

CDS / ISIS for Library and Information Management - Some Developments

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Abstract

CDS / ISIS package has helped many Library & Information professionals to create various in-house databases in India. Majority of the library & Information Centres in India use this package in comparison to other packages. The number of licensed users of CDS / ISIS are nearly 1400 at present. The authors have provided instances where CDS / ISIS is used as a tool for library computerisation particularly in housekeeping activities like ILL, FCE, CNC, IEEE and NEWS; cataloguing and indexing; circulation; acquisition, CAS & SDI, and its use in INTERNET. The package is more popular among the academic and research institutions in comparison to private industries. It helps the newcomers to learn various concepts and approaches to design in-house databases.

Introduction

Database creation, storage and retrieval is no more a new approach to provide various information services to its users. In this regard, CDS/ISIS package has helped many L&I professionals to create various in-house databases in India. Many of them have brought out a good number of products using CDS/ISIS. This paper deals with many such products which have been developed and applied recently in various institutions or organisations in India.

Packages for Library Automation

Various software have been developed and being used in library automation. More than 2 doz. library softwares are developed in India¹. The common softwares are Suchica, Granthalaya, Sanjay, ILMS, Techlib +, LIBSYS, LIBRIS, OASYS/Alice, Librarian, SLIM, Nirmals, TULIPS, WILSYS, Libsoft, Maitrayee, Liberator, SALIM, NILIS, Library Manager, Library Management, CDS/ISIS, MINISIS.

CDS/ISIS for L&I Management

CDS/ISIS is a leading package being used in Library and Information Centres(LIC) in India followed by dBase/Foxpro3. The overall scenario of different packages for automation of LIC is as follows:

Package	No. Users
CDS/ISIS	110
SANJAY	3
ILMS	3
Dbase/Foxpro	36
Libris	2
LIBSYS	9
Others	21

Apart from these, MINISIS², another package, is a relational database system having multi-platform implementations like single user DOS, Novell, Banyan LAN, WINDOW 95 and WINDOW NT, HP/UX, SUN/Solaris, VAX/VMS using Pathworks etc. The software supports the extensive and powerful search - fast access/ index search, truncated, adjacency, numeric, free text and thesaurus based searches.

Many statistical analysis have been done for CDS/ISIS users. The number of licensed users of CDS/ISIS were nearly 1400 by the end of 1997. The distribution of the users in the country are North India: 42.5%, South: 26.9%, West: 21.5% and East: 8.8%. The most common users are academic institutions. Scientific and R&D Institutions (17.5%) and Govt. agencies (18.3%) accounted for the next largest share of the users. The private industries and associations constituted only about 10.6% of the users. Rest is shared by non Govt. organisation, International agencies and others. An analysis of the users indicates that about 63.7% of users use the package for bibliographic purpose and 62.1% use the same for cataloguing/indexing services. 24.7% of the users also use the package for current awareness service. The other use of this package by its users are Acquisition (16.6%), Budgeting (4.4), Circulation (6.1), Serial Control (11.4%), SDI (9.3), Union Catalogue (8.2) and others (14.8).

The WINDOW version was the recent development of a strategic development policy. CDS/ISIS is completely rewritten in C++, UNESCO and BIREME co-operated in developing the CDS/ISIS Dynamic-Link-Library (ISIS-DLL), a tool for the development of specialised applications, based on CDS/ISIS, in the WINDOW environment using professional programming language such as Visual Basic, Delphi or Visual C. ISIS-DLL is design for programmers already having a thorough Knowledge of CDS/ISIS.

CDS/ISIS Utility Packages

Many utility packages are also developed for CDS/ISIS to help database design, format, data transfer and other purposes as mentioned below⁴:

SHOW	Scrolling through records
FMT	Available format
NEWDB	Automatically creates database
HEURISKO	Database selection, searching and printing
FANGORN	Conversion of database from CDROMs to CDS/ISIS database
CCF MARC	Converter: MARC to CCF and CCF to MARC
DB#ISO-ISODB#	dBase3 to CDS/ISIS and vice versa (Export memo field)
GMOD	Global change on field of range of records
SDI	SDI output
IDIS	Data transfer between ISIS and IDAMS
SANJAY	Library Automation Package
Thrishna	Devengiri version of CDS/ISIS of CDSISIS
New SDI	SDI outputs for CDS/ISIS

It is also reported that three Pascal interface have already been designed to make the job of the database manager easier in editing a CDS/ISIS database - Field Editor, ISIS Dictionary Editor and DIS.PAS⁵.

