



The Computer Museum

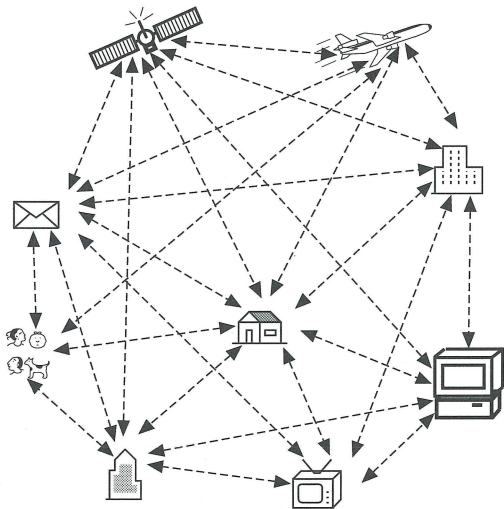
NEWS

Networking Edition

Exhibit on Global Networks to Open in 1994

The world's first exhibit focusing solely on computer networking will open in late 1994. This 5,000-square-foot, \$1.5 million exhibit will offer first-hand experiences with networks and a broad and balanced view of how network technology impacts daily life.

A 1992 planning grant from The Fannie Cox Foundation spurred development of the exhibit. With additional grants from Secretary James Kerasiotes, Executive Office of Transportation and Construction, State of Massachusetts; Novell Inc.; Paul and Kathleen Severino; and Wellfleet Communications, Inc., \$300,000 has been raised. The Museum seeks further corporate and foundation support for this landmark exhibit.



The goal of the exhibition is to make the invisible "information infrastructure" not only visible, but also understandable. Hands-on experiences will illuminate how networking technology works. Specific applications in transportation, health care, government, education, finance, and retail

will clarify how computer networks affect our lives. Moral and ethical issues, such as privacy, and some of the cultural dimensions—life, love and legality "on the Net"—will also be explored.

To turn these educational goals into a compelling exhibit, Museum staff are now evaluating prototypes with visitors' help in an Exhibit Lab (see stories, pages 4-5).

A variety of specialized experiences, including a film on the basic concepts of networks, and areas devoted to a "networked society" in microcosm, network technology, and applications will be featured.

"Networked Society" in Microcosm

A rich hands-on environment represents a "networked society." Each computer will have a different application, and all will be linked with a network. Visitors will log into the "society" and choose a "network guide," such as a doctor, teacher, child or spy. The guides will reveal a microcosm of a society networked together and solving problems.

Visitors and their guide will move from one computer to the next, creating and observing the evolving scenario in which networks are used in such areas as government, health care, education and finance. At the end of this activity, the individual has the opportunity to reflect on these experiences.

Network Technology

The basic principles of networking will be explored. Familiar examples of non-computer networks (rivers, the Interstate Highway System, families), different computer network structures (Ethernet, Token-ring, wireless), and network scales (LANs, WANs) will be presented. Using pre-configured hardware, visitors will handle copper and fiber optic cable, experimenting with connections of varying information-carrying capacities, to build

their own network. Once built, it could be used to transmit text and video. Other interactives will allow experimentation with other aspects of the technology (packet-switching, how information can be sent optically, how local area networks are connected).

Application Areas

In the exhibition's largest space, visitors can explore network applications in compelling real-world and fantasy settings. They will try real computer networks and, through actual examples, face some of the ethical issues of the electronic age.

A simulated traffic control center used by Boston's Central Artery/Third Harbor Tunnel project will be re-created, where management of real-time traffic flow control can be observed. Live video feeds of digital cameras monitoring the traffic will be featured. An up-to-the-minute information network will provide advice on the best route home that day.

The phone system will be explored as a computer network. In a re-creation of a telephone control center, flashing lights will show different levels of caller demand and up-to-the-second news broadcasts. An opportunity to respond to a simulated scenario will be provided. For example, visitors will intervene during a simulation of Mother's Day (when telephone traffic is busiest) to prevent gridlock.

As networks reach into the home through copper wire, optical fiber and cable, people shop, rent movies, order food and get all sorts of information.

Hands-on simulations will sample the home network systems being developed. The social costs and benefits will be explored, such as "telecommuting," in which networks allow people to work at home and still be connected.

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Global Networks Exhibit Opens 1994 *(continued from P.1)*

New styles of information and communication can be directly experienced. Full motion video will connect to people at remote sites. Novel “communities” being formed on bulletin boards and commercial network connections will be spotlighted for visitor exploration.

The exhibit itself will be “on-line” so that people anywhere in the world can take a “field trip” to the Museum and “chat” (via text) real-time with visitors. Anyone with a modem will have partial access to the exhibit through a bulletin board, a File Transfer Protocol site, and connections from commercial services.

As with the Museum’s other exhibitions, the most effective networked computer exhibits will be made available to other museums and science centers around the world via the Exhibit Kits Program.