Hargrave's Communications Dictionary

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telluric current Currents circulating in the Earth or in conductors connecting multiple points on the Earth (grounded points) due to voltages induced in the Earth.

Telnet **(1)** An acronym for TELephone NETwork. **(2)** A standardized application that provides a terminal interface with hosts using the Transmission Control Protocol/Internet Protocol (TCP/IP) network protocol. *Telnetting* to any host provides an interactive terminal session regardless of the remote host type or its operating system. It is defined in Internet STD8, RFC854 and extended with options by many other Request for Comments (RFCs).

Telnet provides a standard protocol (the *Network Virtual Terminal—NVT*—protocol) for character-based remote terminal connections. It allows users to log onto remote hosts as if they were a terminal connected directly to the host. However, the NVT protocol includes only half-duplex communications and that, only in line mode. See also *TCP/IP.*

Telocator Alphanumeric Protocol (TAP) A protocol for submitting messaging requests to a pager service by means of a modem. It uses a 7-bit ASCII, even parity, <XON>/<XOFF> protocol. Doug Morrison of Radiofone Corporation wrote the original version.

RFC1645 and RFC1861 also address methods of delivering both alphanumeric and numeric messages to radio paging terminals. Also called *Personal Entry Terminal* (*PET*) by Motorola, *IXO* protocol by the IXO Company, and *IXO/TAP* by most users. See also *TDP.*

TELSET An acronym for TELephone SET.

TEM An abbreviation from Transverse Electric and Magnetic (Transverse ElectroMagnetic). See also t*ransverse mode.*

temperature coefficient The ratio of the change of a particular parameter value of a device to the change in temperature of the device. Generally, temperature coefficients are expressed as a percentage.

temperature rating The range of temperatures to which a device may be subjected, under a specified set of operating conditions, such that no operating property is degraded more than allowed.

tempest **(1)** In encryption, the name referring to the investigation and control of security jeopardizing emanations from electrical, electronic, and other sources. *Tempest* secure devices provide complete isolation between the unencrypted and encrypted environments and signals. **(2)** To shield against compromising emanations.

temporal Pertaining to the relation of a process, action, or other parameter with time.

temporal database A database that can store and retrieve temporal data, that is, data that depends on time in some way.

TEN An acronym for Telephone Equipment Network.

ten finger interface A term that refers to the interface between two networks that cannot be directly connected for security reasons. The derivation refers to the practice of placing two terminals side by side and having an operator read from one and type into the other. See also *tempest.*

ten's complement See *complement.*

ter Meaning third in Latin. The term is used as a suffix to denote a third version of a standard released by ITU-T.

tera- **(T)** **(1)** The SI prefix for 10^{12} (one trillion). **(2)** With computers and other binary systems, a multiplier of 2^{40}.

terabyte 2^{40} bytes (1 099 511 627 776 bytes).

terminal **(1)** A device used for data input and/or output. *Terminals* can be input only (called *send only terminals*), output only (called *receive only terminals* or *display terminals*), or both. A terminal may have some degree of computing power; hence, there are several categories possible. That is,

- *Dumb terminal*—lacks any memory or other components needed for doing computations. All processing for the terminal is done by the host or by the host's front-end processor (FEP). They have limited flexibility for use because they are not addressable. This means they cannot be shared on a bus.
- *Smart terminal*—has some processing capabilities and can be addressed.
- *Intelligent terminal*—has its own processor, can do its own processing, and can run programs. PCs often are used as intelligent terminals.

(2) In electronics, an electrical termination that can be connected to something else, e.g., a wire or connector.

terminal access controller (TAC) A host computer that accepts terminal connections, usually from dial-up lines, and that allows the user to invoke Internet remote logon procedures, such as Telnet.

terminal adapter (TA) A device that is used to permit non-Integrated Services Digital Network equipment (such as fax machines, computers, and analog telephones) to be connected to the ISDN digital telephone line (at the "R" interface point). Like modems, *TAs* may be designed for internal installation to a computer or may be external with their own power supply. A *TA*'s output conforms to one of the four ITU-T standards V.110, V.120, X.30, or X.31. Typically, it will support standard RJ-11 telephone connection plugs for voice and RS-232, V.35 and RS-449 interfaces for data.

terminal block An insulating base with a means for connecting wiring paths together. The connecting means may be screw terminals, insulation displacement terminals, quick release clips, and so on.

One example of a terminal block is Western Electric's 66-type telephone wire terminal block.

terminal cluster controller A device that connects one or more PCs to a front-end processor of a mainframe computer, e.g., an IBM mainframe network. An alternative uses a gateway to the mainframe.

terminal emulation The imitation of a terminal through the use of software in a computer. Terminal emulation software is used to make a local microcomputer behave as if it were a specific terminal type while it is communicating with a host.

Common terminals emulated include IBM's 3270 and Digital Equipment Corporation's VT-52, VT-100, and VT-200. (The VT-100 is by far the most common.) Host computers can only communicate with a finite number of terminal types; therefore, if the user's terminal is not one of the expected types, only two choices are possible:

- First, don't communicate, or
- Second, use software to fool the host into thinking that the terminal is one of the acceptable types.

terminal equipment **(1)** Communications equipment at either end of a communications link. It permits the involved terminal stations to interface with the communications link and to accomplish the task for which the link was established. **(2)** In radio relay systems, equipment used at points where data are inserted or delivered (as distinct from equipment used only to relay a reconstituted signal). **(3)** Telephone and telegraph switchboards and other centrally located equipment at which communications circuits are terminated.

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