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Editorial Board

Published by

From Director's Desk

Dear Friends,

It gives me a great pleasure to share with you the progress being made by the INFLIBNET Centre in the areas of database development through this newsletter.

As you are aware, this Centre is involved in creating union database of books, serials and theses available in university libraries. Besides this, we have also been developing database of experts, research projects and university information system. During this year, we have been able to consolidate our efforts on experts database. Nearly 36000 letters have been sent to the individual faculty members working at senior level in the universities along with the data input sheet to enable them to give us information about their areas of specialisation, research work being carried out, publications and other achievements. I am happy to mention that number of faculty members have come forward and sent in their response. Within next few months, we would like to increase the size of records from existing 3500 to 12000. I appeal to the authorities, teaching community and librarians of university to help us in achieveing this target by contributing more data. We propose to make this information available on the Internet at the earliest to encourage interaction with experts to take advantage of their expertise in different fields. We will appreciate your participation in this endeavour.

Pramod Kumar
Director

INTERNET edition : http://www.inflibnet.ernet.in/newsletter.html

VSAT NETWORK FOR UNIVERSITIES

This is an era of Information Technology. The rapid technological developments in the fields of computers and communications have virtually shrunk the size of our earth. Persons, widely dispersed physically, can now communicate with each other in matter of seconds without leaving their places. The old Sanskrit saying " Vasudaiv kutumbakam" has indeed become a reality. Satellite communication has largely been responsible for this development.

Satellites, hovering at a very high altitude above the surface of earth, provide an excellent means of communication. Normally Geo-stationary satellites are used for communication. Geo-stationary means stationary with respect to earth. These satellites are stationed in a unique geo-stationary orbit which is about 36,000 kms. above the surface of earth. Three such satellites, placed 120 degrees apart, can cover most of the earth except the polar regions. Satellite communication primarily consists of two segments viz. space segment and ground segment. Space segment comprises the satellites, where as the ground segment comprises a number of earth stations. In the initial stages, when satellite technology was in infancy, the earth stations were big in size with large antennae, because the satellites were not powerful enough. Now a days, more and more powerful satellites are being put into the orbit resulting in smaller earth stations.

VSAT is a common enough word heard now a days in IT parlance. VSAT is an acronym for Very Small Aperture Terminal. It is basically a satellite earth station having a small antenna of the order of 2.4 mts. or less. Because of the small antenna size, two VSATs can not directly communicate with each other. They can not send large enough power to the satellite and also can not receive small power coming back from the satellite. Hence, they have to communicate through a large earth station called a Hub station. Hub stations have antennae of the order of 9 Mts. or more. Hub station receives small signals originating from a VSAT via the satellite and transmits large signals to the satellite, so that other VSAT can receive them. VSATs can easily be transported and installed in very short time at even remote places which are not easily accessible and where it is difficult to install other means of communication. Some of the advantages of a VSAT network are:

1. Reliable network performance
2. High data rates
3. High availability
4. Modular and easy growth of network
5. Network access from remote parts of the country irrespective of available communication infrastructure support
6. Cost effective network design
7. Feasibility of broadcast applications like teleconferencing (video/audio) and computer conferencing
8. Simple to operate, maintain, monitor and control.

UGC, under INFLIBNET Programme, has decided to establish a satellite based VSAT network for all the universities falling under its purview. The proposed network will have about 170 nodes covering all the universities, UGC Information Centres, Inter-University Centres of the UGC and the UGC HQ. Each university will have a VSAT which can be linked to a Local Area Network (LAN) covering all the departments in the campus. This will enable not only the library, but all other departments to access the network. Universities will have to establish LANs in their campuses for which some funding may be provided by the UGC. This network will primarily be a data communication network having limited video conferencing facilities. Using this network, a person in a university can communicate with others in the same campus or in campuses of other universities. This network will have connectivity to the INTERNET through the Hub enabling the university community to access various databases available world wide. The process of identification and selection of a suitable VSAT vendor/service provider is already in progress at the UGC. It is expected that this network will be operational by 31stMarch,1999   ❏

DEVELOPMENT OF LIBRARY AUTOMATION SOFTWARE AT INFLIBNET

To facilitate the automation of university libraries, INFLIBNET had developed an Integrated Library Management Software using COBOL to work on DOS/UNIX platforms. This was also distributed to few selected libraries to implement and to give the necessary feedback.

Keeping in view the trend in the computer industry, particularly client / server technology, Graphics User Interface environment and middle tier architecture, INFLIBNET Centre has begun the work on design and development of new version of Integrated Library Management Software to work in Windows environment. While designing this new version of the software, due weightage has been given to the feedbacks received from the users of earlier version. Front-end of the software comprises following modules.

