Reference to Alert Services

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ABSTRACT

The primary aim of any library is to provide timely and quality services to its users. Advent of new technologies have made it imperative for libraries to absorb, adopt, adapt, and to provide IT-based services to the users. Libraries are now providing customised web-based services at the users' desktops. Users, particularly, scientists, who are engaged in time-bound research and development projects, need to be alerted about the nascent literature in their respective fields. Librarians are providing current awareness services to meet these requirements. A few libraries and many e-publishers are providing alert services to keep the users informed about the latest additions to their collections and other information relating to the users' areas of interest.

This paper describes the experiences in using the AutoLib library software and explains in brief the various innovative and useful web-based library and information services and the alert service being provided at the SERC library.

Keywords: SERC library, Web OPAC, JAPAR, Greenstone library software

1. INTRODUCTION

Technology is playing an ever increasing role in all organisations today and libraries are no exceptions. The volume and complexity of information is increasing exponentially causing librarians to use IT tools to access, organise and disseminate information more efficiently. Library users expect customisation and to meet their changing needs and expectations, Web-based services are being built integrating traditional and modern practices. Customised Web-based library services being provided in the Structural Engineering Research Centre (SERC) library have been designed to be used in real-time high-availability web sites. The interfaces provided help to make the best use of the library's resources and facilitates provision for interactive searches. SERC library in addition to web OPAC, offers customised services such as auto reminder, research alert, current awareness service,

online project research profile service (OPRPS), online project research diary (OPRD), Journal article performance analysis reporter (JAPAR) and institutional repository through Greenstone digital library software.

2. WEB-BASED SERVICES

Present-day library services have not only metamorphosised as automated systems, but have also specialised by providing services through the library Web pages. Web services are being offered using various Web softwares and tools such as RDBMS (MS-SQL, Oracle, MySQL), mark-up, scripting and programming languages (html, asp, jsp) and Web servers (IIS, Tomcat). SERC is using AutoLib library software, which integrates all the above technologies to provide Web-based services to its users.

The library automation has provided integrated solutions for the in-house operations and Web-enabled services on the campus Intranet using the modern Web tools and techniques.

SERC library has about 1,05,017 records. The library has created and maintaining the following databases

- Technical books, reports and theses,

- Journal articles,

- Journal issues,

- Back volumes,

- Standards (codes),

- Compact discs, and

- Microfiche on the intranet.

The library is providing following web-based services using all the above databases:

- Library portal

- Web OPAC

- Online project research profile service (OPRPS) and online project research diary (OPRD)

- Auto alert service (AAS)

- Auto overdue reminder service (AORS)

- Research alert service (RAS)

- Cover and contents page services

- Articles published by the scientists

- Institutional repository

2.1 Library Portal

SERC library provides various services through its library portal (Fig.1)–a single window to access library resources – through Intranet. The portal gives a brief description of the library. It provides information about collection, staff, library committee, rules and regulations, services offered, journals subscribed, building, floor plan, publication, membership, useful websites, etc. It also provides direct links to home pages of important journals in the area of civil and structural engineering published by Elsevier, ASCE, Blackwell, ACS, ASTM, Wiley, Springer, Royal society of Chemistry, Oxford University Press, and ASME, etc.

Several free e-resources available on the internet are being collected, consolidated and made available through the SERC portal. Link to the database of articles published by the SERC scientists has also been provided.

2.2 Web OPAC

Web-based online public access catalogues (Web OPAC) is one of the Web- based services offered by SERC library. As a catalogue, Web OPAC demonstrates advances on traditional OPACs, especially in terms of remote access by users and their potential to integrate many document types and sources via a single interface. A Web-based hypertext OPAC holds the promise of easy search interaction with the databases and retrieval of relevant information.

SERC library Web OPAC has various links like personalised service, books, book reports, journal articles, search report, journal issues, standards, back volumes, conference articles, non-book materials (CD ROMS and microfiche), general search, useful websites.

