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NEWTON's TELECOM DICTIONARY

30th Updated, Expanded, Anniversary Edition

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Harry Newton
with Steve Schoen

NEWTON's TELECOM DICTIONARY
30th Updated, Expanded, Anniversary Edition
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multi-tester Usually an alternate name for VOLT-OHM-MILLIMETER, but may also apply to other MULTI-FUNCTION testing devices.

multi-threading See Thread.

multi-tier tariffs A way of paying for something (i.e. equipment) from your local phone company. The idea is that one tier of your monthly payments is to pay off the equipment, and after a finite period, this tier payment drops to zero. The next tier is to pay for your monthly service and it is ongoing. Other tiers are for other reasons. As this technique was practiced by the Bell System, it was called "two tier." You will no longer find two tier tariffs in common use.

multi-touch An interactive touch-screen technology in some smartphones (including the iPhone and the iPad) that supports two-finger gestures, such as a pinching, which reduces the magnification of the screen display, and spreading (the opposite of pinching), which increases the magnification of the screen display.

multi-user PC A microcomputer that has several terminals attached to it, so that multiple users can simultaneously use its resources. Multi-user PCs can either slice up the time of a single microprocessor or can give each terminal-based user his own microprocessor. Multi-user PCs are an alternative to LANs and are typically used in specialized, one-application solutions, such as a doctor's office billing system.

multi-user software An application designed for simultaneous access by two or more network nodes, i.e. two or more users on a network. It typically employs file and/or record locking. It is not associated with multi processing, nor does it require multi processing to implement.

multi-user telecommunications outlet assembly A grouping in one location of several telecommunications outlets/connectors.

Multi-Vendor Integration Protocol See MVIP.

Multi-Wavelength Optical Repeater See MOR.

multi-way communication A multimedia definition. Multi-way communication goes between two people, or between groups of people in all directions. Multi-way communication can be in real-time, or in store-and-forward mode. Examples of multi-way communication include a video conference, where one individual is giving a presentation to a group of people who listen and ask questions from their workstations; and group conferencing, where several people collaborate, supported by audio, video, and graphics on their workstation screens.

multiangulation A method of locating the source of a radio signal through the use of multiple receivers, each of which focuses on the direction of maximum signal strength. Through the use of multiple receivers, it is possible to plot the general location of the transmitter, even though some radio signals may bounce off and are absorbed by physical obstructions such as buildings, trees and cars. This process uses the angle of arrival of the received radio signals. When three radio receivers are used for this process, it is called triangulation.

multicast 1. Sending data to many places. Also spelled multi-cast. Multicast allows messages to be sent to a selected group of workstations on a LAN, WAN or the Internet. Multicast is communication between a single device and multiple members of a device group. For example, an IPv6 router might address a series of packets associated with a routing table update to a number of other routers in a LAN internetwork. Similarly, a LAN-attached workstation might address a transmission to a number of other LAN-attached devices. Companies are discovering they can distribute material to large numbers of employees and others on their intranets more efficiently using multicast than they can by sending such material in separate bursts to each user. In multicast mode, routers distribute a given file to all hosts that have signaled they want to receive the material, using the Class D addresses of the IP addressing hierarchy. The message is sent from the transmitter down the tree only to those nodes that need to receive it in order to further distribute it to downstream nodes, and so on. At each of those points, the message is replicated and retransmitted only as necessary. Multicasting is much more efficient in many applications than is either broadcasting or unicasting. See also Multicast and Multi-Cast Packets and IPV6. Contrast with Unicast, Anycast and Broadcast.