Library & Information Centre's Automation

Automation of LIC was started quite some time back. In India, many centres have already been computerised and started providing service to their users. It is reported that automation has already been done at C-DOT using CDS/ISIS package⁶. The library is a totally automated based on CDS/ISIS software package 3.07. Besides giving access to its end users through OPAC/HEURISKO it also automated its housekeeping activities like cataloguing, acquisition, subscription and circulation. Apart from this, the library has also designed few tailor made databases to facilitate the library housekeeping activities like ILL, FCE (forth coming events), CNC (Newspaper clippings), IEEE and News etc.

Cataloguing and Indexing

Some users reported their problems relating to processing of microfiche documents and explains the module developed for the automated processing of these documents by Vikram Sarabhai Space

Centre (VSSC) library using CDS/ISIS and Faogorn program of UNESCO⁷.

It is also reported that the retroconversion of the catalogue is one of the major problems. The users have suggested one of the ways in which the ready-made cataloguing data from LCMARC can be used for retroconversion⁸.

Circulation Utilities

IR4 is a CDS/ISIS Pascal program for interface with a CDS/ISIS database for circulation control⁹. This module takes care of charging and discharging of books and designed primarily to record circulation information so as to facilitate a large spectrum of data to analyse and understand the strength and weakness of the library and its users.

Current Awareness Service

CDS/ISIS has very good support for Current Awareness Service (CAS). On the name of 'Alert', Regional Research Laboratory, Bhubaneswar is used to provide CAS service to the readers using CDS/ISIS. Delhi College of Engineering has developed a program in CDS Pascal to provide SDI service to their users¹⁰. The program fulfils the need and establishes the required link between the database of user profile and document profile. CAS service using computer is common in most of the R&D organisations.

Bioinformation Centre, School of Biotechnology, Madurai Kamraj University, Madurai is providing CAS service by auto conversion of searched outputs, i.e. contents pages of journals retrieved from CCOD, Biotech Citation Index and online access MEDLINE etc., so that all the searched records are converted into ISO 2709 structure using FANGORN program¹¹.

CDS / ISIS in INTERNET

Initiation have already been taken by the L&I professionals to design database and its access through Internet. A number of tools for making available CDS/ISIS databases on the INTERNET are also available on free of charge and for downloading - the UNIX version of CDS/ISIS, the WAIS-ISIS server and the WWWISIS server.

Users of CDS/ISIS developed many web products¹⁴, the addresses are :

China	IMS Web
Germany	ISIS WWW
Italy	ISIS Net
Italy	Easyweb and Easycat
Poland	www/ISIS
Spain	Selecta V.1 PRO
Uruguay	IQUERY

NIO, Goa has taken initiation to design CDS/ISIS database on the Net.

The OM Information Service is an interactive multimedia database service based largely on micro CDS/ISIS input records¹². This will be available at a World Wide Web (www) site on the Internet, and on CD-ROM with an off-line web browser. As the web supports multimedia data, the images of the sources (Authors) are incorporated where available, and the user has the option to select and play some devotional music during the search session.

IQUERY is a software designed to run under three platform - Linux, SCO, and DOS¹³. The system was designed to act as an interactive search engine for Mini Micro CDS/ISIS database. The software can run in three different modes as an interactive command shell, as a CGI to run under www servers and as an interpreter taking the statement from a file.

Conclusion

CDS/ISIS is being used by most of the academic and research institutions in India. However, it is not very extensively used by the private industries. Any development or new application should reach its users so that one can properly apply the same and take the benefit of it. It is the individuals responsibility to suggest or incorporate new ideas or applications in this software and make it a popular package. CDS/ISIS helps the new comers to learn various concepts and approaches to design in-house databases.

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