1. OPAC (On-Line Public Access Catalogue)
2. Circulation
3. Catalogue
4. Acquisition
5. Serial Control
6. Reports

All these modules have further sub-modules covering most of the options / functions dealt within the respective areas.

1. OPAC

On-line Public Access Catalogue module has all the possible features that user needs to locate an item from the library. It provides several access points such as title, author, keywords, word in the title, word in any field, besides Boolean operators, viz., OR, AND and NOT. Right truncation is another feature that has been added in search option. Search can also be done using classification number, accession number and other major fields. This module also enables to figure out the status of the book i.e. whether it is available on the shelf or issued out, or in the bindary etc. Another important feature added in this module is that search results could be saved to a file or emailed to a user account.

2. Circulation

The Circulation module in this new version covers most of the procedures and functions practiced in the manual system in a major university library. The membership database has all the provisons to enter, edit and delete the membership information of different categories. System develops an automatic code for every user on feeding & defining the information pertaining to each user. Fine calculation is another useful function added in this module to take care of the fines for all categories of users. Reminder generation and mailing the same through email is being added. Facilities such as reservation of books, Inter-Library-Loan, binding

status, departmental issues, books withdrawn status and generation of various reports adds strength to this module. Security features for different levels of staff using this system have also been built in.

3. Catalogue

This is a comprehensive module which covers almost every field covered in Common Communication Format and takes AACR2 (rev. ed.) as a base. This module enables the library staff to transfer most of the data from acquisition module and modify and add as per the requirement of AACR2. Provision has been made to enter key words, series statements, classfication numbers etc. Various display formats, i.e. as per CCF tags, AACR2 and others have also been incorporated. If one wishes to generate the cards, that could also be done. This module also enables to enter the retrospective data, create authority files etc. The search features added in this module are similar to OPAC with a few extra features.

The Acquisition, Serial Control and Report generation modules are under development. It is hoped that by the end of this year, complete software with all the modules and with in-house test would be ready. While designing this system ISO 2709 is taken as a base for data exchange, and efforts are on to make the OPAC module Z39.50 compatible.

All the above mentioned modules are developed using Power Builder 6.0 software. It is decided to provide run-time version of the above mentioned module to the universities at free of cost. The back-end for run-time module will be any suitable RDBMS i.e. SQL Server 6.5. The library database will reside on SQL Server 6.5 software. Once when this software is ready, before its distribution, it will be rigorously tested in a select few universities, so that bugs if any, could be identified and corrected. ❏

EXPERT DATABASE

INFLIBNET has taken an initiative to create a database of Experts working in the university system, particularly at the senior level i.e. Professor & Reader. This database covers all the important information about each expert i.e. qualifications, area of specialisation, projects handled, research guided, publications and other achievements both in academic and research field. This database is being developed with an ➡

objective, to promote the interaction among the faculty members working in similar areas within the country and outside. Besides, it also provides the information for the formation of committees at various levels by different agencies and facilitate utilisation of expertise for academic and research purpose.

When it was initiated about two years back, a letter alongwith a predefined form was sent to all the faculty members, falling under the above mentioned two categories working in Indian universities. Around 3,000 faculty memebrs responded and the data so received has been added to the database. During this year (around June-July) second letter alongwith a newly designed form was sent to nearly 36,000 faculty members all over the country. The response is far from the expected figure.

Through this newsletter, we appeal to the faculty members to take an active part in this national endeavour and send in their response. We shall appreciate, if the colleague Librarian in each university also takes the initiative and co-ordinate this work of collecting the responses and forwarding them to us.

Currently this database is developed using CDS / ISIS software, and soon it will be mounted on to the RDBMS and which in turn will be accessible over the INTERNET.

Current Status

We have been able to analyse the existing data (while going to the press) universitywise and the same is presented in the table given below. Because of the paucity of space, we have taken only that university, from where minimum 25 responses have come in.

SR No	Name of University	No of Records
1	University of Pune	116
2	C. C. S. Haryana Agri University	92
3	Banaras Hindu University	91
4	Shivaji University	91
5	University of Calicut	75
6	University of Mumbai	75
7	M. S. University of Baroda	67
8	University of Delhi	67
9	Punjab Agricultural University	59
10	Punjabi University	57
11	University of Calcutta	52
12	Panjab University	48
13	Sri Venkateswara University	46
14	Indian Agri. Research Institute	43
15	Avinashilingam Institute	39
16	B. B. Amb. Bihar University	38
17	University of Jammu	34
18	University of Mysore	34
19	Guru Nanak Dev University	33
20	Gulbarga University	32
21	M. G. Kashi Vidyapith	32
22	Tamil Nadu Agr. University	32
23	Gujarat Agricultural University	31
24	Sardar Patel University	31
25	Kurukshetra University	30
26	Indian Institue of Science	29
27	Sambalpur University	29
28	Osmania University	28
29	Goa University	27
30	University of Hyderabad	26
31	Andhra University	25
32	Bhavnagar University	25
33	G B Pant Univ. of Agr. & Tech.	25
34	Jawaharlal Nehru University	25
35	Kerala Agricultural University	25

ON-SITE TRAINING AND SUPPORT

INFLIBNET staff visited following universities during May-June 1998 to provide onsite training and support to library staff.

