

IT@SB COLLEGE



NETWORK OPERATIONS CENTRE

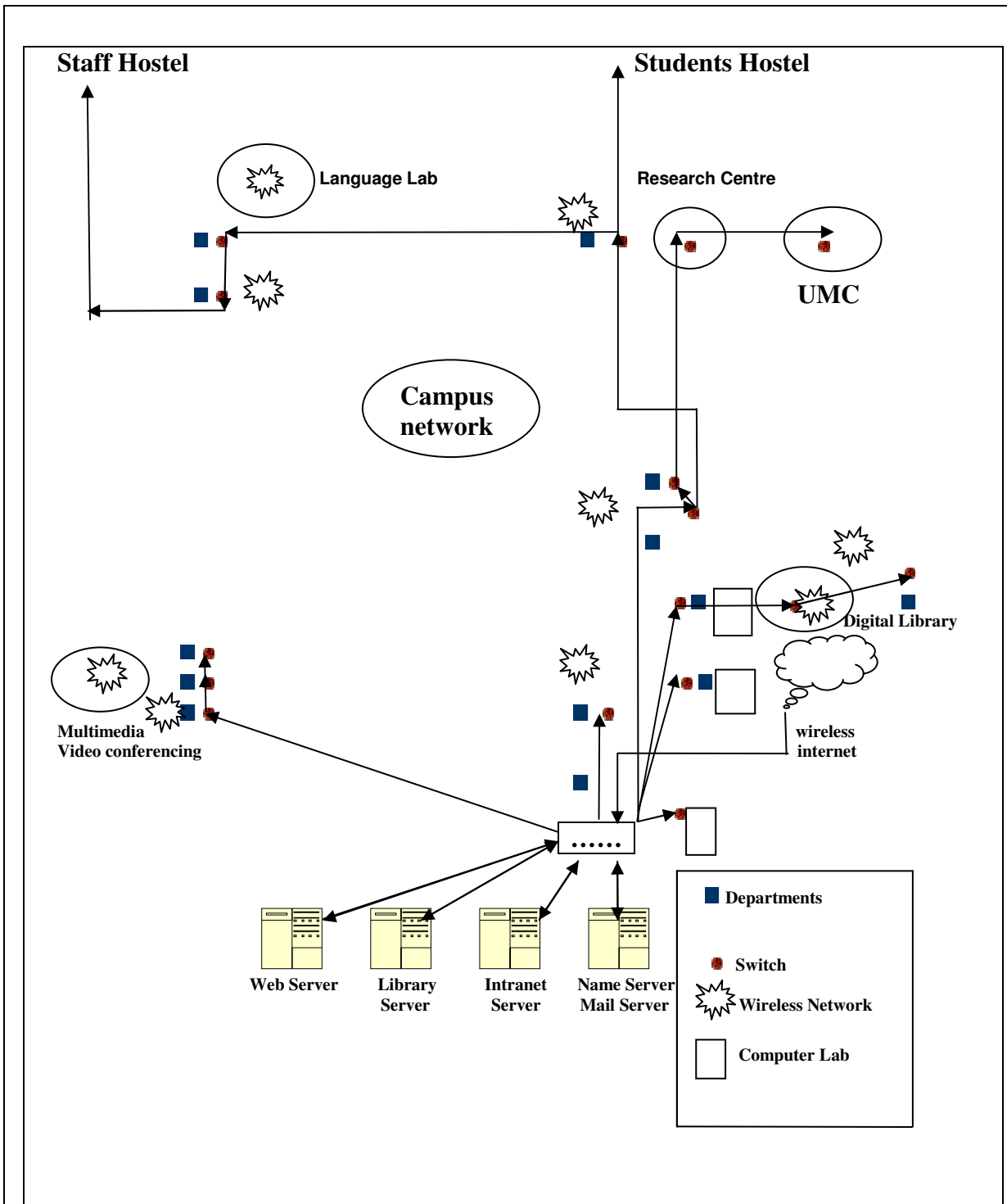
The SBC network is a joint effort of the faculties of the Dept. of Mathematics. Many groups and individuals contribute to the network's performance, growth, and success.

- College-wide planning and advisory committee, such as the Website Updating Committee, help determine the direction and scope of the network, with the goal of supporting the College's mission.
- The Infrastructure and Learning Resources committee provides architecture, consulting, and design services to evolve the network to meet the College's fast-growing network needs.
- The Network Operations Centre within College Information Systems manages the infrastructure and daily operations of the core network.

In recent years, strategic network enhancements have focused on increasing redundancy to ensure robustness and continuous operation and delivering high bandwidth to support innovative applications for teaching, research, and communication. Many of the technology initiatives currently under way at SB College relate to or rely on the SBC network.

Campus Network

Campus wide networking through Point to multi-point wireless technology (wi-fi) and through high speed UTP cable. Local Area Networking through wireless LAN technology as well as Ethernet LAN technology.



You can reach the NOC by phone, e-mail, or the Internet as described below.

Hours of operation

The NOC is staffed during business hours, Monday to Friday, from 9 a.m. to 8 p.m.

For critical network problems, and service Call 2420025-29.

By e-mail For security-related issues, send e-mail to sbcnoc@sbcollege.org. Other network inquiries should be sent to netmanager@sbcollege.org.

e-LEARNING & ONLINE DIGITAL LIBRARY SOLUTIONS

SBC Digital Library provides access to a growing collection of online academic resources for the College community and our worldwide audience alike. Resources include distance learning courses, and innovative projects in academic environment.

Online journals from world leaders like THOMSON & ELSEVIER, e-books from the pioneers like ebrary and knovel on Science, Technology, Engineering, Arts, Humanity and Medical subjects are available to students as well as teachers inside and outside the college.

