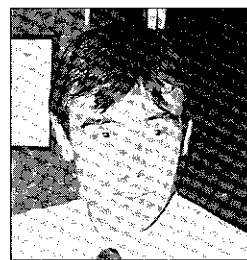


*The Australian
Securities Commission
Library Network*



Kerrie Millgate and John Richards
Australian Securities Commission Library

Establishing The Network - Kerrie Milgate

In 1991 a new organisation took over the nationwide regulation of companies, securities and futures markets. The Australian Securities Commission assumed the function previously carried out by the National Companies and Securities Commission and the State Corporate Affairs Offices.

The first Chairman of the ASC, Mr. Tony Hartnell wanted a decentralised organisation with flat structures and the most up-to-date technology in establishing his vision for the ASC. The only direction from the chairman about the library we received was that he wanted the best and he did not want microfiche! We were to have the latest in technology and be able to operate across Australia so that all regional offices would have access to the national database. In keeping with the overall philosophy of "no centralised bureaucracy" we would have a very small number of library staff in the Office of the Chairman in Sydney.

Existing staff and resources included the NCSC library and two staff in Melbourne. This collection was purchased by the ASC and became the library of the Office of the Chairman in Melbourne. Tina Baniyas and Janice Pendlebury joined us as the library staff in the Victorian Regional Office. The only other staffed library to come to the ASC was from the Corporate Affairs Office in Perth and their librarian, Trixie Byrne. The library and staff of Business and Consumer Affairs in NSW did not transfer, however we did purchase part of their collection for the NSW regional office. Small collections were also purchased from the Corporate Affairs Offices in Queensland, South Australia, Victoria and Perth.

Some establishment work had been done on positions for the various libraries as well as on library plans for the regional offices before I came to the ASC. On starting my first priorities were to review the position classifications and bring them up to an appropriate level, then to negotiate an increase in the space allocated for the regional libraries. With regard to the former I was able to effect significant changes; with the latter I had some success, but the problem of space still remains to be completely resolved in some offices. David Jones, library planning consultant with the State Library of

NSW, was of invaluable assistance in those early days. David drafted plans, often with a short turn-around time, for six of our ten libraries, while I was purchasing or organising purchase of core collections and interviewing staff

Glen Sanders was a member of a consultancy group from Morgan and Banks which completed a report on records management for the embryonic Commission in 1990. That report made several recommendations which affected the library and I asked management to retain Glen to advise on an automated library system.

A steering committee was established consisting of myself as Manager, Library Services, Glen Sanders from Morgan and Banks, and Mike Shelley and Mark Lee from our information technology area. Glen completed a feasibility study into library automation in 1991. This study examined library and user needs and then selected three systems from among those available on the Australian market for further evaluation. This selection was primarily on the basis of known functionality and the requirement to run on networked PCs. The PC LAN environment was a new area for library automation and Image II which ran on Advanced Revelation was chosen largely because of its compatibility with the Banyan Vines local and wide area networks and with Windows 3.1.

One of the most inspired things I did was to create a position of Systems Librarian. An extraordinarily lucky break was that there was someone with John Richards' talents available to fill it. John's function was to manage the automation project and to develop Image II to meet the needs of the ASC. Priorities were a national catalogue, totally integrated library management, an opinions database and electronically delivered current awareness. Achievement of these goals has taken constant effort and experimentation over three years and they are now within reach.

A COOPERATIVE NETWORK

The Office of the Chairman is responsible for overall policy and national standards as well as for national systems including Image II and the Opinions database. Regional librarians are responsible for managing the day-to-day operations of their libraries. This includes budgeting, purchasing, reference and current awareness. They also contribute to the development of policy and direction allowing us to take advantage of their individual interests and areas of expertise. Significant examples are the legal research training packages developed by Susan Heath in Brisbane and Barbara Coat in Adelaide and a user information package developed by Barbara Coat. Barbara also produces an excellent "value added" current awareness service for the South Australian Office which she makes available for all. Merryl Charleston in Sydney has undertaken valuable work in library marketing and Sonia Haroutunian in Melbourne on CD-ROM technology. Trixie Byrne

in Perth co-ordinated our evaluation of the acquisitions module of Image II. Janice Pendlebury and Lechelle Ryan from Melbourne are experimenting with setting up a separate database to index the explanatory memoranda and bills relating to the Corporations Law. Robyn Owens in Sydney has made a special contribution to the completion of the Opinions database and Joy Haberfield in Sydney to the successful implementation of the serials and acquisitions modules of Image II. Regional librarians also take special interest in our unstaffed libraries in Hobart and Darwin and Traralgon.

