2021 Broadband Glossary

Below are definitions for common terms used in the Broadband industry.

3G – Third Generation	The third generation of mobile broadband technology, used by smart phones, tablets, and other mobile devices to access the web.
4G – Fourth Generation	The fourth generation of mobile broadband technology, used by smart phones, tablets, and other mobile devices to access the web.
5G – Fifth Generation	The fifth generation of mobile broadband technology, used by smart phones, tablets, and other mobile devices to access the web. It is believed that this technology will significantly increase bandwidth to users, up to 1 Gig.
Access Point	A device that allows wireless devices to communicate with a wired network using Wi-Fi or related standards. Sometimes referred to as AP, Wireless Access Point, or WAP. Access Points contain both a radio and a wired network connection, and relay communications between the two.
Active Ethernet	An active ethernet system uses electrically powered switching equipment, such as a router or a switch aggregator, instead of passive splitters, to manage signal distribution and direct signals to specific customers. In such a system, a customer may have a dedicated fiber running to his or her house.
ADSL – Asymmetric Digital Subscriber Line	DSL service with a larger portion of the capacity devoted to downstream communications, less to upstream. Typically thought of as a residential service.
ADSS – All-Dieletric Self-Supporting	A type of optical fiber cable that contains no conductive metal elements.
Aggregation site	One of a number of locations on the backbone network that is used to connect (aggregate) multiple local networks to the backbone.
AMR/AMI – Automatic Meter Reading/Advanced Metering Infrastructure	Electrical meters that measure more than simple consumption and an associated communication network to report the measurements.
ASE - AT&T Switched Ethernet	A network service product of AT&T that provides Ethernet transport service with speeds up to 10 Gbps.

ATM – Asynchronous Transfer Mode	A data service offering that can be used for interconnection of customer's LAN. ATM provides service from 1 Mbps to 145 Mbps utilizing Cell Relay Packets.
Backbone/network backbone	In telecommunications, a generic term referring to the part of a network that interconnects all sites on the network, and, therefore, handles the majority of the network traffic. Smaller networks are attached to the backbone through aggregation sites by means of additional circuits and network devices, such as routers.
Bandwidth	The amount of data transmitted in a given amount of time; usually measured in bits per second, kilobits per second (kbps), and Megabits per second (Mbps).
Bandwidth/high bandwidth	Transmission capacity of an electronic pathway such as a communications circuit. Network bandwidth is described in terms of how much data can move across the network within a given amount of time and is typically expressed in bits per second (bps). Examples of measurements include kbps, Mbps or Gbps. The "high" in "high bandwidth" is always relative to current norms for different circumstances.
BGP - Border Gateway Protocol	A standardized exterior gateway protocol designed to exchange routing and reachability information between autonomous systems on the Internet. In short, it is a protocol or set of rules for how data is transmitted how data is transmitted between networks.
Bit	A single unit of data, either a one or a zero. In the world of broadband, bits are used to refer to the amount of transmitted data. A kilobit (Kb) is approximately 1,000 bits. A Megabit (Mb) is approximately 1,000,000 bits. There are 8 bits in a byte (which is the unit used to measure storage space), therefore a 1 Mbps connection takes about 8 seconds to transfer 1 megabyte of data (about the size of a typical digital camera photo).
BPL – Broadband over Powerline	A technology that provides broadband service over existing electrical power lines.
BPON – Broadband Passive Optical Network	BPON is a point-to-multipoint fiber-lean architecture network system which uses passive splitters to deliver signals to multiple users. Instead of running a separate strand of fiber from the CO to every customer, BPON uses a single strand of fiber to serve up to 32 subscribers.

