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# NEWTON'S TELECOM DICTIONARY

The Official Dictionary of  
Telecommunications & the Internet

**15th Updated, Expanded and Much  
Improved Edition**

Ex. 3001

## **NEWTON's TELECOM DICTIONARY**

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email: [Harry@HarryNewton.com](mailto:Harry@HarryNewton.com)  
personal web site: [www.HarryNewton.com](http://www.HarryNewton.com)

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Published in the United States by  
Miller Freeman, Inc.  
Tenth floor  
12 West 21 Street  
New York, NY 10010  
212-691-8215 Fax 212-691-1191  
1-800-999-0345 and 1-800-LIBRARY

ISBN Number 1-57820-031-8

August, 1999

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Distributed to the book trade in the U.S. and Canada by  
Publishers Group West  
1700 Fourth St., Berkeley, CA 94710

Fifteenth Edition, Expanded and Updated  
Matt Kelsey, Publisher  
Christine Kern, Manager

Manufactured in the United States of America

port residing on the fabric (switch) side of the link. It attaches to a N Port (Node Port) at the connected device, across a link. See Fibre Channel.

**F-Type Connector** A low cost connector used by the TV industry to connect coaxial cable to equipment. See also F-Type Connector (which is the same thing, except spelled with a dash.)

**F/A** 1. Fault alarm.

2. Foreign administration.

**F-BCCH** Fast-Broadcast Control CHannel. A logical channel element of the BCCH signaling and control channel used in digital cellular networks employing TDMA (Time Division Multiple Access), as defined by IS-136. See also BCCH, IS-136 and TDMA.

**F-Block Carrier** A 10 MHz PCS carrier serving a Basic Trading Area in the frequency block 1890 - 1895 MHz paired with 1970 - 1975 MHz.

**F-ES** Fixed End System

**F-Type Connector** These are used to terminate coaxial cable. This connector is mostly used for video applications. It's a male single-conductor connector and screws into the female jack.

**F2F** Face to Face. When you actually meet someone with whom you have been corresponding electronically, perhaps through a chat room over the Internet. F2F often is quite a surprise, as your "pen pal" may not be anything like he said he was. F2F also can be very dangerous. Never, ever meet someone F2F unless you have a companion with you and you meet in a well-lit public place. Never, ever give the other person your real name, address or telephone number until you have met him F2F and are confident that he is who he says he is. Tell your children to never, never, ever agree to meet someone F2F unless you approve in advance and you are with them at the meeting. This is a very, very dangerous world full of very, very dangerous people who prey on the unsuspecting.

**Fab** Factory that makes ("fabricates") IC chips.

**Fabric** 1. A descriptive term referring to the physical structure of a switch or network. Much like a piece of cloth, physical/logical communications channels (threads) are interwoven from port-to-port (end-to-end). Ideally, data are transferred through this switch or network on a seamless basis. In ATM and Fibre Channel, the switching fabric generally is non-blocking, or virtually so, from port-to-port. In the Internet, data works its way through a complex, and even unpredictable, interwoven network of networks comprising transmission facilities, packet switches and multiple carriers.

2. Multiple Fibre Channel switches interconnected and using Fibre Channel methodology for linking nodes and routing frames in a Fibre Channel network. See Fibre Channel.

anything and everything. To me it sounds like toilets. But it's not. It can mean the equipment and services which make up a telecom system. It can mean offices, factories, and/or building. It can be anywhere you choose to put telecom things. Oops, I nearly said telecom facilities. So "facilities" means practically anything you want it to mean so long as it covers a sufficiently broad variety of "things" which you haven't got a convenient name for. "Facilities" sounds better than things, especially if you want to sound pompous.

**Facilities Administration And Control** A PBX feature which allows you, the subscriber, to assign to your users features and privileges like authorization codes, restriction levels and calling privileges.

**Facilities Assurance Reports** This feature allows a subscriber to get an audit trail of the referrals produced by the automatic circuit assurance feature of some PBXs. The audit trail will identify the trunk circuit, the time of referral, the nature of the problem and if a test was performed, the outcome of the test.

