ELECTRONIC JOURNALS LIBRARY: A GERMAN UNIVERSITY'S ACCESS AND MANAGEMENT PLATFORM FOR E-SERIALS GOES INTERNATIONAL

Helmut Hartmann

The University of Regensburg, Bavaria, Germany, provides an e-serials management and access service for more than 180 university and research libraries in Germany, Austria, Switzerland and some other countries in Europe. The Electronic Journals Library (EZB) has become a powerful tool for both librarians and patrons. Technically speaking, the EZB is a database of approximately 11,000 titles entered into the system and maintained co-operatively, and the records for each of them can be specified according to the local licensing conditions of the individual libraries. Traffic light symbols indicate to the users whether access to the full text of a certain title is free, granted on the basis of a subscription, or denied, because a library does not subscribe to a journal. Article search has not been implemented yet, but may be made possible in the future.

Helmut Hartmann,
E-serials/E-books Librarian and Consortia Co-ordinator, Library of Karl-Franzens-University Graz, Austria
E-mail:
helmut.hartmann@uni-graz.at

Introduction

In the late 1990s, university libraries in Germany and Austria (as probably everywhere else) found themselves having to cope with a resource which their staff had not been trained to deal with nor their patrons to use: e-serials. The publishers, who had just discovered the enormous potential of web-based services for efficient and cost-saving distribution of content, started flooding collection development staff's mailboxes with irresistible offers of free and easy-to-fit-in electronic editions of scholarly journals whose print editions could no longer be afforded by the majority of libraries. Strangely enough, it was mainly the patrons who were attracted by the overwhelming advantages of the new medium, whereas librarians – apart from very few exceptions – adopted a fairly sceptical attitude towards what seemed to be comparatively far from traditional librarianship. The challenge of procuring efficient management tools, cataloguing standards and user-friendly access platforms was more or less disregarded. The situation being completely different from Britain, where the Pilot Site Licence Initiative together with Athens provided the scientific community with a nationwide efficient solution right from the beginning, in German speaking countries those few librarians who were aware of the challenge at all kept struggling along on their own, setting up hand-maintained HTML pages with link lists of the e-serials which they had access to.

At two different university libraries, completely different approaches to managing scholarly e-serials were put into practice: Regensburg University Library, Germany and Graz University Library, Austria. Although they were developed independently, the principal idea was the same in both cases: to clearly indicate to what extent patrons might be able to make use of the full text of the electronic edition of a scholarly e-serial they were looking for, and at the same time to create a powerful tool for managing the

ever increasing flood of licences which librarians had to deal with. Whereas, however, the Graz model did not aim at a fully database-driven approach (after two years, in addition to funding problems, this was the reason for cancelling the project as inefficient), Regensburg University Library went for the database option right from the beginning in April 1997.[1]

Development

Despite the international range which the Electronic Journals Library (EZB) has reached so far, it was originally not planned to function as a kind of union catalogue of e-serials at all. Its mothers and fathers were not primarily interested in setting up records consistent with the very strict cataloguing rules of German speaking countries; what they were trying to achieve was a simple and efficient user oriented service enabling patrons to browse and search all the e-serials available, no matter at which aggregator's or publisher's server they were stored physically or which format they were. A few months after the service had been installed, someone thought the service could also be used by the library of the Technical University Munich, which had been involved as a partner for engineering issues all the time anyway. Consequently the co-operative

functionalities of the Regensburg e-library were designed, which were to prove so effective and successful in the future, as they enable participating libraries to manage their local licences and access information for their patrons through remote access to the database physically located at Regensburg University Library.

Comparatively soon other Bavarian university libraries applied for membership, to be followed by German libraries outside Bavaria (among them the libraries of the Max-Planck-Society) and, in summer 2000, by the first Austrian libraries, e.g. Graz University Library, Innsbruck University Library and Vienna University Library. Encouraged by their neighbours' initiative university libraries in Switzerland, South Tyrol (Italy), Croatia and Slovakia have joined the service since then, thus bringing the number of co-operating libraries up to a total of 181 and the number of titles available to some 11,000. As a special service for the growing number of members in non-German speaking countries and to facilitate international usage, the redesigned version, which went live last April, has an optional English interface as well.