Broadband	A descriptive term for evolving digital technologies that provide consumers with integrated access to voice, high-speed data service, video-demand services, and interactive delivery services (e.g. DSL, Cable Internet).
Broadband	A marketing term that refers to high bandwidth Internet access. Traditionally, it meant "any bandwidth greater than dial up." Broadband data transmission is digital, meaning that text, images, and sound are all transmitted as "bits" of data. In the context of this project, Broadband refers to providing Internet connectivity at much higher bandwidth than has been available and affordable to most libraries. The FCC currently defines broadband to the home to be anything above 25 Mbps, in the sense
Cabling: CAT3, CAT5, CAT5e, CAT6, etc.	Industry standards for Unshielded Twisted Pair, 8 conductor copper wire, and required for network voice and data applications. Higher standards support greater bandwidth. The maximum length a cable can be is 100 meters, end to end, for all standards.
CAD – Computer Aided Design	The use of computer systems to assist in the creation, modification, analysis, or optimization of a design.
CAI – Community Anchor Institutions	The National Telecommunications and Information Administration defined CAIs in its SBDD program as "Schools, libraries, medical and healthcare providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and entities." Universities, colleges, community colleges, K-12 schools, libraries, health care facilities, social service providers, public safety entities, government and municipal offices are all community anchor in
CAP – Competitive Access Provider	(or "Bypass Carrier") A Company that provides network links between the customer and the Inter-Exchange Carrier or even directly to the Internet Service Provider. CAPs operate private networks independent of Local Exchange Carriers.
Capacity/high capacity	Is the complex measurement of the maximum amount of data that may be transferred between network locations over a network, also known as throughput. "High" is again relative to current norms and measured in bits per second (bps).

Cellular	A mobile communications system that uses a combination of radio transmission and conventional telephone switching to permit telephone communications to and from mobile users within a specified area.
CLEC – Competitive Local Exchange Carrier	Wireline service provider that is authorized under state and Federal rules to compete with ILECs to provide local telephone service. CLECs provide telephone services in one of three ways or a combination thereof: 1) by building or rebuilding telecommunications facilities of their own, 2) by leasing capacity from another local telephone company (typically an ILEC) and reselling it, and 3) by leasing discrete parts of the ILEC network referred to as UNEs.
CO – Central Office	A circuit switch where the phone lines in a geographical area come together, usually housed in a small building.
Coaxial Cable	A type of cable that can carry large amounts of bandwidth over long distances. Cable TV and cable modem service both utilize this technology.
Co-location	Refers to the way information technology hardware and resources are located or installed in a shared or common location. In this context, networking hardware resources owned by an organization are located outside the organization's physical premises and "co-located" with other organizations' hardware, often through a commercial service provider.
Commercial Internet	Generally, the parts of the Internet that are used for primarily commercial purposes, including residential service. This usage is to distinguish it from parts of the Internet that are used primarily for non-profit educational or research purposes. Also, referred to as the "Commodity Internet."
Commercial networks/carriers	Any entity engaged in the business of providing telecommunications services that are regulated by the Federal Communications Commission or other governmental body. These are generally for-profit companies.
Commodity Internet	Another way of saying the "Commercial Internet."

Consumer-level speed	Refers to the service that is commonly available and used to connect homes/residential customers to the Commercial Internet. The bandwidth (speed) varies widely, but today is generally in the range of 1.5 Mbps to 100 Mbps. It is also asymmetric, in that there is much higher speed provided to the home than from the home because the consumer is generally viewed as consuming digital content rather than producing it.
Content creation	The process of generating or producing (digital) material for use or display over the network.
CPE – Customer Premise Equipment	Any terminal and associated equipment located at a subscriber's premises and connected with a carrier's telecommunication channel at the demarcation point ("demarc").
Cross-connect	In telecommunications, a cable connecting two separate “facilities.” The cable may be either copper or fiber optic, depending on the circumstances. The facilities may be a switch, a router, patch panels, or other hardware. Cross-connects are typically used as the means to provide a connection between two parties, such as a carrier and CalREN.
CWDM – Coarse Wavelength Division Multiplexing	A technology similar to DWDM only utilizing less wavelengths in a more customer-facing application whereby less bandwidth is required per fiber.
DEMARC - Demarcation Point	The point at which the public switched telephone network ends and connects with the customer's on-premises wiring.
Dial-Up	A technology that provides customers with access to the Internet over an existing telephone line.
Digital content	Products available in digital forms. Common digital products are Web pages, movies, music, and books.
DLEC – Data Local Exchange Carrier	DLECs deliver high-speed access to the Internet, not voice. Examples of DLECs include Covad, Northpoint and Rhythms.
DNS - Domain Name System	In networking, the standardized, distributed system of translating between names (e.g., www.cenic.org) and IP addresses.
Downstream	Data flowing from the Internet to a computer (Surfing the net, getting E-mail, downloading a file).
Drop	Connection from the nearest access point (NAP or handhole/vault) to the premise.

