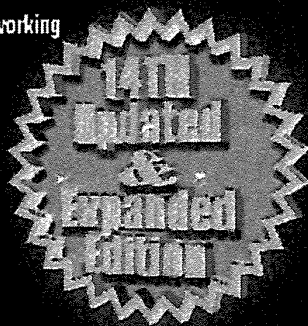


NEWTON'S TELECOM DICTIONARY

The Official Dictionary of
Telecommunications

- ◆ Computer Telephony ◆ The Internet ◆ IP Telephony ◆ Intranets, LANs & WANs
- ◆ Windows 95, NT, NetWare & Unix Networking
- ◆ Wired & Wireless Telecommunications
- ◆ Voice Processing ◆ Carrier Telephony
- ◆ The Intelligent Network ◆ ISDN & T-1
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by Harry Newton

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Main PBX or Centrex switch into which other PBXs or remote concentration of switching modules are homed. A PBX or Centrex connected directly to an electronic tandem switch (ETS). Also, a power source.

Main Cross-Connect The interconnect point where wiring from the Entrance Facility and from the Workstation is connected to telecom equipment.

Main Distribution Frame MDF. A wiring arrangement which connects the telephone lines coming from outside on one side and the internal lines on the other. A main distribution frame may also carry protective devices as well as function as a central testing point. See MAIN DISTRIBUTION FRAME FILL, DISTRIBUTION FRAME and FRAME.

Main Distribution Frame Fill The central office mainframe is the termination point for outside plant cables. The "fill" is the percentage of pairs used by customers of the total number of pairs on the frame. Optimum fills vary based on the size of the central office and the amount of growth in the area. A low fill means idle lines and wasted investment in outside plant. A high fill, plus unexpected growth, forces budget busting and crisis construction projects.

Main Feeder Feeder cable that transports pairs from the central office to branching or taper points.

Main Lobe The main lobe is the area with the maximum intensity in the pattern of radiation produced by an antenna. One presumes it's called "lobe" because the pattern in a microwave signal of the main lobe typically looks like a ear lobe.

Main Memory The principal random storage area inside the computer. Used for storing data and programs and under the direct control of the CPU — the main processor. Also called RAM memory.

Main Network Address In IBM's SNA, the logical unit (LU) network address within ACF/VTAM used for SSCP-to-LU sessions for certain LU-to-LU sessions. Compare with auxiliary network address.

Main PBX A main PBX is one which has a Directory Number (DN) and can connect PBX stations to the public network for both incoming and outgoing calls. A main PBX can have an associated satellite PBX, and can be part of a tandem tie trunk network (TTTN). If the main PBX provides tandem switching for tie trunks, it is called a tandem PBX. In the context of ESN (Electronic Switched Network), a main PBX has tie trunks to only one node. See PBX.

Main Satellite Service A PBX feature that allows multi-location customers to concentrate their attendant positions at one location referred to as the Main. Other unattended locations are referred to as Satellites.

Main Service Entrance In AC electricity, the main service entrance is the necessary equipment, usually consisting of main circuit breakers or fuses, a switch and branch circuit breakers or fuses, in a grounded enclosure (panel) connected directly to earth. Located in the building at the point of entrance of the supply conductors from the power utility. Other panels in the building are referred to as branch, service or supply panels.

Main Station A subscriber's telephone instrument, terminal or workstation used to originate and receive calls. Very often if two instruments have the same extension number (are bridged), one becomes the Main Station and the other is a bridged station for inventory purposes.

Main Terminal Room The location of the cross-connect point between the incoming cables from the telecommunications external network and the premises cabling system.

Mainframe A powerful computer, almost always linked to

a large set of peripheral devices (disk storage, printers, and so forth), and used in a multipurpose environment at the corporate or major divisional level. A mainframe is a large-scale computer typically containing hundreds of megabytes of main memory and hundreds of gigabytes of disk storage. It is capable of "serving" thousands of "on-line" terminals. The term — main frame — derives from the racks that typically hold a large computer and its memory.

Mainframe Chiller System Water-cooled mainframe computers rely on mainframe chillers for a continuous supply of liquid coolant to maintain processor temperature within a specified range. Exceeding the temperature specifications or an interruption of coolant flow can cause a sudden shutdown, interrupting of computer operations, and possible hardware damage, requiring costly repairs.

Mainframe Gateway A hardware/software system that allows PCs on a LAN (Local Area Network) to communicate with a mainframe. A single, usually dedicated, PC acts as the gateway. PCs on the LAN share its hardware and its communication link, communicating with it over the LAN cable. The most common mainframe gateway is an SNA gateway, which hooks a LAN into an IBM mainframe.

Mainframe Server Clients are devices and software that request information. Client is a fancy name for a PC on a local area network. It used to be called a workstation. Now it is the "client" of the server. A mainframe server is a large computer that stores lots of information and manages libraries of information. Here's a definition of Thin Client, courtesy of Oracle Corporation, writing in early 1994: "Mainframe systems store lots of data, but they're expensive, slow and difficult to use. Because all the processing happens on one large computer, they can't move large amounts of multimedia information to large numbers of users. Example, the IBM ES/9000, Amdahl's 5995-1400 or any plug compatible mainframe." See also CLIENT, CLIENT SERVER, CLIENT SERVER MODEL, FAT CLIENT and MEDIA SERVER.

Mains Some countries call their normal commercial power outlets — "mains." In Europe the frequency of commercial power is 50 Hz. In the United States, its frequency is 60 Hz. It's hard to convert the frequency of commercial power. It's easier to convert voltage. In Europe and Australia, normal voltage is 240 volts. In the U.S., it's 120 volts.

Mains Modem A modem which is part of a system called remote metering which monitors electricity usage and allows electric companies to offer such services as electronic mail, burglar alarms and energy management. The idea of energy management is that if the electric companies could turn off unnecessary appliances for a few hours during peak times, they might not have to build expensive new power stations. In exchange for that favor, they undoubtedly would be prepared to offer their customers price reductions.

Maintenance 1. All work needed to keep the telephone system operating properly, including periodic testing, repairs, etc. See PREVENTIVE MAINTENANCE.

2. All work needed to keep a software program operating properly, operating on new machinery and operating with new management needs. Often, software maintenance means substantially rewriting the original software program. Most of the work done by data processing departments in large companies involves maintaining old programs. This is not a put-down.

Maintenance Acceptance A term used in the secondary telecom equipment business. The point at which a maintenance company has tested a system, component, or peripheral device and determined that it meets manufacturer's specifications. The