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29,019 TERMS DEFINED

716 Bonus MONEY-SAVING TIPS

Harry Newton
with Steve Schoen

methods have always required large amounts of main memory. In a medium size system supporting a few dozen terminals of dissimilar types, 80K to 100K bytes of storage is not an unusual requirement. The IEEE's 802.x standards for LANs and MANs. See Access Methods.

access methods Techniques and rules for figuring which of several communications devices—e.g. computers—will be the next to use a shared transmission medium. This term relates especially to Local Area Networks (LANs). Access method is one of the main methods used to distinguish between LAN hardware. How a LAN governs users' physical (electrical or radio) access to the shared medium significantly affects its features and performance. Examples of access methods are token passing (e.g. ARCnet, Token Ring and FDDI) and Carrier Sense Multiple Access with Collision Detection (CSMA/CD) (Ethernet). See Access Method and Media Access Control.

access minutes The term access minutes or access minutes of use is used by NECA (the National Exchange Carrier Association) and the FCC (the Federal Communications Commission) in measuring traffic between LATA (Local Access and Transport Area) service providers (CLECs, competitive local exchange carriers, or ILECs, incumbent local exchange carriers) and IXC (InterExchange Carriers). The formal definition is "Access Minutes or Access Minutes of Use is that usage of exchange facilities in interstate or foreign service for the purpose of calculating chargeable usage. On the originating end of an interstate or foreign call, usage is to be measured from the time the originating end user's call is delivered by the telephone company and acknowledged as received by the interexchange carrier's facilities connected with the originating exchange. On the terminating end of an interstate or foreign call, usage is to be measured from the time the call is received by the end user in the terminating exchange. Timing of usage at both the originating and terminating end of an interstate or foreign call shall terminate when the calling or called party disconnects, whichever event is recognized first in the originating or terminating end exchanges, as applicable." This comes from the FCC's 69.2 definitions.

access network 1. Several wholesale carriers define access network as the fiber connection and associated electronic equipment that link a core network to Points of Presence (POPs) and on to Points of Interconnect (POIs) switch locations.

2. The part of the carrier network that touches the customer's premises. The access network is also referred to as the local drop, local loop, or last mile.

access node (AN) Access nodes are points on the edge of a network which provide a means for individual subscriber access to a network. At the access node, individual subscriber traffic is concentrated onto a smaller number of feeder trunks for delivery to the core of the network. Additionally, the access nodes may perform various forms of protocol conversion or adaptation (e.g. X.25, Frame Relay, and ATM). Access nodes include ATM Edge Switches, Digital Loop Carrier (DLC) systems concentrating individual voice lines to T-1 trunks, cellular antenna sites, PBXs, and Optical Network Units (ONUs).

access node control protocol ANCP. Based on a subset of the General Switch Management Protocol (GSMP) in which IGMP is no longer terminated or proxied at the access node. Instead, IGMP passes through the access node transparently. Also known as Layer 2 control (L2C).

access number The telephone number you use to dial into your local Internet Service Provider (ISP). To connect to the Internet you must first establish an account with an ISP in your area. Usually you will receive a list of telephone numbers you can use to "dial-in" to the service.

access organization An entity which originates program material for transmission over the access channel capacity of a cable television system. An access organization may be an individual, a non-profit corporation, an unincorporated non-profit association, or a for-profit corporation. However, under most cable franchises, commercial advertising is prohibited on Public, Educational, and Government Access channels.

access path 1. A generic term that encompasses both wired access lines (analog, DSL, ISDN, fiber, cable) and wireless subscribers. It solves the problem of using the term "lines" when counting both wired access lines and wireless subscribers.

2. In a database management system, the path chosen by the system to retrieve data from a database when it executes a query.

access phase In an information-transfer transaction, the phase during which an access attempt is made. The access phase is the first phase of an information-transfer transaction.

access point AP. Basically a device that connects a computer to a network. It includes:

- A wired device that sends out wireless Ethernet signals to which you and I can connect to.
- A point where connections may be made for testing or using particular communications circuits.
- A junction point in outside plant consisting of a semipermanent splice at a junction between a branch feeder cable and distribution cables.
- A cross-box where telephone cables are cross connected.