How do we operate as a team, thousands of miles apart across this great country? We maintain communications in our network with fortnightly reports, responsibility for which is rotated around the network. We have a bi-monthly telephone hook-up and again responsibility for the agenda is rotated so that each of the different Offices can make a significant contribution. Finally there is an annual meeting where the major issues are discussed and decided. All libraries are expected to contribute to the newsletter in their Office on a regular basis to alert staff to new developments and offer training.

The ASC library network in 1993/1994 completed 17,000 reference questions and 16,500 loans. There are 11,000 bibliographic records and 68,000 items on our national database. The library catalogue is available on every networked PC as is the Opinions database. This applies no matter where in Australia, in any of the 11 centres, the officer is located. The holdings of the whole network are available through interlibrary loan overnight. Each officer can access the contents page of the most recently received journal electronically and they can keep themselves up-to-date with *ALMD* and *Current Law* on disc via an icon on their PC. ASC libraries now subscribe to over twenty five CD-ROM titles nationally. A selection of these are available through an icon on each networked PC. CD-ROM technology has been well received in the ASC. We anticipate a doubling in demand for network drives over the next eighteen months.

The libraries also have access to a significant number of external online databases relevant to our subject interests. PC network technology in the ASC enables us to send the results of online searches in a Word document attached to an email. Recently we received a request for a search of New Zealand newspapers. A Kiwinet search was completed and the results emailed to our user within 15 minutes. They were amazed, but what is more amazing is that this would have been possible whether our requestor was in Darwin, Hobart or Perth.

The library enjoys a high profile in the organisation which has been built up on the services we have provided and in attending to the very special needs of a large national organisation. We have at all times enjoyed the support of management in what we have been trying to achieve and this has been fundamental to the success of establishing the network.

ASC Systems - John Richards

AN INTEGRATED SYSTEM

Image II is a fully integrated, real time system, based on a relational database engine, Advanced Revelation. Image II is not a widely known system in Australia, and some of this section will, of necessity, be a product description. It was developed by a New Zealand company, Contec Data Systems. Functions installed at the ASC are Serials, Acquisitions, Cataloguing, Circulation, OPAC, Routing, Communications and a menu driven Report Writer. Optional modules installed are Graphics, Full text display of word processing documents, Additional authorities and Additional databases. Modules not installed are the portable smart bar code reader, and file management.

The Wide Area Network version of Image II installed at the ASC varies in some respects from the standard model. It combines the response time of a local system, with some of the disk savings of centralised data storage. It delivers real time performance for local data, with batch processing for data from other sites. The system is also available for stand alone PCs and local area networks. It is a DOS based product, which is operating in a Windows 3.1 environment at the ASC. Contec has agents in Sydney and Canberra, as well as New Zealand and Singapore.

The design philosophy behind Image II is to permit the individual library to customise the system to their needs, without compromising compatibility with future versions. For example the fields for searching, the fields for sorting, and the fields that appear in the summary display are all individually configurable. Different configurations are easy to establish for each type of user. These can be combined with security levels to permit some functions to some types of users, and deny them to others. Thresholds for sorting and "do you wish to continue?" prompts are definable. Messages and help screens can be rewritten by the individual library.

Full integration means that records created as orders or serials or through cataloguing are available within minutes to OPAC users and other library staff. The acquisitions bibliographical checker searches on the same files as an OPAC user. Checking in a serial or receiving a monograph order "pops up" windows that allow the item to be added to the database at that point. At any point in the system, the librarian can access any other system module at the touch of a key. For example OPAC, authorities or current orders could all be accessed whilst cataloguing a record, without leaving that record.

Serials management includes a versatile prediction management system, claims, budgeting and routing. The ability to have multiple invoices against a single serials order accommodates those law report subscriptions which issue fascicules for one price, as well as individually priced bound volumes,

invoiced upon delivery. Monographs in series can also be handled through this system.

Placing an order uses all the bibliographic information from the main bibliographic record, without re-keying.