Libraries that want to benefit from its service are requested to do their share of adding and maintaining data, i.e. to enter new e-serials they come across, to restore broken links, to alter the
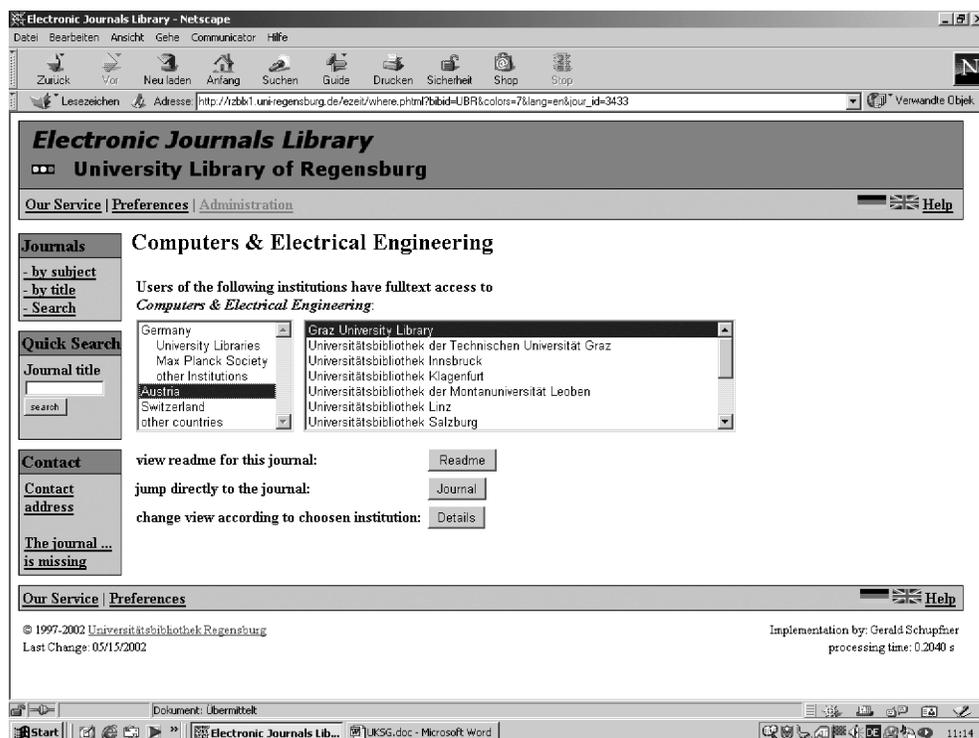
licensing condition indicators in case of change, to contribute to the internal mailing list and to stick to the comparatively few and evident cataloguing rules.

Display features and functions

The Electronic Journals Library interface[2] is optimally tailored to the functions to be performed: browsing the virtual holdings by title as well as by subject, and searching for both title words and keywords, optionally using the Boolean operators "and", "or", "and not". In addition to these basic modes, searches can be limited to one or more subjects and even to a period whose remote end is defined by a certain date of entry, so that only those titles will be indicated which have been added since that date will be indicated.

All these categories are certainly helpful and important, yet they do not exceed the standard of any other database in this field. What really adds uniqueness to the EZB (particularly from the patrons' point of view) is searching by full-text availability, which is displayed for each title according to the licensing conditions of the individual libraries by traffic light symbols, "green" signalling free access to full-text articles, "amber" signalling that access to full-text articles

for patrons of the respective library is based on a subscription, and "red" signalling that access to full-text articles is denied, as the respective institution does not have a subscription. In this case, however, tables of contents and abstracts are usually available free of charge. As an additional service, patrons can find important technical information and details about the use of licensed e-serials when clicking on the "Read me" files next to the amber traffic light symbol.

Whereas the basic display mode only provides the patrons with lists of titles and the full-text availability symbols for each of them as described above, more detailed bibliographical information can be obtained by clicking on the blue information symbol in front of each title. But apart from the standard bibliographical data, the focus is again on additional user-oriented information like alternative URLs, which may be helpful if the preset one does not work or is too slow, and a list of the libraries subscribing to the title shown. This information will certainly be particularly appreciated by a patron whose library does not subscribe to the serial in question, because without having to use any other catalogue, he/she learns where to get the article from via traditional print ILL – as electronic delivery is forbidden by all publishers.