Figure 1. SERC library portal.

The service is made available at the users' desktop on Intranet. More than 150 desktops are connected to the server through the Intranet.

The web OPAC provides the following search interface to access library resources:

Simple Search: Simple search allows the users to search based on all the mandatory fields of the documents such as author, title, subject, accession number, keyword separately and also in combination of these fields.

Advanced Search (Query Builder): The web OPAC helps to search resources using Boolean and other logical operators on access points like title, keyword, year, etc. on an Intranet environment from any where in the campus. The Web module has advanced query builder, which allows users to search the database using a field or combination of fields based on any conditions (search string in a character field such as author, title etc. or any where in the field starting with a word or in a numeric field such as accession number, price, etc. by using operators like >,>=,<,<=,= combined with Boolean operators AND, OR, NOT. This module helps to generate various types of search reports in various formats like MARC, CCF, etc. Users can generate reports in customised formats (user can choose fields to be displayed in search out put). The search result can be sorted in any desired order at multiple level.

Restricted Search: Restricted Search allows to search the documents based on all the mandatory fields by typing letter by letter.

Dictionary-Based Search: The Web module has dictionary for author, subject and publisher. By clicking the link, users can access the required information.

2.3 Online Project Research Profile Service and Online Project Research Diary

Online Project Research Profile Service (OPRPS) is one of the personalised service that serves as a tool to collect and organise resources for use by individual users and helps scholars stay informed of the new resources added by the library. Users no longer need search the online catalogue regularly to be aware of new resources. The Web-

based user interface program with their login and password has been made available on the Intranet. This allows the users to create and maintain their dynamic user profiles, hitherto maintained by the library staff. Users can judge, by both the number and appropriateness of the resources retrieved, just how broad or narrow, and also how relevant, are their search profiles. Once the user is satisfied with a particular search profile, he can then save the profile (though it can be edited again at any time). The user can run their profile against the records added and retrieve these documents filtered by the date in which records have been added, document types, etc. (Fig. 2).

With the proliferation of full-text journals and the availability of e-resource repositories and sophisticated integrated library system, the process of providing current awareness service has been re-emphasised and reshaped. The concept is simple, but powerful and personalisation of services is the key to institutional engagement for the digital library.

OPRD is a unique feature, which allows the users to search the databases of the library for a particular research topic and make personal research notes on the retrieved documents after referring/reading the same. The information put into the system remains private and OPRD enables them to keep track of the referred literature, modify comments or notes for each document referred. This is of vital use for future research activities, writing research papers, project proposal presentations, reports writing, etc. OPRD works on a login and password and is individual-centric. The users have largely benefited from both the OPRPS and OPRD.

2.4 Auto Alert Service

A software tool has been developed to provide auto alert service which automatically runs all user search profiles (described above in OPRPS) against the records added every day. The system then e-mails, to each scientist, a report of the new records that meet the criteria in his or her saved profile (Fig. 3).

2.5 Auto Overdue Reminder Service

It is very difficult to keep track of the overdue documents and inform the user as and when documents fall due for return, even

Update Profile

Home

Member Code 59   **Member Name** BALASUBRAMANIAN I

Email ID balu@sercm.csir.res.in   **Profile** concrete structure; concrete composite; FRC; concrete aggregate; corrosion; polymer; cement

Please specify your Research / Project Topic(s) / field of interest.
Eg : parallel computing; neural network; steel structure

Update

Generating Reports

For Generating a Report, Please specify the Date (dd/mm/yyyy) (From and To) and select the Document Type.