DSL - Digital Subscriber Line	A family of technologies that are used to provide Internet access by transmitting digital data over telephone lines. It may be either symmetric (same bandwidth both direction), or asymmetric (different bandwidth each direction). The service may be implemented simultaneously over the same lines used to provide voice service.
DSLAM – Digital Subscriber Line Access Multiplier	A piece of technology installed at a telephone company's Central Office (CO) and connects the carrier to the subscriber loop (and ultimately the customer's PC).
DWDM – Dense Wavelength Division Multiplexing	An optical technology used to increase bandwidth over existing fiber-optic networks. DWDM works by combining and transmitting multiple signals simultaneously at different wavelengths on the same fiber. In effect, one fiber is transformed into multiple virtual fibers.
EON – Ethernet Optical Network	The use of Ethernet LAN packets running over a fiber network.
E-rate	Common term for the federal Schools and Libraries Program, funded by the federal Universal Service Fund and administered by USAC under the direction of the FCC. The program provides subsidies of up to 90 percent to help eligible schools and libraries in the United States obtain affordable telecommunications and Internet access. Discounts for support depend on the level of poverty and the urban/rural status of the population served and range from 20 percent to 90 percent of the costs of eligible
Ethernet	A generic name for a family of networking technologies that are both a national and international standard. A variety of signaling and cabling technologies are supported. Data rates range from 10 Mbps to 100 Gbps, depending on the specific implementation.
EvDO – Evolution Data Only	EvDO is a wireless technology that provides data connections that are 10 times as fast as a traditional modem. This has been overtaken by 4G LTE.
FCC - Federal Communications Commission	The federal agency responsible for regulating interstate communications by radio, television, wire, satellite, and cable. The FCC also participates in international communications standards coordination and policy development.
FCC – Federal Communications Commission	A Federal regulatory agency that is responsible for regulating interstate and international communications by radio, television, wire, satellite and cable in all 50 states, the District of Rock Falls, and U.S. territories.

FDH – Fiber Distribution Hub	A connection and distribution point for optical fiber cables.
Fiber/fiber-optic cable	Fiber optic technology converts electrical signals carrying data to light and transmits the light through transparent glass fibers. A variety of fiber optic cable types are available, depending on the application. Supported distances vary based on cable type, transmitter source (laser or LED), data rate, etc.
Firewall	A network device or set of components that provide filter and gateway functions between two or more networks. Firewalls can be used to augment security practices.
Fixed Terrestrial	The operation of wireless devices or systems used to connect two fixed locations (e.g., building to building or tower to building) with a radio or other wireless link. The purpose of a fixed wireless link is to enable data communications between the two sites or buildings.
FTTB – Fiber to the building	A fiber-optic system that connects directly from the carrier network to a business building
FTTN – Fiber to the Neighborhood	A hybrid network architecture involving optical fiber from the carrier network, terminating in a neighborhood cabinet which converts the signal from optical to electrical.
FTTP – Fiber to the premise	A fiber-optic system that connects directly from the carrier network to the user premises.
FTTx – Fiber to the X	All fiber optic topologies from a provider to its customers, based on the location of the fiber's termination point
GBPS - Gigabits per second	A data transmission rate; 1,000,000,000 bits per second. 1 Gbps = 1,000 Mbps or 1,000,000 kbps. Giga is the unit prefix for 109.
GIS – Geographic Information Systems	A system designed to capture, store, manipulate, analyze, manage, and present all types of geographical data.
GPON- Gigabit-Capable Passive Optical Network	Similar to BPON, GPON allows for greater bandwidth through the use of a faster approach (up to 2.5 Gbps in current products) than BPON.
GPS – Global Positioning System	A space-based satellite navigation system that provides location and time information in all weather conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites.
GSM – Global System for Mobile Communications	This is the current radio/telephone standard developed in Europe and implemented globally except in Japan and South Korea.