A UNION CATALOGUE

All cataloguing is done centrally. Only the Office of the Chairman has the ability to create new author and subject authorities. Records are downloaded from ABN and transferred into the catalogue. New records are copied to the other sites after 5pm each day. The load program checks for RID numbers to prevent loading of duplicate records. New authorities can be either flagged for verification, or automatically established by the load program.

Temporary records can be added by regional office staff. These are identified by an alphabetical prefix to the database record number. These records can use existing authorities, but new authorities are flagged for verification. For the most part, regional offices need only add a holding statement to an existing record, to catalogue an item.

The Additional authorities module has allowed us to establish new authority controlled fields. At the ASC, two of the fields include act and section number and case names. The advantages of authority controlled fields include,

- being alerted to the creation of a new authority
- selecting from a list of existing authorities, to save key strokes
- selecting from headings starting with a word, or those which contain a string of letters
- allowing users to select from a list of authorities when searching
- minimising duplication of authorities.

Authority control in the standard version is only available on authors and subjects. The Additional authorities module allows an additional five "user definable" authorities files and fields. All authority fields include broader, narrower, related, preferred and non-preferred terms.

Three major projects recently completed at the Office of the Chairman included elimination of duplicate author authorities, the inclusion of 'see' and 'see also' references for LC subject headings, and the creation of a thesaurus for the legal opinions database. The global change facility has made this process quite simple. Subject and Author authorities at the ASC

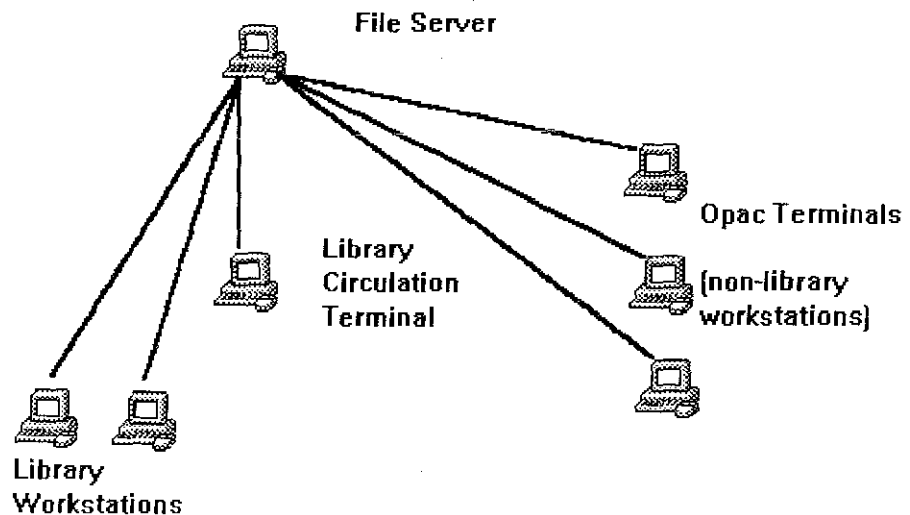
are quite beautiful as a result of this. The benefits of this high standard of cataloguing are available to all sites.

'See' and 'see also' references simplify the searching process for the customer, by selecting preferred headings automatically, as well as offering the choice of additional broader, narrower or related terms.

AN OPAC ON EVERY DESK

Every work station in the ASC has a library OPAC icon. Local holdings are displayed at the touch of a button, and display the borrower's name if on loan (this is an option the ASC chose to implement). At the touch of another button, holdings for other libraries in the network can also be displayed. OPAC users may print a bibliography of hits, or send it to a wordprocessing file.

One of the file servers at each site has a copy of the database. Transactions made by staff are indexed, and made available, by the "circulation terminal". This terminal doubles as an indexing machine, constantly updating indexes whenever there is no keyboard activity for a specified time (in our case 60 seconds). This makes records created locally available to non-library staff within minutes.