**Facilities Based Carrier** A carrier which owns most of its own facilities (i.e., stuff), such as switching equipment and transmission lines.

Facilities based end to end.

There are three benefits to being a facilities based carrier. Cheap, roll out new features fast, network integrity.

facilities based end to end

ILECs (Incumbent Local Exchange Carriers) such as Bell Atlantic, BellSouth, Citizens Communications, GTE and SBC fit this definition. Incumbent IXC's (IntereXchange Carriers) such as AT&T, MCI Worldcom and Sprint also fit this definition. The major facilities-based IXC's have switching offices, or POPs (Points OF Presence) in all service areas of the country and provide both originating and terminating service nationwide. Major facilities-based carriers sell their services to business and residential users and to other carriers which resell those services. Non facilities-based long distance carriers are known as switchless resellers. To be recognized as a CLEC (Competitive Local Exchange Carrier) by most local regulatory authorities and to receive reciprocal compensation from the local ILEC, you must, at minimum, own a central office switch; thus you must be a facilities based carrier. There's probably not one single carrier — local, long distance or international — in the entire North America that is 100% facilities based these days. Everyone seems to be renting some facilities — usually lines — from someone else. The most facilities based would be the ILECs. The least facilities based would be the CLECs (Competitive LECs). They tend to resell local loops from the local ILEC which they terminate in their switching centers. See also CLEC, ILEC, IXC and POP.

good way of relating all the files together in one gigantic base management system (DBMS).

**Relationship Routing** A concept introduced by automatic call distributor manufacturer, Aspect Communications, to have callers' calls routed to agents based on previously developed

**Relative Transmission Level** The ratio of the test tone at one point to the test tone power at some other point in a system chosen as a reference point.

**Relative URL** The Internet address of a page or other World Wide Web resource with respect to the Internet address of the current page. A relative URL gives the path from the current page to the location of the destination page or resource. A relative URL can optionally include a protocol. For example, the relative URL doc/harry.htm refers to the page htm in the directory doc, below the current directory.

**Relay** An electrically activated switch used to operate a circuit: connects one set of wires to another. Usually, the relay is operated by low voltage electric current and is used to operate another circuit, which is of much higher voltage. Telephone switches used many relays to switch (i.e. route) their calls. Relays come in many forms. There are electromechanically sealed relays, in which thin metal contacts are in an airtight glass or metal enclosure. There are also reed relays in which a small tube of mercury tilts and completes or breaks a circuit. See also REED RELAY.

**Relay Rack** Open iron work designed to mount and support electronic equipment. A relay rack is to electronic equipment distribution frame is to wire. See Distribution Frame.

**Release Button** Allows a user to open or close a solenoid via the system.

**Relaying** A function of a layer by means of which a layer receives data from a corresponding entity and transmits other corresponding entity.

**Release** 1. A call comes into a switchboard. The operator tells you it's for you. Then he/she "releases" the call to you. On most switchboards there's a button labelled "Release". That's the release button. On some phones (not corded) the release button is the "hang-up" button. Hitting this button means disconnecting the call. Be careful.

Ending of an inbound ACD call by hanging up.

Release key on most ACD instruments labelled Release.

Release key used in the secondary telecom equipment business.

Relinquishing of a piece of equipment to a purchaser or lessee on fulfillment or anticipated fulfillment of contractual obligations, whether written or oral.

**Release Button** The release button — found always on computer consoles and occasionally on some phones — ends a call in the same way that hanging up the receiver does.

**Release Link Capability** The ability for an originating

terminal to dial the number and the phone dial someone else's number and the receiver back on-hook again.

**Reliable Sequenced Delivery** The delivery of a set of Protocol Data Units (PDUs) from a source to a destination with no errors in any PDU, in the order transmitted, and without gaps or duplicates.

**Reliable Service Area** RSA. The area specified by the field strength contour within which the reliability of communication service is 90 percent for a mobile unit.