INFLIBNET is likely to be another free resource available through our digital library (state government process is progressing).

Library Automation

Over the past decade or so, traditional library resources and services have been augmented by electronic resources, and access has been enhanced through Web-based interfaces. Library Web sites have been evolving into information gateways that provide access to library services and resources, including electronic databases, library catalogs, research tools and the Internet. These developments have opened the door to unprecedented numbers of library users. We started with a software named NIRMAL and then changed to an open source software KOHA for our Library Management System.

Koha is an integrated library system (ILS) containing the usual modules of such a utility:

- Acquisitions
- Cataloguing
- Members ("patrons")
- Circulation
- Online Public Access Catalog (OPAC)
- Very sophisticated opportunities for ergonomic personalization
- The Virtual Shelf concept: Virtual Shelves allow a professor to build a list of books related to a given subject. For researchers, it is possible to define a Shelf to be used as the bibliography for a thesis, etc. There are three types of Virtual Shelves: private, public, and free. The private Shelves are accessible only to their creator. The public ones are managed by their creator only, but can be viewed by anyone. The free Virtual Shelves are created by any user and can be added to by any other users (either OPAC users or librarians).

Office Automation

The Office of the NOC Technology provides support, guidance, and core technology training to enable the Office staff to implement the best practices in information technology management. Desktop and LAN Support has developed a suite of services that provides technical support for many of the desktop personal

computers, local area networks (LANs), and departmental file servers used to support the administrative operations of the College.

Open Source Software

The SB soft, as a group dedicated to seeking out high-quality software at reasonable cost, has a vested interest in supporting the goals of the Free and Open Source Software. These movements have shown that some of the best software development, particularly in the areas of academic interest, comes from open, non-proprietary development methods.

College Information System (CIS)

CIS is a web based Integrated Software Package developed at SB soft and it is a data warehouse of student, course and institution information. A complete Web Based application for all Kind of education institution, which is completely web enabled & operates through Internet or LAN. CIS is easy-to-use, integrated College administration applications are proven to reduce time spent on administrative tasks. The parents can obtain rapid and swift response to any enquiries regarding their ward's attendance, academic performance status with specific remarks if any, of faculty as well as class/test/exam schedules, which are available on-line anywhere, anytime on the internet or local institution network at the entry of the unique password assigned to each user of the system. Other major features are information regarding different departments, faculty, courses, college informations etc.

Mary Matha College, Vyanadu has installed CIS and it is working perfectly. CIS can be downloaded from <ftp.sbcollege.org> at free of cost.

External activities

To ensure that SB stays in step with the latest technology developments and industry standards, staff members play an active role in the networking community beyond SB. They participate in standards-setting bodies and workgroups, contribute to collaborative initiatives, attend and present at major meetings and conferences, and provide knowledge transfer to Research Institutes, Colleges and schools regarding Internet ,Networking and other related areas.

IT enabled teaching facilities

We effectively use WWW multimedia technology (HTML and audio/video browser plugins such as RealAudio together with customized WWW servers) to deliver stored course or training materials such as class notes/overheads and audio/video of classroom lectures to students. LCD projectors and Laptops with wireless access networks are used for the same.

A software package Acado is used to make e-learning successful and enjoyable. Acado is a completely web based solution for academic purposes, which incorporates in addition to an E-learning Platform, a Digital Library, effective Collaboration & Groupware tools and Communication tools. A customized Institute Information Portal and individually password protected Personal Information Organizer are part of the package.

The E-learning Platform seamlessly integrates tools and templates which help faculty members to create and administer content, based on their independent style and need. By incorporating presentations, media objects and case studies, the faculty can amplify the quality of the lecture as also the classroom learning experience of his pupil. Learning effectiveness is enhanced by Acado's course support tools that foster interaction between faculty and student; enable performance tracking, student alert in case of specific events and book marking of personal reference material. Acado also doubles up as the basic framework for the Education Grid, or the inter-campus extranet for E-learning.

Internet & servers

- Wireless Broadband Services with a speed of 512KBps.
- Web server(www.sbcollege.org)
- Mail server(SB college employees can create email addresses of the form username@sbcollege.org)
- FTP server(ftp.sbcollege.org)
- Squid server as proxy server
- Library server(library automation)

NOC maintains all the servers.

Multimedia, Video conferencing

- Multimedia Class Rooms
- Language Labs
- Interactive Distance learning
- Video-Conferencing

Training Programmes

Center for Training and Development

(CTD) (Password-protected access for SB college employees only)
Courses include word processing, PowerPoint presentations, database design and management, web page development, graphics programs, desktop publishing, and more.

All departments at the College maintain computing support units to serve the specific needs of their students, faculty, and staff. These groups offer a variety of services that can include network and e-mail support, help with hardware and software problems, training, online documentation, and instructional computing support.

CTD arranged training on Acado by experts from Techno Park, Trivandrum where teachers learned how to use network and collaborative technologies to extend and enrich the teaching and learning experience. The session included a brief introduction to e-learning in the classroom, strategies that guide the effective

integration into curriculum, and discussions of e-learning standards and best practices.

Student Learning Programmes

CTD in collaboration with COC (Career Orientation Centre) arranges student training programmes. These programmes include Linux and Windows fundamentals, Java, Web server Programming, web page development, etc..

A number of job oriented courses are designed by CTD in collaboration with COC and KELTRON (A government of Kerala undertaking) to meet the tremendous demands for computer professionals in India and abroad. Students can join these classes after regular college hours.

CTD also acts as a placement cell and provides guidance and Campus Recruitment Training (at COC).

Edusat

Discussions with Dr.Sreevalsan, Director, IIITMK (State Govt. representative) are going on regarding SB's participation in Edusat programs.