List of Library Software Packages
Section III

List of library software packages

Many useful library application software packages are available. These packages are developed in foreign countries also.

Library Software packages developed in foreign countries:

- Oasis/Alice packages
- CDS/ISIS
- Procite 3.1 for windows
- Minisis
- Citation 7
- End note plus 2
- Conserarch 3.0
- Total library computerization (TLC) Version 2
- The library program.

The developed countries are in the forefront in the development of library software packages. There are number of library software packages developed during 1980's and 90's which are being used to libraries internationally in library automation. An account of such major library software packages are given below.
OASIS Alice packages:

There are two important packages developed by international group SOFTLINK AMERICA and SOFTLINK AUSTRALIA. This is introduced to INDIA by the SOFTLINK ASIA Pvt. Ltd. The OASIS package run under DOS platform and Alice run under windows platform. These packages are used in more than 7000 major libraries all over the world. OASIS/ALICE software packages perform various library functions like management, Acquisition, Circulation, On-line public Access Catalogue (OPAC), periodical and Journal Indexing, Stock Verification etc.,

Main Features of OASIS/ALICE are:

- OASIS/ALICE is a menu driven package which facilitate easy use by both library staff and users.

- It has simple search screen. So the users may carry out simple as well as complex search, print the result and on-line reservation.

- The search screen has password. This will protect the system so that the end user cannot enter right database design area.

- It takes care of all library functions. This will facilitate fileless library.

- It runs on Bar Code Technology which facilities speedy circulation of books and stock verification.

- It runs on multi-user platform. It supports Novell NetWare, Windows, NT System on Dos, Windows3.1 or 95 or Windows 98.

- It also runs on single user platform convertible to multi-user platform.
- It has inbuilt communication. It facilitates on-line access to other libraries.

- It has CD-ROM loader. It facilitates downloading data from CD-ROM diskettes,

- It has multimedia functions. It facilitates scanning of data Videos, graphics, photographs, soundclips in record etc.

- It has seven digit data capacity. This enables to hold 99 lakh record.

- It has special data protection. It facilitates saving of data upto last record entered in case of power failure.

- It has in-built tutorial modules. It helps library staff/students to learn the software by themselves.

- It has complete documentation the reference manuals and tutorial manuals help the library staff to understand the software functions and the library automation.

Alice for windows provides an complete range of functions packed in discrete modules. It is configurable to suit the working practices of individual libraries and may be operated as a single user systems or as true multi-user system. It also works efficiently under Windows NT Environment. SOFTLINK International provides web Enquirer module to facilitate global information search from any corner of the globe and from any platform ODS/UNIX/WINDOWS in library Data Base.
CDS/ISIS:-

Computerized Documentation System/Integrated set of Information System.

CDS/ISIS developed by UNESCO is one such software specially designed for libraries. CDS/ISIS allows to build and manage non-numerical databases. The CDS/ISIS database is a file of related data that consist of discrete data elements each containing a particular characteristic of entity being described.

The CDS/ISIS has a facility of assigning a unique tag number to each data element. The collection of fields of a given unit of information is called a record. The unique feature of CDS/ISIS is that it is specially designed to handy fields of varying length. This allows an optimal use of disk storage.

CDS/ISIS provides for creation of subfields within a field. For e.g. the author field has two divisions:-

a.. Entry element
b.. Secondary element.

The major services of the CDS/ISIS can broadly classified in to two.

User Services

- ISISENT data entry and record editing
- ISISRET Information Retrieval.
- **ISISPERT** Sorting and printing the records in a designed manner.
- **ISIS/NV** Inverted file maintenance (index to the contents of the master file)

**System Services**

- **ISISDEF** Definition of new databases or modification of existing databases.
- **ISISUTL** Miscellaneous system utility functions.
- **ISISXCH** Facilities for interchange of data with other systems
- **ISISPAS** Advanced Programming facilities using Pascal develop ones own application programs

**Designing a database using CDS/ISIS**

CDS/ISIS is menu driven software which provides a menu for each service mentioned above. A new database can be defined by selecting the 'D' option in the main menu. To define a new database the following are to be decided.

1. Identifying the fields in the database
2. Field Definition Table – FDT
3. Designing a format for the data entry(Data entry worksheet).
4. Designing a formatted output (either on the console (or) on the printer)
5. Identifying the key fields for indexing -(Field Select Table)-FST.
Field Definition Table:

The FDT defines the fields in database and their characteristics like maximum length, the data type, whether(x) not repeatable and whether the field has sub fields.

