decsystem10

REMOTE TIMESHARING LINKS SMALL COLLEGES

digital

DECsystem-10 is providing economical and effective computing services to members of a network of small colleges in Southern California. Keys to this use are the proven hardware, a wide range of software, and the realistic price of the DECsystem-10—a combination which permits small colleges to afford big computer power.

The timesharing service is provided by the Institute for Educational Computing of The Claremont Colleges in Claremont, California, thirty-five miles east of downtown Los Angeles. Officially founded in 1971, I.E.C. grew out of the former Computer Services Office of the Claremont University Center, the collective coordinating body for joint services of The Claremont Colleges.

Although regional computer centers aren't new, the Claremont venture is unique in several respects. It is the only regional academic computer network to be a self-supporting enterprise, operating as a nonprofit corporation and existing solely from the sale of terminal and programming services within the network. Rather than offer regional service to users on a time-available basis, as is the case in many university-centered networks, I.E.C. exists primarily to serve the computational requirements of small, undergraduate colleges.

Previous networks have also been hardware oriented, concerned with providing time on a large computer. I.E.C. goes a step further and attempts to maximize DECsystem-10 utilization by supporting the remote user with education, consultation, and software. The hardware link is secondary to the support of academic services. I.E.C.'s goal is to become a center for faculty education, software and curriculum development as well as information about the use of the computer in all phases of education.

The I.E.C. network consists of a DECsystem-1050 with 80,000 words of core memory supplemented by over 60 million characters of disk storage. DECsystem-10 has a long history of use in education and has proved to be a good general-purpose timesharing machine, a fact which I.E.C. feels is vital to the success of their project.

Most of I.E.C.'s users have KSR-33 or ASR-33 Teletype® terminals. However, those running APL programs or preparing on-line text use modified Selectric® typewriters with interchangeable typefaces. All terminals are hardwired via leased telephone lines to the computer, which is housed in the basement of Scott Hall on the Pitzer College campus in Claremont. Distant remote users are currently multiplexing their signals in cooperation with other users.

The range of capability provided by the DECsystem-10's variety of language processors is key to the network's ability to handle a spectrum of educational computing needs. Those currently mounted include BASIC, FORTRAN IV, SNOBOL, LISP, AID, COBOL, APL, ALGOL, MACRO (DECsystem-10 Assembler), POP-2, and DYNAMO.

The Institute also maintains a growing library of software packages to support the unique requirements of users in the natural and social sciences, mathematics, and humanities. Programs and applications developed at network colleges are collected, tested, documented, and disseminated to participating schools through traveling consultants, published notices, and system messages.

The current staff of I.E.C. reflects its commitment to educational computing. Collectively, I.E.C. has over 20-years experience in educational computing, not only on the theoretical level but also on the practical, day-to-day problems that face any academic installation.