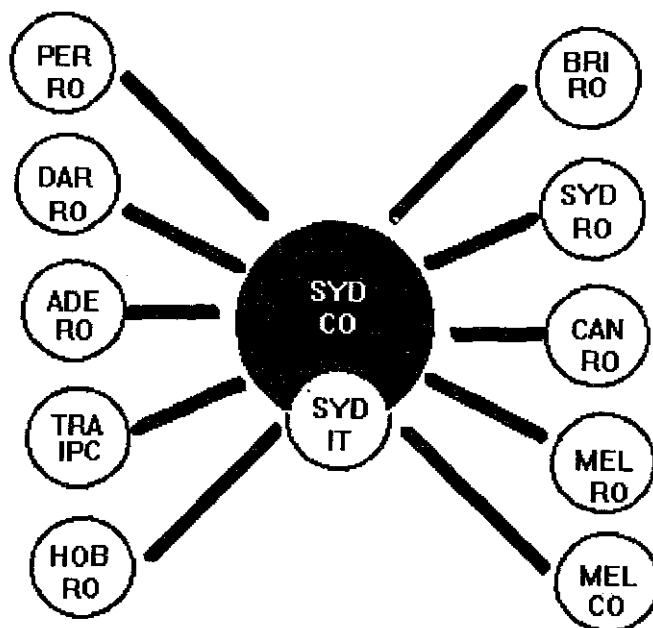
Reservations and loans can be made by the customers at their desks. Some of our sites allow returns as well as loans, and some do not, depending on the local policy.

SDI profiles can be set up to trap new records in particular subject areas. The SDI profile can also monitor and display the contents pages of particular serials titles for each user. In OPAC customers can check which new titles and contents pages have been added since they last looked. SDI profiles are established by library staff using a structured questionnaire.

A DISTRIBUTED NETWORK

Image II can be configured in many ways in WANs and LANs, depending on disk space, line speed and work practices

At the ASC there is a copy of the database at each of 10 sites. Changes made at each site are available in "real time" at that site. Changes made at other sites are processed in a batch mode, once per day. The number of batch updates per day is up to the individual libraries.



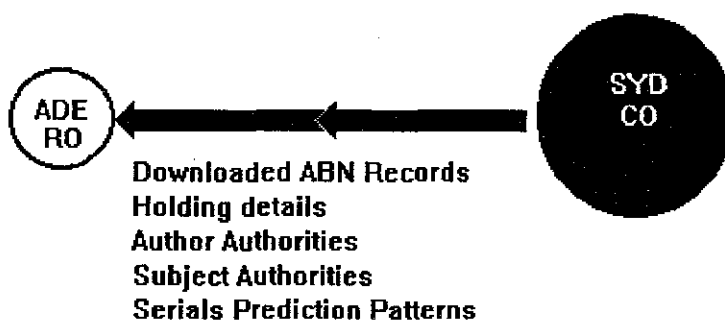
Cataloguing and authority control is done centrally at the Sydney Chairman's Office. Ordering, serials and loans are done locally at each of the Regional Offices.

Some information is unique to each site and is not transferred to the other sites - borrower file, individual serial issue information, loans data, orders.

Some information is passed as "two way traffic" - bibliographic records and holding statements.



Some information is passed as "one way traffic" from a central site -serials prediction patterns, author and subject authorities.



Some information is collated from all the sites, and then transferred to all the other sites. Image II has the ability to exclude specified fields from this import/export process, in order to protect "site specific" information, within each record.



Some information is held centrally - contents page image files, speeches and legal opinions in word processing format. A single copy of these files is held at our National IT branch in Sydney, and accessed at the touch of two buttons when required.

IMAGES IN THE DATABASE

The Graphics module is an optional extra that can be purchased as an "add on". It employs a third party software product called Database Graphics Toolkit, by Blackhawk. Additional software hooks were added by Contec, to simplify the installation procedure. A Hewlett Packard Scanjet Plus is used to capture images. The Omnipage software includes a free graphics package called Image Assistant, which is used to enhance and manipulate the image, where necessary.

The ASC attaches contents pages to the database records for serial titles. At the touch of a button the customer can display the attached image. This partially replaces two types of current awareness services. The photocopied contents page service has been reduced substantially as a result. Previously an electronic current awareness service, delivered by email, used to include the scanned contents pages, as text. Both of these services were time consuming and labour intensive.

The electronic current awareness service used Omnipage software for optical character recognition. Scanning the image takes only a minute or two. Optical character recognition of the same page, plus spell checking and reformatting could consume more than half an hour per page. Attaching images rather than text has produced significant savings in time. Our library assistants are overjoyed to be relieved of the task of photocopying hundreds of contents pages every week.

There are some concerns about copyright in introducing this service. Most publishers are happy to agree to this method of storage and reproduction. Law Book, CCH, and Butterworths all granted the ASC blanket approval, in writing, for their serial publications to be used in this way. Some publishers have refused permission, so we have permission to include the *Economist*, but not the *Bulletin*.