Data Entry Worksheet:

For inputting data a data entry worksheet has to be designed giving the field names, space for keying the data, help message, defining default rants etc. The CDS/ISIS has an editor for designing the worksheet.

Display format:

For displaying the records during retrieval (or) generating printed outputs, the display formats are to be designed. The CDS/ISIS provided a formatting language for designing the Display format.

Field Select table:

Retrieval of records is very fast only in indexed records. The fields that are to be indexed are to be defined in FST.

Data processing:

Once the above steps are completed, the data can be entered and stored in the defined database. As and when the data entry is completed, the inverted file can be updated. The database can be browsed edited, printed, pointed and the search results can be stored and printed in any
desired format. The complete database can be exported to other databases and similar type at the other databases and similar type can be imported.

**Data Entry Service:**

- In the Main menu press 'ENTER' for Data Entry Services.
- In the submenu press N.
- Worksheet will be displayed.
- Enter data for all the fields and press N for New record. After entering all the records press X to close the session.
- Next step is to index our database. Indexing will help us to receive the record easily. It is like the index in the books.
- Press 1 for "INVERTED FILE CREATION". Indexing and inverting means one and the same. Now in the sub menu press F to generate a full inverted file.
Information Retrieval:

☐ Press S in the main menu to select information retrieval services.

☐ Press B in the sub menu to browse master file. There is a prompt asking us to supply the starting record number to show the records.
Press ENTER, the records will be displayed starting from the 1st record.

Type 5 and press ENTER, the display will start from the 5th record.

When there is 1000 of records in a database it is difficult to see one by one. In this case press T-display term dictionary we get an alphabetical list of terms indexed. When we find the particular item, we want to press to select that key word and that word will be linguistic. Press X to come out. Press D to see the records retrieved. Now we can see the records.

Printing the records, System utility service, Advanced programming service are some of the facilities available in CDS/ISIS package.

Prcoite 3.1 for windows:

The Procite 3.1 for window is a reference database management system developed by PERSONAL BIBLIOGRAPHIC SOFTWARE INC, ANN ARBOR. As a reference database management system, it provides a number of features. Through its available and developing integration with word processors, it offers much needed functionally supporting the generation in-text citation, footnotes and bibliographies.

There are about 50,000 registered users of Procite World wide it is scholars and professional librarians. Among them there are such corporate users as dove chemical corporation, aligned signal and Astramerck pharmaceuticals. This software maintains a world wide Website with
information's on its products. As window product procite3.1 makes excellent use of graphical user interface. The database screen can be customized to make information easy to find.

Biblio-link II is a companion product for procite3.1. When installed, it enhances Procite 3.1's importing capabilities. Bibliolink provides instructions for downloading and filters for importing from several online bibliographic source and CD-ROM sources. Filters and instructions are provided for importing from DIALOG MEDLARS and STN international etc., instructions are also provided for modifying existing filters, creating new filters to allow for better record importing if needed.

Minisis:

This software is developed by international development centre (IDRC) Canada. It works on HP300 family of computers. It is a useful package for library work including networking. It is an efficient application software package for big libraries in India, this software can be held from Hewlett Packard India Ltd., community centre, New Delhi.

Citation 7:

The citation7 is an data file manager and bibliographic citation generator. This was developed by NOTEOBERON, NEWYORK. The main feature of this software is that it works from within word perfect for windows
and Microsoft word and is accessed from the tools menu of these word processors. Another important feature of citation7 is its capability of formatting the selected items in an data file into desired bibliographic format.

End note plus2:

This is an enhanced referenced database and bibliographic manager. This software has developed by Niles and Associates Inc, Berkley. According to the vendor there are over 85,000 registered users for endnoteplus2. It requires Windows95 or Windows NT as operating system. The Ennoteplus2 makes good use of the graphical interface. The user has the option of using menu bars or key combinations to perform various tasks within the program.

Consearch 3.0:

This is an electronic Research utility for windows. It was developed by management Information Technologies, INC HAUPPAUGE, NEWYORK. There are about 1000 registered users for consearch. Consearch runs on windows platform and it has the good use of the graphical use of interface.