Some more user-oriented functions can be

Total access per month
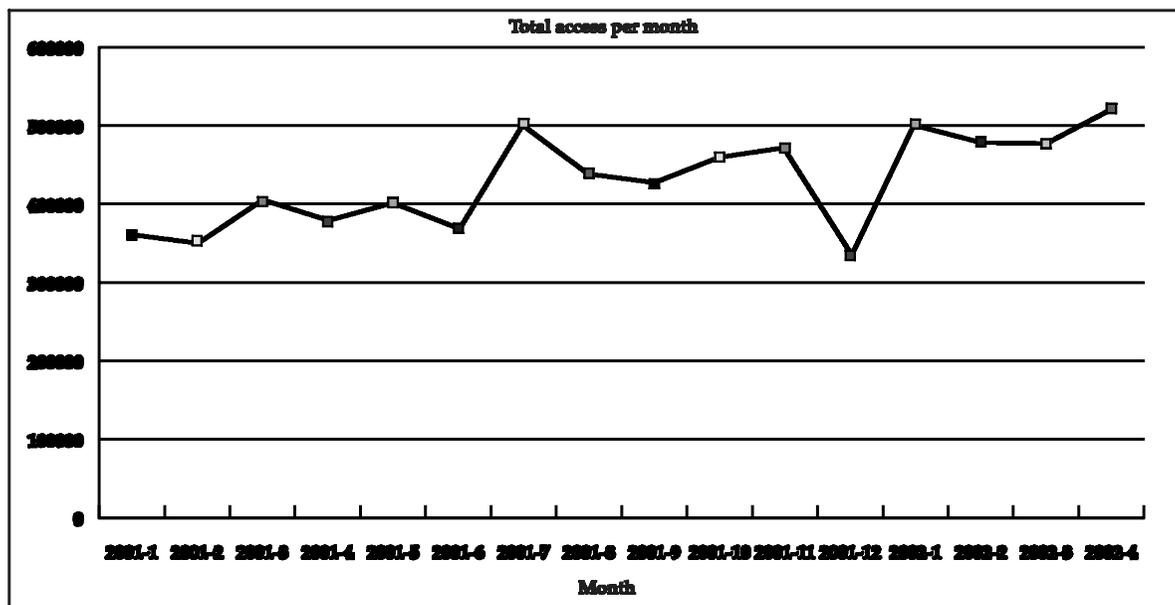
found when clicking on the "Preferences" button at the top of each page. In the frame opening now, patrons can select a member library different from the one pre-set (which will usually be their own institution's one) to have a look at the e-serials offered there. From my colleagues' experience and from my own, I have to admit that this function has also proved very helpful in many cases in the process of consortia forming. In this way a survey of possible consortia partners' virtual holdings could be achieved quite easily. Another possibility of customising the database is offered by selecting the licensing conditions as criteria for display; as a result, the category/ies excluded (e.g. the "red" ones and/or the "green" ones) will not be indicated as long as the preset option has not been altered. However, to avoid incomplete results, one should be aware of the fact that this selection will be maintained for searching and browsing until it is cancelled again.

The EZB frontdoor linking function

Seamless linking from OPACs and databases to full-text articles is definitely the state of the art in modern library technology and can be achieved in different ways. Full-text articles in PDF format may be integrated into databases like the EBSCO or ProQuest ones with the result that navigating within the database is absolutely comfortable and satisfying. Access from outside, alas, e.g. from an OPAC, to the individual titles is practically impossible, which is the more a nuisance when

there is no "independent" online version of a serial at all. Fortunately, there are databases like Medline or BIOSIS with seamless linking options to the full text of exterior e-serials, i.e. the full text does not have to be part of the database, can be stored on another server with a URL of its own and is therefore easily accessible from databases as well as OPACs.

Naturally, in the days of SFX linking, CrossRef and DOIs are trying to drive home the point that seamless linking can be a bit of a problem may seem rather awkward, and I frankly admit that, so far at least, very few libraries in Germany and none in Austria have been able to raise the funding for setting up an SFX system. What they could do was to try to satisfy their patrons by offering seamless linking from databases and OPACs, and they have been able to achieve this more efficiently and comfortably since the so-called "front-door" technology was created by the EZB engineering team.

The front door is an access page generated on the spot whenever an ISSN or ZDB[3] number-based search for an e-serial is started by clicking on the specially designed link in a database or an OPAC record. Whereas for linking from databases the ISSN number is made use of, it is the ZDB number in case of catalogues. The advantage of this method is evident: Whereas the URL of the front-door link[4] cannot change anymore – as ZDB numbers, like ISSN numbers, never change – and is practically the same for all serials apart from the number, entering the publishers' or

aggregators' complicated URLs in the records takes much longer and is likely to cause a lot of work in the future if URLs change, which happens quite frequently, as all colleagues in charge of cataloguing e-serials will certainly confirm. If a library uses the EZB front door, its staff and patrons can rely on the regular updating of any broken links and will always be able to get access to the full text through seamless linking from the OPAC via the front door, if the respective library subscribes to the title in question. What is more, as generating the front door is based on IP control, the licensing traffic light symbol indicates at the same time whether access is available at all.

