

Exhibit 21

client

client **1.** In an Internet service, a program that can communicate with a server located on the Internet to exchange data of a certain type. A Web browser is a client for accessing information available on Web servers. **2.** In a client/server network, a program that is designed to request information from a server. See *client/server*, *heavy client*, *light client*. **3.** In Object Linking and Embedding (OLE), an application that includes data in another application, called the server application. See *client application*.

client application In Object Linking and Embedding (OLE), an application in which one can create a linked object or embed an object. See *server application*.

client/server A design model for applications running on a network, in which the bulk of the back-end processing, such as performing a physical search of a database, takes place on a server. The front-end processing, which involves communicating with the user, is handled by smaller programs (called clients) that are distributed to the client workstations. See *heavy client*, *LAN*, *light client*, *WAN*.

clip A portion of a video, especially one that has been digitized using a video capture board. See *video capture board*.

clip art A collection of graphics, stored on disk and available for use in a desktop publishing or presentation graphics program. The term is derived from a graphics design tradition in which packages of printed clip art were sold in books and actually clipped out by layout artists to enhance newsletters, brochures, and presentation graphics. Most page layout or presentation graphics programs can read graphics file formats used by clip art collections available on disk.

Clipboard In a graphical user interface (GUI), a temporary storage area in memory where material cut or copied from a document is stored until one pastes the material elsewhere.

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clip-on pointing device A trackball that clips on the side or front of a portable computer. These devices have fallen in popularity because modern notebook computers have built-in pointing devices such as touchpads or pointing sticks. See *freestanding pointing device*, *mouse*, *snap-on pointing device*.

Clipper Chip A U.S. government-backed encryption technology, housed on a semiconductor that would have been manufactured in massive quantities that would provide private individuals with the means to encrypt their messages. However, the Clipper Chip includes a back door that would enable law enforcement agencies to eavesdrop on the message. To do so, law enforcement personnel would have to obtain a warrant, which is now required to eavesdrop on telephone communications. Privacy advocates fear that the government would abuse its power, eavesdropping on conversations without having obtained the proper certification, while law enforcement personnel fear that encryption technologies will prevent the detection of terrorist and drug-dealing activity. The Clipper Chip proposal was seriously derailed after a researcher proved that its encryption scheme was not reliable, but U.S. government security agencies continue to make similar proposals. See *back door*, *encryption*, *key escrow*.

clock An electronic circuit that generates evenly spaced pulses at speeds of millions of hertz (Hz). The pulses are used to synchronize the flow of information through the computer's internal communication channels. Most computers also contain a separate circuit that tracks the time of day, but this has nothing to do with the system clock's function. Synonymous with system clock. See *clock/calendar board*, *clock speed*.

clock/calendar board An adapter that includes a battery-powered clock for tracking the time and date. These were popular on the earliest PCs, which were not otherwise capable of remembering the date and time when turned off.

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clock cycle The time between two consecutive pulses of a computer's system clock. A personal computer goes through billions of clock cycles every second.

clock-doubled Operating at twice the speed of the system clock. A 50 MHz processor operating on a motherboard with a 25 MHz system clock, for example, and an internal microprocessor operating at more than a 25 MHz 486DX on the system board. A clock-doubled chip, doing nothing to speed up operation of the microprocessor. Clock doubling and even quadrupling were possible with 486-class microprocessor systems but not used in Pentiums and newer processors. See *clock-quadrupled*, *clock-tripled*.

clock-quadrupled Operating at four times as fast as the system clock. A 133 MHz processor operating on a motherboard with a 33 MHz system clock. See *clock-doubled*, *clock-tripled*.

clock speed The speed of the system clock of a microprocessor. The rate at which operations proceed with the processor's internal processing circuitry. Clock speeds bring noticeable differences in microprocessor-intensive tasks such as recalculating a spreadsheet, but are not the only feature that determine performance. The system's bus speed, the speed of its memory, contribute significantly to the overall performance of a computer. Disk-intensive operations proceed slowly, regardless of clock speed. Hard and floppy disks are sluggish when comparing clock speeds, do not compare dissimilar processors; for example, a Pentium running at 300 MHz is faster than a Pentium II running at 300 MHz.

clock-tripled Operating at three times as fast as the system clock. Some microprocessors perform internal microprocessor functions faster than clock-doubled or standard microprocessors but do nothing to speed up the operation of the system. See *clock-doubled*, *clock-quadrupled*.