Total Library Computerization: (TLC) version 2:

This software package is developed by on point INC, Washington Dc for automation of small and medium sized libraries. TLC runs on simple user and multi user environment. LC has basic library management producers for cataloguing, circulation, serial control, acquisition etc.,
The Library program:

The library program is a DOS based group of programs produced and distributed by Micro computers Business system of Amity, Oregon. There are over 200 users of the library programs of these 70% are church libraries and 30% school libraries. The major features of the software include provision for basic security through user account model adding a users name to the program and setting his or her password in an easy process; and once a user is logged in the program access is set and is not reset until the next user logs in. A limitation of the Library program is that it does not offer On-line public access catalogue (OPAC).

In addition to the software's mentioned above packages such as circulation catalogue plus an Alliance plus suitable for school libraries and (ATHENA) A window based integrated library system developed Nichols Advanced Technology for school libraries etc are other important library software packages from western fields.

Library software packages developed in India:

There are a number of indigenous library packages developed by library professionals (or) computer experts for in have use of library automation for specific functions. Some agencies have developed library software's on a commercial basis for general applications in libraries. A brief account of commercially available library software packages in India are under
SANJAY:

Sanjay is an augmented version of CDS/ISIS. CDS/ISIS is a generalized information storage and retrieval software for the management
of structured non-numerical databases. It cannot be used straight away for the management of house-keeping operations but the CDS/ISIS has provision for interfacing the necessary software modules with it for covering the house-keeping operations.

Hence NISSAT, the distributing agency in India for CDS/ISIS package, has become interested in getting the modules for library house-keeping operations developed indigenously.

So NESSAT has awarded a project to DESIDOC for the development of these additional modules in PASCAL. Accordingly DESIDOC has developed the additional modules for the library house-keeping applications on CDS/ISIS. This package is called SANJAY.

It does the library management functions such as Acquisition control, online catalogue management, circulation control etc., The main features of SANJAY are

1. The package is capable of handling numerical operations like calculation of budgeting allocations and expenditure.

2. It provides linking of two (or) more databases of a single application, like linking an acquisition and circulation systems.

3. The inverted files are updated automatically whenever a change is made in the database.
4. It has a set of 70 PASCAL PROGRAMS AND 25 SPECIAL menus.

5. Faster response time.

6. New menus can be inserted in between the existing menus without affecting their functions.

□ LIBSYS:

This package was developed by LYBSYS CORPORATION, New Delhi. It is a fully integrated multi-user library system designed to run on a wide spectrum of hardware (software platforms in client-server environment. It is easy to operate and the library staff can begin to use it quickly without much computer skills. It ensures high productivity because of minimal data entry requirements, maximum possible ingestion of functions and powerful search and query facilities. It has its own centralized bibliographic database base on ANSI 239.50 format. LIBSYS supports almost all activities relating to acquisition cataloguing, circulation and serials control and has a powerful but at the same time user friendly OPAC interface.

LIBSYS is highly user friendly having features such as integrated functions, interactive and screen oriented, menu driven multi-user capabilities minimum possible data entry, powerful data editing facility easily installable user defined securing databases recovery procedure, help facility etc., LIBSYS is a well proved software having more than 120 registered users in South Asian Countries since 1988. The registered users
include Universities, public libraries Governmental Organizations, British libraries etc.

- **MAIOTREYI**

  This software was developed by COMPUTER MAINTENANCE CORPORATION (CMS) for Calcutta Library Network (CALIBNET). This provides facilities for all jobs relating to housekeeping and information storage and retrieval functions. This software can be purchased from CMC, Calcutta.

- **WYLISYS**

  WYLISYS stands for WIPRO LIBRARY SYSTEM. It has been developed by Wipro Computer Ltd. It has facilities for housekeeping and information storage and retrieval functions.

- **ILMS**:

  This software was developed by INFLIBNET CENTRE AHAMMADABD. This software was developed as a means to automate the documentary resources available in all the university libraries under the INFLIBNET program. Because of some of the problems the package could not be used by librarians on a satisfactory level, so this package is not in vogue.

- **ARCHIVES**:

  Archives is an integrated software package developed in multi-user FoxPro based by MINIFAX ELECTRONICS PVT.LTD.BOMBAY. It is a
comprehensive package offering acquisition control serial control, cataloging retrieval and SDI

- **LIBMAN:**
  
  LIBMAN was developed by DATAPRO CONSULTANCY SERVICES PUNE. Creation of database of books, members, issues, and return interlibrary loan, generation of overdue lists. Computerization figures Computerization etc, are possible with in package.

