

CALIBNET on Stream

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ABSTRACT

This paper approaches the twin objectives of library automation and networking through the network route and e-mail route. The author has dealt on software development, database development, and network development in detail. The network also features a number of special services.

1. INTRODUCTION

With a mandate to facilitate provision of broadbased information services in the country, the National System for Science & Technology (NISSAT), Department of Scientific & Industrial Research, Government of India, took up initiatives for the design and development of metropolitan library networks since 1985. Calcutta Library Network (CALIBNET) is one such product.

CALIBNET was inaugurated on 21 September 1993 by Prof S K Sen, Minister for Power, Science & Technology and NES, Government of West Bengal.

Following a Memorandum of Understanding (MOU) in June 1994, NISSAT assigned the role of Network Coordination Agency to CALIBNET Society (a society registered under West Bengal Societies Registration Act, 1961). The management of Network Services Centre

(NSC) was entrusted by NISSAT to CMC Limited till the Society was functional. CALIBNET Society formally took over the infrastructural facilities of NSC on 29 November 1994, from CMC Limited.

1.1 Objectives

CALIBNET is being established to serve the collective interest of Calcutta's institutional libraries by means of computer-based library automation and networking, aimed at optimum utilisation of bibliographic resources of these libraries by a mechanism of resource sharing and electronic access. The prime objective is to institute systematic inter-library cooperation and document delivery amongst the libraries of Calcutta. Thereby, they can stimulate and sustain resource sharing with a view to largely free libraries from the stranglehold of financial crunch.

CALIBNET adopts two routes to realise its objectives : (1) the network route with:

- ✦ A library automation and networking using its own application software 'MAITRAYEE'.

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(2) the e-mail route to provide member libraries with:

- ⊕ Online access to various databases within the network.
- ⊕ Online access to information available through Internet, DIALOG/Knight-Ridder, and CD-ROM resources through ERL.
- ⊕ Full-text documents through British Library Document Supply Centre, ASTINFO, UNCOVER and other agencies.
- ⊕ Electronic-mail facility for easy interactions.
- ⊕ Centralised bibliographic support for name and subject authority control.
- ⊕ Training and consultancy.

2. ESSENTIAL FEATURES

2.1 The Network Route

CALIBNET is essentially a computer-based network of Calcutta-based libraries, comprehending total automation of library operations and management functions and their interconnection through telecom lines. It will have online access to international databases and search facilities of CD-ROM-based databases at NSC. It has a prized collection of international databases on CD-ROM. A few of them are *Bibliofile*, *British National Bibliography*, and *Inside Information*, which provide access to contents of over 10,000 high impact journals.

Significantly, CALIBNET is a true library network coming up on a technological platform of program-program communication between libraries in the network, using its own application software 'MAITRAYEE'. The re-engineered version 3.0 is being ported on CALIBNET participating institutions (PIs) Annexure.

Within the individual libraries, the functions that will be automated are

acquisition and fund accounting, cataloguing, circulation, serials control, and local user services. Users will be able to locate books and serials through online public access catalogue (OPAC). The network services component will enable CALIBNET libraries to query any remote library hooked on the network; transfer files across libraries, exchange messages, and reply to queries from any of the in the libraries network through e-mail.

The NSC will provide centralised services such as online search of international databases as well as search of such databases held on CD-ROM at the NSC itself. Current Awareness Service (CAS), Selected Dissemination of Information (SDI) services, and back-up support with full-text delivery; will essentially function as a computer-communication based information provider.

The NSC will also extend consultancy in library computerisation, manpower development and training, assistance to nodal libraries on standardisation, local automation, and retrospective conversion of existing card catalogue into machine readable format (Retrocon).

2.2 The E-Mail Route

Apart from the total automation and network concept that CALIBNET envisages, it has introduced and supports a closed-circuit e-mail network for its member institution libraries (MILs). CALIBNET is transforming itself from a library network to essentially an information network.

3. HARDWARE AND SOFTWARE

The hardware and operating system software were supplied and installed at the PIs and NSC by CMC Limited as the

turnkey implementation agency of CALIBNET.

The host system provided to NSC—the WIPRO Landmark 486 and the operating system WINIX—were incompatible with the functional requirements of CALIBNET. This factor along with certain deficiencies in the application software MAITRAYEE which was being developed by CMC Limited delayed the implementation of CALIBNET. The software, in fact required re-engineering to overcome those problems and the CMC has done the job. It had recently released the revised version as MAITRAYEE version 3.0 and ported on PIs' systems and is under observation at NSC. The host system at NSC has also been recently replaced with hardware of higher configuration and SCO UNIX operating system. The combined efficiency of MAITRAYEE (ver 3.0) and this host system vis-a-vis functional requirements of CALIBNET is currently under observation.

4. A NEW DIMENSION : INFORMATION NETWORK

With the phenomenal advances made in computer-communication technologies, the library network is progressively making room for the information network. Consistent with this contemporary thrust towards information network, CALIBNET is coming up essentially as an information provider—in tandem with its library network implementation—with high-tech resources for access, search, and retrieval of global information already established.

CALIBNET is wedded to the conviction that using information improves the chance of success in one's profession and mission. No matter what one's specialty, from basic sciences and engineering to humanities and social sciences and management, and one's institutional or professional affiliation, CALIBNET InfoServices are being designed

to serve a broad spectrum of information seeking users.