Recently, I.E.C. conducted a two-week faculty training seminar under the sponsorship of the National Science Foundation. The purpose of the program was to create an awareness among the members of the educational community of the type of problems that could be handled with a computer. The vehicle for this awareness was training in the BASIC programming language. Although most of the attendees had no previous computer experience, many approached a high level of programming competence. More importantly, the training allowed them to examine their own discipline and decide where the computer could have a beneficial impact on their work, either for themselves or their students. Prominent consultants and I.E.C. staff members discussed with the faculty the philosophies they had seen or had themselves used in attempting to further the spread of computing at their own installations. The program's success and the general level of new faculty awareness may lead to a full-scale project aimed at exposing and training new faculty members in the use of computers.
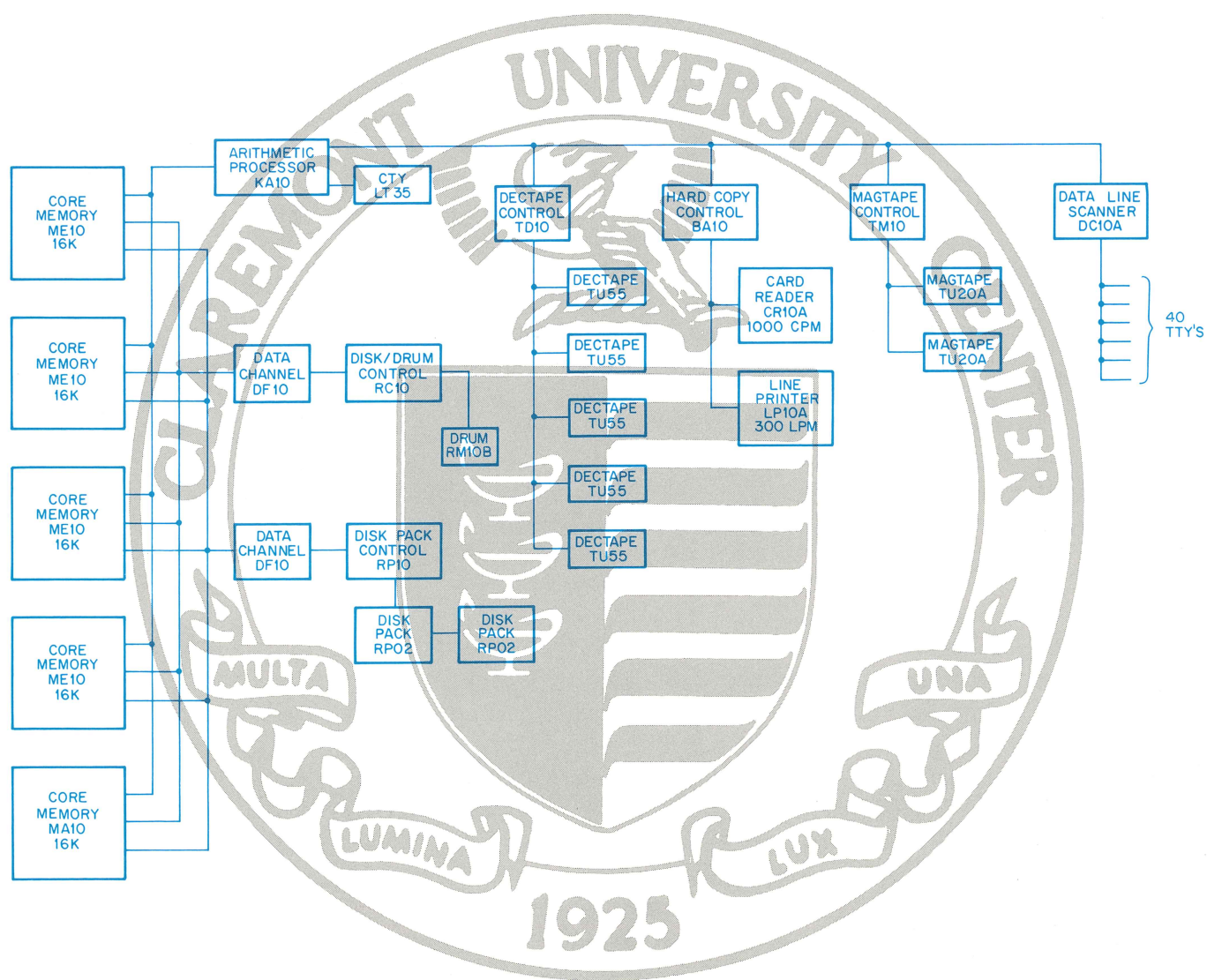
DIGITAL EQUIPMENT CORPORATION, Maynard, Massachusetts, Telephone: (617) 897-5111 • ARIZONA, Phoenix • CALIFORNIA, Sunnyvale, Santa Ana, Los Angeles, Oakland, San Diego and San Francisco (Mountain View) • COLORADO, Denver • CONNECTICUT, Meriden • DISTRICT OF COLUMBIA, Washington (Riverdale, Md.) • FLORIDA, Orlando • GEORGIA, Atlanta • ILLINOIS, Chicago • INDIANA, Indianapolis • LOUISIANA, New Orleans • MASSACHUSETTS, Cambridge and Waltham • MICHIGAN, Ann Arbor and Detroit (Southfield) • MINNESOTA, Minneapolis • MISSOURI, St. Louis • NEW JERSEY, Englewood, Metuchen, Parsippany and Princeton • NEW MEXICO, Albuquerque • NEW YORK, Centereach (L.I.), Manhattan, Syracuse and Rochester • NORTH CAROLINA, Durham/Chapel Hill • OHIO, Cleveland and Dayton • OKLAHOMA, Tulsa • OREGON, Portland • PENNSYLVANIA, Philadelphia and Pittsburgh • TENNESSEE, Knoxville • TEXAS, Dallas and Houston • UTAH, Salt Lake City • WASHINGTON, Seattle • WISCONSIN, Milwaukee • ARGENTINA, Buenos Aires • AUSTRALIA, Adelaide, Brisbane, Melbourne, Perth and Sydney • AUSTRIA, Vienna • BELGIUM, Brussels • BRAZIL, Rio de Janeiro, São Paulo and Porto Alegre • CANADA, Calgary, Alberta; Vancouver, British Columbia; Ottawa and Toronto, Ontario; and Montreal, Quebec • CHILE, Santiago • DENMARK, Copenhagen • FRANCE, Grenoble and Paris • GERMANY, Cologne, Hannover, Frankfurt, Munich and Stuttgart • INDIA, Bombay • ITALY, Milan • JAPAN, Tokyo • MEXICO, Mexico City • NETHERLANDS, The Hague • NEW ZEALAND, Auckland • NORWAY, Oslo • PHILIPPINES, Manila • PUERTO RICO, Miramar • SPAIN, Barcelona and Madrid • SWEDEN, Stockholm • SWITZERLAND, Geneva and Zurich • UNITED KINGDOM, Birmingham, Edinburgh, London, Manchester and Reading • VENEZUELA, Caracas