2. A TV term that simply means more channels will be available for viewers.

It's often used to refer to the explosion of special interest channels that surround when digital TV hits the scene and uses the CATV network to deliver its programs. I suspect that the explosion of channels will lead some to think Johnny Carson quips about channels for "one-eyed, one-legged, one-breasted."

multicast address resolution server See MARS.

multicast backbone Mbone. A method of transmitting digital data over the Internet in real time. The TCP/IP protocols used for Internet multimedia are unsuitable for real-time audio or video; they were designed to deliver other files reliably, but with some delay. MBONE requires the use of another backbone service with special hardware and software to deliver video and audio transmissions; the existing Internet hardware cannot handle time-critical transmissions.

multicasting Sending data to a group of destinations at once. See also Multicast.

multichannel The use of a common channel to make two or more transmissions. Frequency Division Multiplexing (FDM) accomplishes this by splitting the frequency band of the common channel into several narrower bands. Time Division Multiplexing (TDM) divides the entire channel into time slots.

multichannel aggregation A feature under Windows NT which gives users the option of using two phone lines for the same remote session. This way you double bandwidth, thus making their session go twice as fast.

multichannel audio digital interface See MADI.

multichannel operator A generic term that encompasses cable TV providers, telco TV providers, and satellite TV providers. The term multichannel is used because these operators deliver multiple TV channels to customers, unlike over-the-air TV broadcaster, which delivers only a single TV channel.

multichannel subscriber A subscriber to a pay TV service from a cable company, satellite TV operator, or telco TV operator.

multichannel transmitter A transmitter using low-level combining techniques to process many channels at the same time.

multichannel video programming distributor MVPD. A term used in the Telecommunications Act of 1996 and by the FCC for a service provider that delivers subscription TV services, such as a cable TV company, direct broadcast satellite (DBS) provider, and telco TV provider.

MULTICS MULTiplexed Information and Computing System. In the mid-1960s, MULTICS was the focus of a huge development effort sponsored by MIT (Massachusetts Institute of Technology), Bell Telephone Laboratories and General Electric. The idea was to develop a "computer utility" that would provide computing resources to the population of an entire city or area—in contemporary terms, we would describe this as a multi-user time-share system. MULTICS was a failure. When Bell Labs pulled out of the project, Ken Thompson, Dennis Ritchie and a few other Bell Labs programmers developed UNICS, a single-user version of MULTICS. UNICS later became known as UNIX. See UNIX.

multicore phone A phone with multiple processors. Such a phone—called a smartphone—has one or more processors for general computing, a graphics processor, and a processor for multimedia. When the first edition of this dictionary hit the stands in 1984, the only multicore systems available were minicomputers, mainframes, and supercomputers. Who would have thought back then that phones would ever become multicore systems? Who would have thought that a phone would ever have even a single processor? Today's smartphones—iPhones, Blackberrys, Androids, etc.—are now more powerful than most computers were in 1984.

multidrop Also known as a point-to-multipoint circuit, a multidrop circuit has one point of termination on one end, and multiple points of termination on the other end. For example, a hospital in Detroit leases a private data line going to NYC (New York City) to connect the Detroit primary data center to the smaller host computers in each of four NYC hospitals. Therefore, the "end" in Detroit connects to NYC, where there are four drops. See also Drop.

multifactor authentication I enter my user name and my password on the site. The site may also ask for the number that showing on a small random number generator gadget I'm carrying with me. Or the site may ask me to dial a cell phone for a number that I just got texted from the site. My bank also asks me every time I want to add someone new to my list of people on my address book. I can wire to...

multifiber cable A fiber-optic cable that can be an independent optical fiber. In PCM systems, each frame can be identified in each multifiber.

multifrequency monitor They can show images in series, more expensive than them more prone to instant or may not look better than on the screen's other attributes.

multifrequency pulsing (DTMF). See DTMF.

multifrequency signaling (DTMF). See DTMF.

multifunction MFS TI generally associated with a fax machine with a p term is not very precise, will print, photocopy, for term.

multifunction mobile such as a camera, web watch, and SMS.

multifunction switch See end office switch.

multihaul A network or for metro traffic, designed to carry all interface cards and know as a multihop.

multihomed computer figured with multiple network. The host route traffic for other.

multihoming TI discrete lines to a malfunction of or

multilevel protocol customers may for calls with low

multiline handset phone in the group

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multiline telephone Key Telephone

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