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NEWTON'S TELECOM DICTIONARY

**The Official Dictionary
of Telecommunications
Networking and
the Internet**

**16th
EXPANDED
& UPDATED
EDITION**

BY HARRY NEWTON

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to a key telephone set to indicate a CO or PBX line is ringing in. Pulse repetition rate is normally 60 Hertz with a duty cycle of 5 sec on and 5 sec off. This signal is usually provided by the local Interrupter KTU.

Lamp Leads Lamp and Lamp Ground (L&LG) wires connected to all lamps in the key telephone set over which steady and pulsed 10 VAC signals from the Line Card KTU are sent.

Lamp Steady A steady (unpulsed) 10 VAC source of lamp power sent to a key telephone set to indicate that the line is in use. See also Lamp Battery.

Lamp Wink A pulsed 10 VAC source of lamp power sent to a key telephone set to indicate that the line is on Hold status; pulse repetition rate is normally 120 Hertz with a duty cycle of .4 sec on and .1 sec off. This signal is usually provided by the local Interrupter KTU.

LANs Line Adapter Modules.

LAN Local Area Network. A geographically localized network consisting of both hardware and software. LANs link personal computers, workstations, printers, file servers, and other peripherals. Devices on a LAN typically transmit data inside buildings or between buildings located near each other. For a more detailed explanation, see Local Area Network. See also AppleTalk, Ethernet, LocalTalk, token ring, virtual networking systems (VINES), and Xerox Network Systems (XNS).

Local Area Network, A short distance data communications network (typically within a building or campus) used to link together computers and peripheral LANs between klomger. For a more detailed explanation, See Local Area Network: devices (such as printers) under some form of standard control. For a **LAN Adapter** A PC-compatible circuit card that provides the PC-to-LAN hardware connection. In addition, LAN software drivers and LAN operating systems need to be run on the PC for it to function as a LAN station.

LAN Aware Applications that have file and record locking for use on a network.

LAN Emulation Also known as LAN-E, it is a set of specifications developed by the ATM Forum for the operation of LAN-to-LAN bridged connectivity over an ATM network, allowing ATM to be deployed on a legacy LAN or with legacy LAN applications.

LAN Ignorant Applications written for single users only. These are not recommended for use on LANs (local area networks).

LAN Intrinsic Applications written for client-server networks.

LAN Manager 1. A person who manages a LAN. Duties can include adding new users, installing new hardware and software, diagnosing network problems, helping users, performing backup and setting up a security system. Unlike MIS managers, LAN managers are rarely formally trained in LAN management. Sometimes they're called LAN Network Managers.

2. The multi-user network operating system co-developed by Microsoft and 3Com. LAN Manager offers a wide range of network-management and control capabilities. It has been superseded by Windows NT Advanced Server.

LAN Network Manager An IBM-developed network management tool. It is a software program that runs under OS/2 and which provides management and diagnostics tools needed to manage a Token Ring LAN. A PS/2 running LAN Network Manager collects vital statistics and special management data packets on the ring to which it is connected. When multiple rings are involved, the LAN Network Manager relies on the token ring bridges and routers to help in managing

those token ring LANs that are not directly connected to the LAN Network Manager station. IBM has installed software in its bridges called the LAN Network Manager Agent. The agent software acts as the eyes and ears for the LAN Network Manager station so that the station can manage the remote rings as if it were connected directly to them. If there were no such agents, managers of networks would be blind to what's going on these LANs. Remote management with LAN Network Manager includes the ability to perform ring testing, analyze traffic and error statistics, and force adapters off the network.

LAN Server IBM's implementation of LAN manager, now largely superseded by OS/2 2.1.

Land Attack A land attack occurs when a malicious person sends instructions over a network to a server attempting to crash the server. Officially known as land c code, Land Attack works by tricking the targeted server into trying to set up a TCP session with itself. If the machine falls for this form of IP spoofing, it goes into a TCP closed loop and has to be physically rebooted. A number of security experts, including Chris Klaus, chief technology officer at Internet Security Systems, Inc., agree there is no reason a machine would want to talk to itself like this. Systems should be designed to prevent such attacks.

Land Line A telephone circuit that travels over terrestrial circuits, be they wire, fiber or microwave. A call may originate from a source not connected to the "terrestrial" network, as from a car telephone or a ship to shore radio, and the call be completed via a Landline.

LANDA Local Area Network Dealers Association. It runs a number of excellent trade shows each year. Its members are LAN resellers, distributors, manufacturers, and consultants. In 1993 it merged with NOMDA, the National Office Machine Dealers Association. And shortly thereafter, NOMDA/LANDA changed its name to the Business Technology Association, headquartered in Kansas City. www.blantet.org. See BTA.

Landscape Most computer screens are horizontal, i.e. they are wider than they are high. In the new language of computer screens, such screens are called "landscape." When a computer screen is higher than it is wide, it's called "portrait." Some computer screens can actually work both ways. Some even have a small mercury switch in them that determines which way the screen is standing (portrait or landscape) and will adjust their image accordingly.

LANE An ATM term. LAN Emulation: The set of services, functional groups and protocols which provide for the emulation of Ethernet and Token Ring LANs over an ATM backbone. Operating at the Link Layer (Layer 2 of the OSI Reference Model), LAN Emulation takes over the MAC (Medium Access Control) layer function found on Ethernet and Token Ring NICs (Network Interface Cards). LANE supports connectionless service in either a broadcast or multicast mode. The network addresses of the LECs (LAN Emulation Clients) are resolved through a LES (LAN Emulation Server), by virtue of a LUNI (LAN Emulation User-to-Network Interface), as defined by the ATM Forum. The LES maintains a table of MAC-to-ATM addresses in order that the native MAC addresses of the LAN-attached devices (e.g., workstations) can be mapped into ATM addresses, with the process being reversed on the destination end of the transmission. Another server, known as a BUS (Broadcast and Unknown Server) handles data addressed to the MAC broadcast address, all multicast and unicast traffic sent by a LEC prior to the establishment of an ATM address for the destination LEC. As a Layer 2 ATM service, LANE functions only within a single ELAN (Emulated LAN) environment, but offers significant advantage in the