**Reliability** A measure of how dependable a system is once you actually use it. Very different from MTBF (Mean Time Between Failures). And very different from availability. See MTBF.

**Relief** Relief refers to providing additional equipment to accommodate growth in customer demand.

**Relocatable Code** Machine language programs that can reside in any portion of memory.

**Remailer** Remailers are anonymous mail drops that computer hackers have set up on the Internet, untraceable electronic mail addresses where one can send or receive encrypted data. An article in the October, 1994 issue of High Times, a drug related magazine, offered plans for a similar security system as a remailer, adding one interesting twist. By incorporating a computer virus like Viper or Decide in the system, the computer could be programmed essentially to self-destruct as soon as it detected a security breach, thus rendering it worthless as evidence.

**Remanufactured** Equipment, parts and/or systems that have been repaired and upgraded to the latest higher revision level. The remanufacturing process makes the telecom equipment (used or new) into a finished product that is the latest release and ready for resale. Remanufactured is the term for the highest level of refurbishing equipment.

**Remapping** The practice of redefining the meaning of keys on the keyboard.

**Remind Delay** The period of time from when a call is put on hold to when a reminder tone is heard and a message appears on the telephone display.

**Remission** IBM-speak to change the mission of a product or a facility.

**Remodulator** In a split broadband cable system, a digital device at the headend that recovers the digital data from the inbound analog signal and then retransmits the data on the outbound frequency.

**Remote** Pertaining to a system or device that is accessed through a telephone line. The opposite is local. See Remote Access and RAS.

**Remote Access** Sending and receiving data to and from a computer or controlling a computer with terminals or PCs connected through communications (i.e. phone) links.

**Remote Access Concentrator** See RAC.

access to their email and to software and data on the corporate LAN (e.g. status on customer orders). Remote access servers are also used by commercial service providers, such as Internet Access Providers (ISPs) to allow their customers access into their networks. Remote Access Servers are typically measured by how many simultaneous dial-in users (on analog or digital lines) they can handle and whether they can work with cheaper digital circuits, such as T-1 and E-1 connections. See also Remote Access Concentrator and Universal Edge Server.

**Remote Access Services** Software that enable distant PCs and workstations to get into a Remote Access Server to get to software and data on a corporate LAN. Remote access services are provided through modems, analog telephones or digital ISDN lines. Remote access services is For a much longer explanation, see Remote Access (Ref: Hands-On Networking Essentials, M.J. Palmer, Course Technology, Cambridge, MA, 1998, p. 293)

**Remote Access To PBX Services** Allows a user outside the PBX to access the PBX by dialing it over a normal phone line. You dial the number. It answers. It may or may not say anything. It may just give you dial tone. You now punch in an authorization code. If your code is acceptable, the PBX gives you another dial tone. That dial tone is effectively the one all users within the PBX get. Once you have this dial tone, you can dial another extension, jump on the company's WATS network, get into the dictation unit, access its voice mail, or whatever. Suffice, you are inside the PBX. You can do whatever anyone else inside the PBX can do.

**Remote Adapted Routing** The adaptation of backbone routing techniques that take into account; slow-line communications links, intermittent connections, security, charity chatty routing protocols, management, and user ergonomics.

**Remote Batch Processing** Processing in a computer system in which batch programs and batch data are entered from a remote terminal or a remote PC (personal computer) over phone lines.

**Remote Bridge** A bridge between two or more similar networks on remote sites. Dial up or leased lines typically require a local bridge or gateway and a remote bridge or gateway at each end, in order to network.

**Remote Call Forwarding** RCF. This is a neat service. It allows a customer to have a local telephone number in a distant city. Every time someone calls that number, that call is forwarded to you in your city. Remote call forwarding is very much like call forwarding on a local residential line, except that you have no phone, no office and no physical presence in that distant city. Remote Call Forwarding exists purely in the central office. You can also think of it as measured Foreign Exchange. Companies buy Remote Call Forwarding for three reasons: 1. To encourage distant customers to call them by