- **LIBRA:**
  
  It is a multi-user multilingual, user-friendly package available from IVY SYSTEMS LTD. NEW DELHI. It facilitates housing keeping operations such as acquisition control, circulation control, cataloguing and on line retrieval.

- **LIBRARIAN:**
  
  Librarian is library management software package developed by computers professional s in consultation with experienced library professionals it was developed by SOFT-AID PUNE.

- **LIBRIS**
  
  Libris is a comprehensive user friendly and menu driven library software developed by FRONTIER INFORMATION TECHNOLOGIES PVT.LTD, SECUNDRABAD. The system covers an the functional archives such as
acquisition, cataloguing, circulation, serial control, enquiries and library administration.

MEMLIB

The memex library manager (memlib) has developed by MEMEX PVT LTD. TRIVANDRUM. It is a Microsoft windows based application which can run in a single user or multi-user environment. This software provides facilities for almost all important function in a library. This includes, acquisition, processing, circulation, serial control etc. Another important feature of this software is its import facility of CD/ISIS database.

Memlib on line search facility provides for various options and makes many selected jobs easy without browsing entire through the data and makes the job very easy.

KRVGER LIBRARY MANAGER:

It is a menu driven and user friendly software developed by BLITZ AUTO VISUALS, PUNE. It is a complete library management package for on line information. It turns on PC XT/AT compatibles. It contains facilities for validation for data entry, circulation control, catalogue and card printing information services, preparation of cards according to AACR II, information search etc.
TRISHNA

It was developed by NISTADS, NEW DELHI. Trishna is a version at CDS/ISIS. It supports data creation, storage and retrieval in Indian languages.

ULYSIS

Universal library system (ULYSIS) was developed by WIPRO INFORMATION TECHNOLOGY LTD. The package is developed in C language. It is a fully integrated system taking care of house keeping and information storage and retrieval functions.

SOUL (Software for university libraries)

The soul is the a state of the act library automation software designed and developed by the INFLIBNET. It is user friendly software developed to work under client server environment. Although looking at the name of the software one may think that it is meant for university libraries only but in fact it is flexible to be used for automating any type or size of library in India. While designing this software the international standards bibliographies formats networking protocols and typical functions of all types and sizes of libraries particularly at university level, have been taken into accounts. The functions have been grouped into six categories, working into the functional divisions of Indian university libraries. At present SOUL uses RDBMS on Windows NT operating system as backend to store and retrieve the data.
However keeping in view the event in towards linux operating system, efforts are under way also to provide SOUL to work on Linux platform. The inputs received from expert team consisting of practicing librarians and the feedback's received from users to an earlier software. ILMS have given a strong base for designing this software. SOUL is near total solution offered by INFLIBNET to Indian Libraries. It puts library staff at ease in exploring all functions to their advantages with the help of professionally prepared manual.

Stray features of Soul:-

Following are few of the strong features of SOUL, which should in once librarians to use soul in their Libraries.

1. Windows based user friendly software.

2. Well-designed Screens, logically arrayed functions with extensive help messages make the software user friendly.

3. It is based on client server architecture allowing scalability to the users.

4. It was RDBMS to organize and query data.

5. SOUL does not need an extensive training with very little familiarity, one can begin using it.

6. It is specially designed to work in the large academic libraries, capable of handling large number of records.

7. It is a multi-user software and there is no limit on simultaneous access.

8. Supports intentionally known standard such as CCF and AACR II etc.,
9. Provides export and import facility and adheres to ISO 2709 format.

10. Incorporates all required features to work in a networked environment i.e. LAN and WAN.

11. OPAC is versatile and very user-friendly with all options in-built.

12. OPAC is accessible over the web using any GUI based browsers.

13. Provides comprehensive list of Reports, master databases authority files.

14. Provides facility to create, view and prompt records in regional languages.

15. Functionally it covered every conceivable operation of university library.

16. Available at affordable cost.

17. SOUL has been fully tested at a number of university libraries and certificate evaluated by team of experts and practicing librarians.

MODULES -

The SOUL has been divided into six broad modules.