From Date 01/01/2006   **To Date** 21/04/2006   **Type** Book

Display   To File

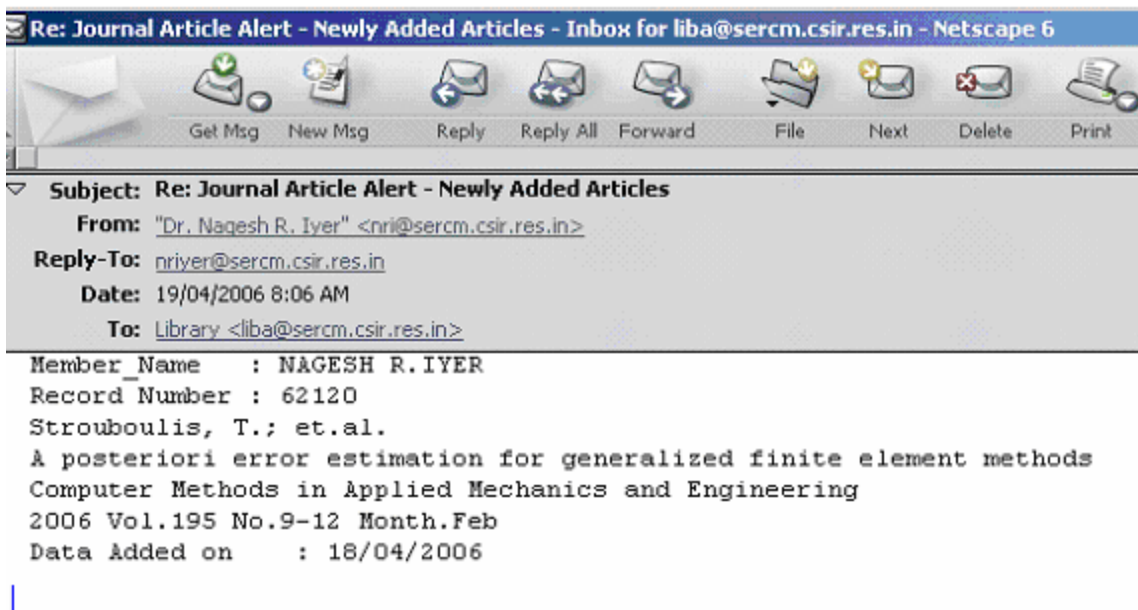**Figure 2. OPRPS research profile.**

Figure 3. Article alert service through e-mail.

in an automated system. Therefore, an auto overdue reminder service (AORS) has been designed and implemented. This program keeps track of the overdue books daily in the morning when the system is booted. It identifies overdue documents on the day and sends a reminder to the users' mail box (Fig. 4).The alert overdue reminder messages are sent daily until the overdue documents are returned. The overdue collection has been considerably reduced after introduction of this service.

2.6 Research Alert Service

Research Alert—a monthly Central Alert Service (CAS) is being offered as an in-house alert service, primarily to cater to the needs of the engineer/scientists of the Centre. Core periodicals have been identified and articles are keyed into the database regularly. These articles are grouped under 21 main areas covering core Research and Development areas of the Centre.

Users have seamless access to the research alert database from any PC that is connected to the campus Intranet. In-house studies have shown that this service is being used extensively. This service is also being offered on a subscription basis, since 1997.

2.7 Cover and Contents Page Service

The cover and contents pages of books are being scanned as and when bought in the library and linked to the respective record at the time of cataloguing the books. The user can view the content pages in the Web browser along with the bibliographical details while searching at his work place itself. This helps the user to browse the contents of books easily from his terminal anywhere in the campus.