Managing E-serials

Although the EZB was designed as a user-oriented service, it is still a powerful tool for managing e-serials. As it is a co-operative service, the central level and the local ones must be kept apart. Adding titles to its ever growing collection – perhaps based upon some suggestions made by patrons through the integrated suggestion service – updating licence conditions, maintaining bibliographical data, replacing broken links, and passing on information to colleagues are the central tasks. Locally the individual libraries' virtual holdings have to be managed, i.e. the "traffic lights" have to be adjusted according to purchasing or cancelling of licences, "read mes"

have to be kept accurate and comprehensible, and information about new e-serials has to be forwarded to the cataloguing department.

Last but not least, the EZB supplies its member libraries with reliable and detailed statistics each month. Thus each library is not only in permanent control of the total number of patrons accessing its virtual serials, it can also see which subjects, which publishers, and which titles are topmost and which ones have not been used at all. If there are different user groups (e.g. sub-libraries) with different IP addresses, the usage statistics can be broken down to this level as well. Although a certain percentage of patrons (perhaps up to 10%) accesses the virtual holdings directly (e.g. by bookmarking the publishers' URLs of the most frequently visited pages), we can draw upon the figures provided by the EZB when it comes to collection development issues and the inevitable topic of cancellations. Furthermore, comparing the independent scores with the ones supplied by the different publishers might be a good opportunity to check the efficiency of the various statistical methods applied.

Conclusion

As the EZB total access statistics above clearly indicate, average usage per day has doubled within the last 18 months, and the tremendous total of titles accessed for year 2001 was 4,888,245. Therefore it does not take

Average access per day

Month
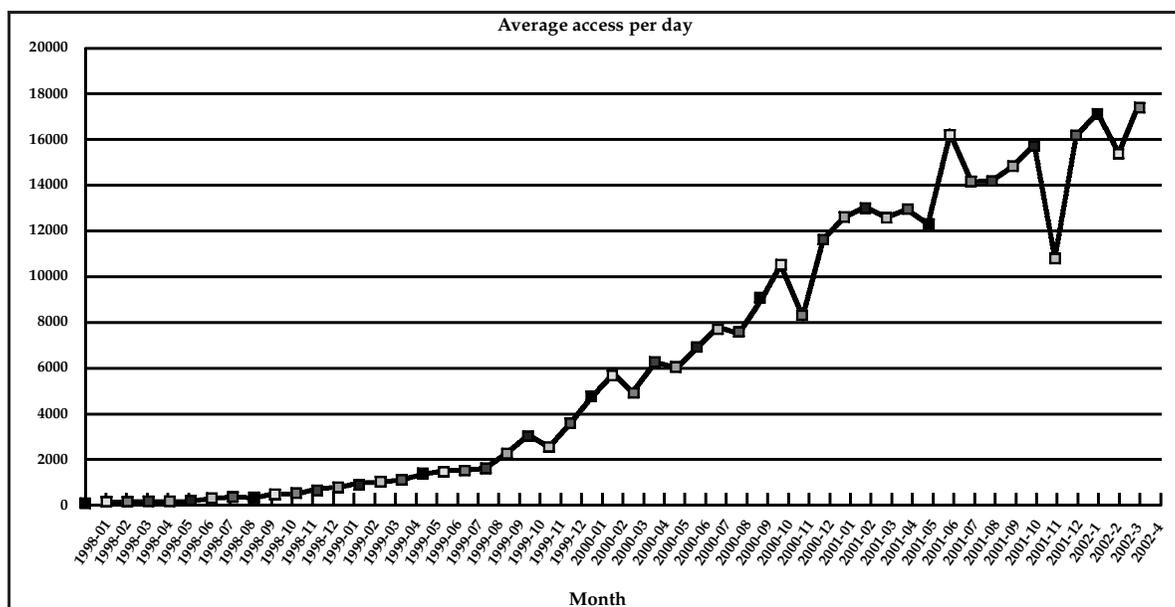
a prophet to predict a further increase in
members and titles. For this reason talks have
been started about installing a mirror server in
Austria to retain the speed and reliability of
the service despite the enormous amount of
data to be processed at present, not to mention
in the future when breaking down the search
function to article level is envisaged. Another
landmark in the world of referencing is likely
to be erected.

References

1   Contact: Dr. Evelinde Hutzler,
    Universitaetsbibliothek Regensburg
    evelinde.hutzler@bibliothek.uni-regensburg.de

2   http://www.bibliothek.uni-regensburg.de/ezeit/

3   ZDB is the German acronym for the nationwide
    serials union catalogue, in which each title is given
    a local number in addition to its ISSN number.

4   http://www.bibliothek.uni-regensburg.de/?
    [ZDB-Number without hyphen and last digit]