5. Network device that connects a wireless radio network to a wired LAN (local area network).

access point base station Another name for a femtocell, a small cell phone radio base station designed for a home or an office. See femtocell.

access point name APN. An element in the header of a GPRS tunneling protocol (GTP) packet that provides information about how to reach a network. It is composed of two elements: a network ID and an operator ID. When mobile stations connect to IP networks over a wireless network, the GGSN uses the APN to distinguish among the connected IP networks (known as APN networks). In addition to identifying these connected networks, an APN is also a configured entity that hosts the wireless sessions, which are called Packet Data Protocol (PDP) contexts.

access point spoofing The setting up of a malicious wireless access point (AP) and giving it a SSID (network name) that resembles or even duplicates the name of a legitimate wireless access point, in the hope that unsuspecting users will log on to the access point and enter logon IDs, passwords, Social Security numbers, credit card numbers, and other sensitive information that the hacker behind the malicious AP can capture and use for criminal purposes. Also called AP spoofing. See evil twin, sniffer mode, SSID.

access protection Refers to the process of protecting a local loop from network outages and failures. Access protection can take many forms, such as purchasing two geographically diverse local facilities, adding protection switches to the ends of geographically diverse local loops, or buying service from a local access provider which offers a survivable ring-based architecture to automatically route around network failures.

access protocols The set of procedures which enable a user to obtain services from a network.

access provider A carrier that provides a user with access to a network from the user's terminal, computer, telephone, or other end-user device. Telcos and Internet service providers are examples of access providers.

access rate 1. The maximum data rate of the access channel, typically referring to access to broadband networks and network services.

2. AR. A Frame Relay term which addresses the maximum transmission rate supported by the access link into the network, and the port speed of the device (switch or router) at the edge of the carrier network. The Access Rate defines the maximum rate for data transmission or receipt. See also Committed Information Rate.

access request A message issued by an access originator to initiate an access attempt.

access response channel Access Response Channel. ARCH. Specified in IS-136, ARCH carries wireless system responses from the cell site to the user terminal equipment. ARCH is a logical subchannel of SPACH (SMS (Short Message Service) point-to-point messaging, Paging, and Access response Channel), which is a logical channel of the DCCH (Digital Control Channel), a signaling and control channel which is employed in cellular systems based on TDMA (Time Division Multiple Access). The DCCH operates on a set of frequencies separate from those used to support cellular conversations. See also DCCH, IS-136, SPACH and TDMA.

access router 1. An access device with built-in basic routing-protocol support, specifically designed to allow remote LAN access to corporate backbone networks. An access router is not designed to replace backbone routers or to build backbone networks.

2. A router that is connected to the Internet and provides connectivity to the Internet access points.

access server An access server is provides, allows and disallows access to the Internet. Picture a hotel. It has decided it intends to charge its guests \$10 from each room to the basement wireless switch and eventually on a device connected to the Internet. That device will perform the access.

1. If a guest plugs their laptop or Internet browser, the access server typically displays a "Welcome" page, saying the guest is welcome. That money might be charged to the guest's credit card. And the access server might require the guest to provide company requesting authorization.

2. The access server may send a message to the computer for including on the guest's account.

3. It may also time the guest's session, has or is about to expire.

4. It might also house some information on activities in the hotel, restaurant hours, etc.

5. It might also house a fire alarm system to detect attacks from outside.

Today's access servers are often rack-mounted with other communications equipment.

In the old days an access server was a communications processor that connected a local network (or WAN (wide area network) software. It performed both synchronous and asynchronous protocols. An access server is sometimes also a TU.

access service 1. From the perspective of the end-user, access service provides the end-user with access to the network, thereby enabling the user to use the network.

2. From the perspective of the network, access service is a long-distance carrier to receive traffic from the network.

access service ordering guide Access Service Requests (ASRs) as defined by the ITU-T and the Alliance for Telecommunications Industry Standards (ATIS) outline the forms, data fields, and procedures to create an Access Service Request.

access service request ASR. A request from a user to a network service provider (ISP) to request that a service be provided. Some services that can be requested are: Feature Groups B, C, D Forms; special services; testing service; and other services. ASR generally is processed by the network service provider.

access service tariff See access service. A term which indicates their ability to access a network. It is a number on an alternate carrier's "End-to-End" Signaling.

access stimulation See traffic stimulation.

access surcharge State specific charge for the originating end of a circuit.

access switch Any switch that

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Harry@TechnologyInvestor.com

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Steve Schoen, Technical Editor
Gail Saari, Artistic Director
Gail Saari and Leigh McLellan, Typesetting

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Gail Saari, Artistic Director

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