2.8 Articles Published by the Scientists

A database of articles published in journals by the scientists of SERC since 1969 has been created using the Web-enabled software called journal articles performance analysis reporter (Fig. 5). Users can search the database based on author, article title, journal name, year of publication, subject, country, impact factor, etc. Many reports and statistics, such as number of articles published by a scientist in a journal or in a given year, can be generated.
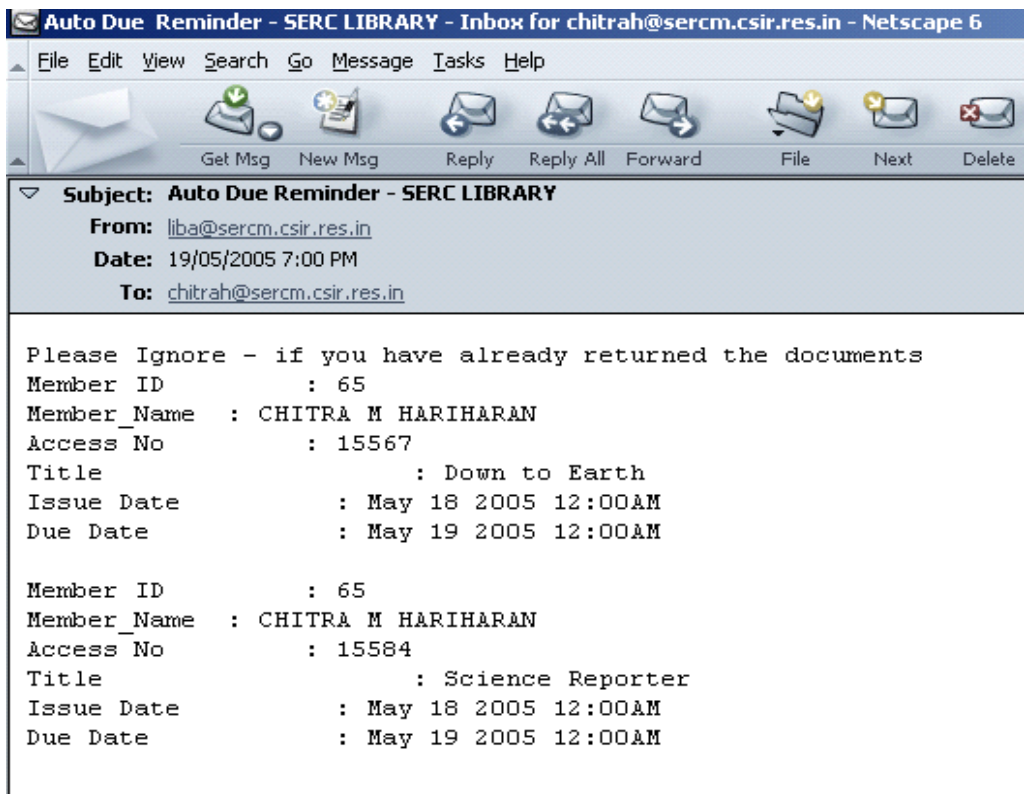
Figure 4. Auto overdue reminder service.

Figure 5. JAPAR.

2.9 Institutional Repository

An institutional repository has been set up to archive all the publications acquired by the SERC using Greenstone library software (Fig. 6). At present, articles published by the SERC scientists in the *Journal of Structural Engineering*, published by SERC, have been identified and archived, Metadata for the identified articles based on Dublin Core has been created. A full-text index has also been created for all the articles available in the repository which is available on the Intranet for full-text searching and browsing.

3. CONCLUSION

Users expect seamless access to library resources in multiple contexts outside library systems. Web-based services act as vehicles in an otherwise depersonalised digital environment. The personalised web-based services developed and offered at the SERC library accept the reality that people are finding information on the Internet. These services provide a way to integrate other resources with the library resources, which have been evaluated and selected by the library professional. This will encourage the use of the local collection and will also provide easier access to digital holdings.

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Figure 6. Instititional repository.

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Contributors

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Ms Chitra M. Hariharan obtained her BSc from the Bangalore University, BLiSc from the Kerala University, and MLiSc from the University of Madras. She is at present working as Officer-in-Charge (Scientist) at Structural Engineering Research Centre, Chennai. Her notable achievements are establishment of a completely automated modern library, initiation of programmes and services for enhanced usage of library resources including research alert, introduction of customised Intranet services, development of database of papers published by Scientists of the Centre since inception, and development of institutional repository.

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