CALIBNET can now offer worldwide information, searched online or on CD-ROMs, contained in over 450 international databases. It is fast and cost-effective way for one to obtain current, accurate, and comprehensive information critical to his/her day-to-day decision making and professional pursuits.

5. RESOURCES AND SERVICES

CALIBNET has already established high-tech resource-base and put several services on stream :

5.1 Global Information Search and Retrieval

5.1.1 Online Services

- ✦ Access to Internet—the information superhighway which allows CALIBNET to surf in cyber-space, search online, and tap the entire information resources of Internet available in a wide array of databases.
- ✦ Access to DIALOG/Knight-Ridder service. CALIBNET can now exploit this online search facility of over 450 databases from a broad range of disciplines.

5.1.2 Databases on CD-ROM

CALIBNET holds a good collection of in-house databases and offers information services, ranging from the access to contents of over 10,000 high-impact current serial titles held by British Library, to the holdings of United States Library of Congress.

5.2 Full-text Document Delivery

5.2.1 Online Ordering to International Sources

CALIBNET will exploit the online ordering facility for full-texts of documents available from :

- ✦ British Library Document Supply Centre,
- ✦ UNCOVER,
- ✦ ASTINFO, and
- ✦ Over 50 other international vendors, available on DIALOG/Knight-Ridder.

5.2.2 Ordering over E-mail Network from other National Sources

CALIBNET is forging cooperative arrangements with libraries and information centres in the country holding full-text databases on CD-ROM for supply of full text of documents requested by its clientele.

The resources base and services are given below:

Resource base	InfoServices on stream
Internet	RetroFile ConFile FactFile ConAlert
DIALOG/Knight-Ridder	CALIBLINK
CD-ROM Databases	CALIBORDER
Online Document Ordering	RETROCON HRD CONSULTANCY

5.3 Communication Linkages

CALIBNET recognises the fact that a combination of modern computer and communication facilities is the bedrock for an efficient and contemporary information network. Besides acquiring access to trans-national services like Internet, the information superhighway, and Dialmail, the electronic mail service to communicate with major information vendors worldwide, it has accorded top priority for creating at its NSC, a local hub of ERNET of the

Department of Electronics, Government of India, for establishing CALIBLINK as a closed-circuit e-mail network of its MILs.

It has also taken steps to utilise the packet-switching communication service of I-NET for its activities and services

5.4 Support to Member Libraries

5.4.1 CALIBLINK

CALIBNET supports installation of CALIBLINK, E-mail Network of CALIBNET MILs, which will offer MILs an enhanced access to CALIBNET services. Additionally, the network will offer the MILs rapid access to other worldwide libraries, institutions, and individuals having e-mail facility.

The scheme for e-mail is as follows :

The MIL will provide a standard PC computer running on DOS and a dedicated telephone in its library.

CALIBNET will support the scheme by offering loan to the MIL, the modem required for e-mail operation, install the e-mail node, and train the operators. A limited number of modems will be thus offered every year on first-come-first-served basis.

A nominal one-time charge for installation, training, and annual usage fees will be levelled.

5.5 CALIBNET InfoServices

CALIBNET InfoServices is now well set to announce the following services :

5.5.1 Database Services

- ✦ RetroFile : Bibliographic information on any topic of users choice through retrospective search of single or multiple databases.
- ✦ ConFile : Contents of current journals from a collection of over 10,000 high-impact

journals at regular intervals depending on the frequency of the journals.

- ⊕ FactFile : Fast, clear-cut answers to a variety of questions, such as worldwide corporate intelligence, products and markets, company financial statistics, demographic data, and other factual data.
- ⊕ ConAlert : An automatic customised current awareness service, continuous up-to-date bibliographic references on the topics specified in advance.

5.5.2 Caliborder

A document ordering service, CALIBORDER, meets requests for copies of original publications. One can utilise the faster mode CALIBLINK(described in 5.4.1 above) or fax or other communication facilities to place orders.

5.5.3 Resource Sharing

CALIBNET will assist its MILs in rationalisation of their acquisitions which helps in avoiding duplication of document procurement amongst them, and in inter-library lending.

5.5.4 Retrocon

CALIBNET offers to convert existing card catalogues at MILs into machine-readable databases by downloading relevant records from LCMARC database.

5.5.5 Authority Files

CALIBNET offers on request the name and subject authority files of U.S. Library of Congress to help in standardisation of library database management functions.

In addition CALIBNET also provides services for Human Resources Development, and Consultancy in Library and Information Centre Automation.

6. CONCLUSION

CALIBNET, or for that matter any similar network in the country, can sustain itself only when adequate demand is made on its services. Information user response is highly crucial for survival of the networks. A vigorous and planned promotional drive, preferably in conjunction with NISSAT, to activate user consciousness, is the order of the day.

CALIBNET—Participating Institutions (PIs) via the Network Route

- ⊕ Indian Association for the Cultivation of Science
- ⊕ Jadavpur University : Central Library
- ⊕ Indian National Scientific Documentation Centre : Calcutta Regional Centre
- ⊕ Calcutta University : Department of Radiophysics & Electronics
- ⊕ Calcutta University : Rashbehari Prangan Central Library
- ⊕ Bose Institute
- ⊕ Indian Institute of Management
- ⊕ Asiatic Society
- ⊕ Institution of Engineers (India)

In addition to these PIs, the network services centre (NSC), where the host system and related communication and other facilities reside, will control and manage the network operations and provide centralised services.