1. Barkutulla University, Bhopal
2. Gauhati University, Guwahati
3. Kurukeshtra University, Kurukshetra
4. Nagarjun University, Guntur
5. Tezpur University, Tezpur

DATA COLLECTION

To strengthen the union catalogue of books, serials and theses, INFLIBNET staff visited the following universities to collect the data, besides the universities where, the on-site training was conducted.

4. INTERNET Facility

Recently INTERNET facility has been set up with the help of INFLIBNET funding. It is being heavily used to access email and World Wide Web facilitating speedy access to information.

Library Automation

INFLIBNET has been kind enough to select this young and dynamic library under its programme during the financial year 97-98. M. G. Library has now received in all Rs. 7.5 lakh (i.e. Rs. 1 lakh under core facilities and Rs. 6.5 under library automation and networking). This will give further impetus to bring this library on the map of INFLIBNET, facilitating easy access to information.

This library already has four computers, two printers, one modem and an exclusive telephone line with STD facility and INTERNET connectivety. With the new grants from INFLIBNET additional systems and softwares will be purchased as required to participate in the programme.

With the existing systems, Library has already made a beginning in creating databases of books, serials and theses using CDS/ISIS software.

This Library has highly skilled and motivated staff working dedicatedly to promote the services to academic and research community on the campus. With the support from INFLIBNET, M. G. University Library is all set to enter the next millennium. ❏

ELECTRONIC JOURNALS ON THE WEB

Following are few select important Web sites of Electronic Journals :

1. **Association of Research Libraries**
   http://arl.cni.org
2. **BUBL Journals**
   http://bubl.ac.uk/
3. **The CIS Electronic Journals Collection**
   http://ejournals.cis.net
4. **National Library of Australia**
   http://www.nla.gov.au/oz/ausejour/libs.html
5. **MIT Libraries Electronic Journals Collection**
   http://nimord.mit.edu/common/ejournals.html
6. **Serials in Cyberspace :Collection,**
   Resources, and services
   http://www.uvm.edu:80/~bmaclenn
7. **The World Wide Web Virtual Librarie's Electronic Journals**
   http://www.edoc.com./ejournal/
8. **Library journals and academic librarianship in Germany**
   http://gort.uced.edu/rsonn/libjour.html/
9. **Full text of LIS related documents**
   http://www.vuw.ac.nz/dlis.ssbubl/fultext/ ❏

ARTICLES ALERT

1. Nancy K. Herther. CD-ROM to DVD-ROM : Moving Optical Storage Along a Bumpy Road into the New Century. *Database,* Vol. 21 no. 2, April/May 1998, pp 26-29.
2. Richard Poynder. Patent Information on the Internet. *CD-ROM and Online Review,* Vol. 22 no. 1, Februray 1998, pp 9-17.
3. Terry Kunny and Gary Cleveland. The Digital Library : Myths and Challenges. *IFLA Journal.* Vol. 24 no. 2, 1998, pp 107-113.
4. Ciaran Morton. Intranets : Some Problems and Solutions.*Managing Information,*Vol.5 no. 4, May-1998, pp 26-27.
5. Richard Poynder. SCI-TECH Information on the Internet. *Managing Information,* Vol. 5 no. 1/2, Jan/Feb-1998, pp 35-37.
6. Ian Bannerman. Pricing On-line Journals. *Serials,* Vol.11 no.1,March-1998, pp23-26.
7. Frederick J. Freind. Alternative To Commercial Publishing For Scholarly Communication. *Serials,* Vol.11 no. 2, July-1998, pp 163-166.
8. Kate Elder and Jane Miller. New technology, traditional approaches : librarians, training and the Internet. *Australian Academic and Research Libraries,* Vol. 29 no. 1, March-1998, pp 34-41.
(All the above journals are available at INFLIBNET Library) ❏

REQUEST FOR NEWS ITEMS/ COMMENTS / FEEDBACKS

The Editorial board requests the Librarian and others to contribute the news items pertaining to important activities and events taking place in your universities.

We also solicit your comments, suggestions in making this newsletter an effective media to communicate INFLIBNET activities. ❏