- Acquisition
- Cataloging
- Circulation
- Serial Control
These Modules have further been divided into Sub-Modules looking at the nature of functions handled by various functional divisions in University Libraries.

**Online public Access Catalogue Module (OPAC)**

Soul includes Boolean Operators when more than one search option is to be used.

- Search results can be sorted according to the preference of search item.
- User has option to select variety of search item.
- Display of records according to AACR –II format

**Easy and quick searches with options:**

- Status of each book starting from acquisition module is reflected
- Search key fields, such as author, title, keywords, class number, accession number etc.

Accessible through the GUI based Web browsers like Netscape communicator, Internet Explorer etc.

User can see the soul status of currently borrowed items by entering his/her borrower number.
Search results can be saved and printed.

Selection of databases can be made according to the choice of users.

Beta Test of the SOUL at four sites:-

To ensure the suitability of all built-in functions, working of development tools used to handling of large number of records and simultaneous transactions of various functions it was decided to have a Beta Test of SOUL in real time environment. Accordingly following four university libraries were selected and tests were carried out during 7 – 26th June 1999.

a. University of Hyderabad.
b. Jawharlal Nehru Technological University
c. Kakatiya University, Warangal Hyderabad
d. Osmania University, Hyderabad.

PALMS (Prasad Automated Library Management Systems):-

This package was developed by Dr. R.C. PRASAD, SCIENTIST (library and Documentation, GBPIHED) and it is distributed by Nutan Software and Publishing, Almora U.P. It is a menu –driven user – friendly single and multi-user networking package runs under DOS environment. It is hoped that the package is very useful to automate all types of libraries small or big. The package will also useful to scientists/researchers in maintaining the references related to the field of research. This package is used for database Management and for information services such as SDI, current Awareness Services and Bibliographical services.
Other features of the package include report generation, utilities and tools, automatic book number system, data protection, fast speed, query facilities, computability with other software packages etc.,

☐ ODYSSEY

This software was developed by SRA System LTD, Imaging Division, madras. It is a comprehensive Document Image Management System which provides easy methods for storage, sharing and retrieval of documents. It takes information from various sources such as Scanners, Faxes, Computer created Documents and other ASCII files. It supports various types of storage media like Hard discs, Optical Disks, CD-ROMs and Juke boxes. It uses an advanced Database Engine to store, retrieve incise and provides multiple searching mechanism like QBE, wild cards, Boolean operators and key words.

*The main features of the software are the following:*

☐ It provides multi-level security features and access control for the document images.

☐ It supports different types of scanners and provides a flexible scanner control.

☐ It uses CCITT Group IV Fax format for compression of B/W Documents and JPEC format for color documents.
It allows the users to index their document in a flexible manner with user definable index fields which would be used later for retrieval. Text index can also be built automatically using the OCR Facility.

It provides document archival facilities including archival management—Read/Write disk Cache, batch mode archival, read only and re-writable

disk management, auto servicing of requests for retrieval and volume management etc.,

It provides a comprehensive electronic filling cabinet hierarchical fashion. Document can also be field automatically in multiple folders without duplication.

It provides various methods of retrieval by unique system generated ID number, document reference, keywords, text search facility, query by form (QBF) for document types etc.

It provides notepad facility to annotate on document images.

It has a built in mailing system. This enables was to mail documents with messages within the ODYSSEY network. It supports CC mail and MS – mail

It incorporates a wok - flow facility using which any user can initiate an action Oriented Document routing process to route documents to other users in the network. The user will also be able to keep track of documents and their flow when they more from one user to another.
OCR can be used for text search, conversion of image text to ASCII text, content-based text search and automatic indexing.

It provides with a comprehensive text search facility to provide support for content-based search using OCR facility. Text Search can also be performed on ASCII text and word processed documents for content-based retrieval.

It provides activities for data export and import through ASCII format.

ODYSSEY is built around client server architecture and supports NET BIOS, SPX/IPX AND TCP/IP communication protocols.

It is developed with modular can open-ended design, therefore it can easily be integrated with another application software systems.

The system requirements of ODYSSEY applications are:-

PC/AT 486 or above, 8 MB RAM, VGA Display, MS-WINDOWS 3.0/95/NT, and industry standard scanner.

In addition to the indigenous software listed above a number of library software packages have been designed by library professionals with the assistance of computer experts for in-house library use. But attempt is not made herein to give details due to lack of documentation about these packages.