

Anatomy of a Network

WAN A Wide-Area Network connects suppliers, factories, and warehouses with corporate headquarters.

GROUPWARE Network software that allows groups of people to work together on documents, schedules, and so on.

ISDN Local phone companies offer Integrated Services Digital Network lines that can transmit voice, data, and video simultaneously, making it easier to telecommute.

WORLD WIDE WEB SERVER A computer that stores "pages" of information that can be called up across the Web, a way of organizing the unwieldy Internet. Increasingly this is being used to set up electronic malls to reach customers directly.

NETWORK SERVER A computer that holds files and programs shared by all the PCs on a LAN. Sort of a remote disk drive.

LAN A Local - Area Network (LAN) connects computing devices within a building.

CENTRAL PHONE OFFICE Phone company building where switching equipment, completes local calls and passes long-distance calls to the fiber-optic lines of long-distance carriers.

THE MOBILE WORKER operates using a cellular phone and pager which transmit via radio waves.

GATEWAY A computer that connects the LAN to the phone network.

PBX A Private Branch Exchange is a company's automatic switchboard.

MAKING ALL THE CONNECTIONS

For the past decade, companies have been moving away from large mainframe computers to networks of personal computers, a setup known as client/server computing. The heart of this model is the local-area network, or LAN, a pipeline connecting computers and peripheral devices so they can share data. Employees use the LAN to send E-mail and call up files stored in a communal server, and to collaborate

on files using groupware. The mainframe still has a big role—performing heavy-duty jobs and acting as a repository for large databases.

To exchange information with computers outside the building—at a factory in another state, say—the PBX funnels calls and data to local and long-distance services. It also manages all internal voice traffic and a company's voice mail system. The LAN is con-

nected to the PBX via a gateway computer crammed with modems.

Fiber-optic cables provide high-speed links in and out of the local phone company's central office. This is where calls are routed between local subscribers, long-distance networks, and wireless services such as cellular phones. ISDN speeds data over ordinary residential phone lines used by telecommuters.

Increasingly, businesses are using wide-area networks to engage in electronic commerce with suppliers and customers. The Internet, a worldwide network of computers linked by phone lines, has emerged as a means for low-cost business networking. And there's a flurry of activity on the Net's World Wide Web, an engaging way to post information and electronic advertising that reaches a potential 25 million Internauts.