As a general rule, graphic images tend to be large files and require large amounts of storage space. They can quickly fill up a hard disk, unless carefully monitored. We addressed this problem by adopting a policy of attaching only recent contents pages, although some titles may still have up to six images attached. Older images are pruned when new ones are added. We have eliminated the consumption of disk space at the regional sites, by locating all image files centrally, at National IT branch in Sydney.

The size of the individual graphic file was also of some concern, both from a storage and display time point of view. In an early test, we achieved a beautiful reproduction of the *Bulletin's* contents page. It had grey scale colouring, with beautiful pictures, as well as legible text in many font sizes, some with coloured backgrounds. The test file was 3 megabytes in size and took twenty minutes to display across the WAN. Scanning the image as 'line art' rather than 'grey scale' reduced this file size from three megabytes down to one quarter of a megabyte. The text was still legible, but the photographs were reduced to the quality of a poor photocopy.

All contents pages are scanned in black and white. Colour image files are significantly larger, and slower to display.

Most contents pages consume only 150k to 250k of disk space. A file of this size takes between 60 to 90 seconds to completely display on the customer's screen. The image is painted from top to bottom on the screen, and the customer can start reading the contents within 10 seconds. Display time could be improved significantly by locating copies of the files at each office, but disk space is at a premium, and central storage is preferred at the ASC. These response times were achieved on our slowest work stations (Compaq 386 SXs with 8 bit network cards) at sites from Darwin to Hobart and Perth all accessing the images stored in Sydney.

There are a number of variables to consider in scanning contents pages. The number of dots per inch, whether to use grey scale or line art, and variations in brightness and contrast all vary from title to title. This requires a fair bit of experimentation the first time the title is scanned, to obtain the best results. Details of the settings used for scanning are recorded for each individual title. This speeds up the scanning process for subsequent issues of the same title.

We found that contents pages with both text and images required special treatment and we were forced to trade clarity of pictures to obtain legibility of text. Clarity of both could be achieved, but only with a massive blow out in the size of the graphics file itself, with consequent degraded display times.

Currently all scanning is done centrally at the Office of the Chairman in Sydney. Regional Offices have undertaken to contribute their unique titles to the scheme, and many of them either have their own scanner, or access to one.

I have used a royal plural when describing the above process. I should point out that most of the experimenting, documenting, training and promoting of this service was done by Robyn Owens. Robyn has since been appointed as head of the Standards Association Library, where I am sure she will continue to be a force for innovative delivery of library services.

DOCUMENT DELIVERY THROUGH THE CATALOGUE

Many of the items held by our libraries are generated from within the ASC. These are generally available in machine readable form as Microsoft Word documents. Image II has the facility to attach these documents to the bibliographic record, and to display the full text at the touch of a button.

We have applied this facility to speeches and papers delivered by Commission Members and other ASC employees. We have also included it in the ASC legal opinions database. At the point where the customer sees the database record displayed on their screen, they can read or print the full text of the speech or opinion. Running under Windows, the customer can also "cut and paste" slabs of text into another word processing document. This produces more accurate quotations, and reduces re-keying.

Other real advantages of electronic storage and delivery are the savings in shelf space, and filing. Paper copies of opinions are only held at one site. Electronic copies are never misfiled, and can't go missing or be mutilated.

I met a former "frequent user" in the lift recently, and commented that I had not seen her in the library for some months. She replied that with the availability at her desk of the opinions database, library catalogue and Diskrom's Corporations law, she rarely needed to physically go to the library. By delivering library services to the customer's workstation we are creating the "invisible user". Whilst we can monitor the number of times a system is used, and who uses it, we cannot monitor their success or help them with their failures

Hasluck on Libraries ...

"My idea of a good library is a great quantity of books, a desk to oneself, quietness and nothing else. Staff should be few, fustian, dim, obscure and unobtrusive and there should be no adventitious aids. Modern libraries repel me. I find difficulty in working or even borrowing a book from a place that looks like a travel bureau, full of display counters and special exhibits and inducements to read books that should never have been published. In a library I want to be aware of the books of ages and not the gimmicks of some bright young architect. A library, like a church, is a shrine for the traditions of centuries - not an ephemeral exhibition of the latest tricks."

Paul Hasluck

"Mucking About - An Autobiography"

Melbourne University Press 1977 p 163