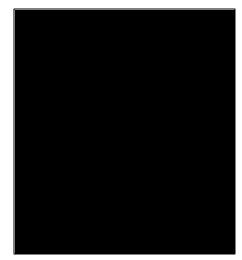
CaseHistory



TheengineersatCrayuseMacintosh computerstodesignsupercomputers.

MacintoshComputersImprove ProductivityatCrayComputer Corporation

CrayComputerCorporationisdesigningandbuildingasupercomputerbasedon gallium-arsenidechiptechnology. This new machine--the Cray3 will run at a clock speed of 2 nanoseconds--ist wo times faster than the silicon-based Cray2 supercomputer. To speed up that design process, the Information Systems and Hardware Engineering departments at the company's Colorado Springs development facility, decided to exchange their MS-DOS systems for a platform with faster microprocessors and an easy-to-use interface for developing applications.

CrayComputerCorporationhas250AppleMacintoshcomputers.EveryMacintosh can access the building's Ethernetbackbone, eitherthrough an Ethernetbridge or directly, using an Apple EtherTalkinterface card, or a Kinetics Etherport card.

Almosteveryone in the company has a Macintoshon his orherdesk, and the Macintoshis used for everything from general office productivity to a HyperCardbased executive information system accessing the Hewlett-Packard HP 3000 for accounting and human resources data, HP 3000 terminal emulation, and engineering functions such as logic design, testing and simulation. According to Jerry Stevens, Information Systems specialist, "Macintosh computers have improved productivity, reduced training requirements throughout the organization, and facilitated development of end-user applications."

Inaddition to the Macintosh computers, the Ethernet network includes Sunfile servers and workstations, MS-DOS machines, HP3000 and HP9000 minicomputers, and Cray2 supercomputers. Users can access Hewlett-Packard plotters or do HP terminal emulation through Shiva Net Serial devices. In addition, dedicated Net Serial, connected directly into the company's telephone system, is used for electronic messaging.

UsingApple's HyperCardsoftware, Stevensrecently developed an executive information system (EIS) that charts information on head count, inventory, and expenses versus budgets that is updated daily on an HP 3000. The program calls the HP minicomputer every morning at 1:30 and requests the latest figures. It takes only about one minute for the information to be downloaded from the HP to the Macintoshand into HyperCard. HyperCard then creates barcharts and graphs from the information and places a copy on the Apple Share file server in the folders of

CaseHistory

everyone who is cleared for it. This enables managers to view up-to-date information first thing in the morning.

"Idon'tknowhow I would have written our EIS using something other than the Macintosh," says Stevens. Hewrote the EIS in three months, fitting it between other tasks, and credits the Macintosh personal computer and HyperCardwith the short development time. "At first, I thought I would have to use a variety of software products to get the job done, but I was able to write the whole system using only HyperCard. The system we developed is userfriendly, it's packed with information, and it gets really specific. The system is a lot better, and its development was a lot easier than any one expected it could be."