Handhole (aka Vault)	Vaults constructed under the ground to access telecom cables/components. Handholes are necessary for a fiber optic network route along its length to access the cable at periodic intervals. During installations, these handholes serves as space to assist the cable pass through ducts smoothly.
HD – High-Definition Video	Video of substantially higher resolution than standard definition.
Headroom	Unused (or available) capacity in a network connection beyond the amount used by existing activities. The amount of utilization of a circuit and headroom available are inversely related.
HFC – Hybrid Fiber Coaxial	An outside plant distribution cabling concept employing both fiber-optic and coaxial cable.
ICT – Information and Communications Technology	Often used as an extended synonym for information technology (IT), but it is more specific term that stresses the role of unified communications and the integration of telecommunications, computers as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information.
IEEE – Institute of Electrical Engineers	A professional association headquartered in New York City that is dedicated to advancing technological innovation and excellence.
ILEC – Incumbent Local Exchange Carrier	The traditional wireline telephone service providers within defined geographic areas. Prior to 1996, ILECs operated as monopolies having exclusive right and responsibility for providing local and local toll telephone service within LATAs.
Internet exchange point	IX or IXP - a physical infrastructure through which Internet service providers and content providers exchange Internet traffic between their networks.
Internet/The Internet	The Internet is a global system of interconnected computer networks, rather than a single, centralized network. It is a “network of networks” that today reaches almost everywhere in the world and is the basic logical network that underlies most on-line communications through email, social media, and Web sites.
Internet2	The not-for-profit national organization established to address some of the networking needs of research and higher education institutions in the United States. Internet2 operates a national backbone network with a variety of additional services.

Intranet	Is a private network that shares data and application resources. An Intranet differs from the Internet, which is a public network.
IP - Internet Protocol	The data protocol (set of rules and messages) used to exchange information on the Internet.
IP address	A unique address assigned to hosts (computers, servers, printers, etc.) participating in a network that uses IP. IP addresses are 32 bits in length in IPv4 and 128 bits in IPv6.
IP-VPN – Internet Protocol-Virtual Private Network	A software-defined network offering the appearance, functionality, and usefulness of a dedicated private network.
ISDN – Integrated Services Digital Network	An alternative method to simultaneously carry voice, data, and other traffic, using the switched telephone network.
ISP - Internet Service Provider	A communications carrier that provides access to the Internet. ISPs are not necessarily directly connected via an Internet exchange; they may in turn acquire connectivity from another ISP.
ITS – Intelligent Traffic System	Advanced applications which, without embodying intelligence as such, aim to provide innovative services relating to different modes of transport and traffic management and enable various users to be better informed and make safer, more coordinated, and 'smarter' use of transport networks.
KBPS - Kilobits per second	A transmission rate; 1,000 bits per second. 1,000 kbps = 1 Mbps. Kilo is the unit prefix for 103.
LAN – Local Area Network	A geographically localized network consisting of both hardware and software. The network can link workstations within a building or multiple computers with a single wireless Internet connection.
Last mile connection	A term of art used by the telecommunications industry to refer to the final leg of a network to the customer, generally from the provider's last POP to the customer.
LATA – Local Access and Transport Areas	A geographic area within a divested Regional Bell Operating Company is permitted to offer exchange telecommunications and exchange access service. Calls between LATAs are often thought of as long distance service. Calls within a LATA (IntraLATA) typically include local and local toll services.
LCP - Local Convergence Point	The point in the PON network, usually a cabinet or closure, that marks the breakout (splits) from the backbone cable to the distribution cables or an MDU. The LCP usually contains optical splitters that split one backbone fiber into 32 or 64 distribution fibers.

Leased circuit	Dedicated network connection between two physical points, acquired from a commercial provider.
LOA - Letter of Agency	A document authorizing one entity to act on behalf of another. For example, a library jurisdiction issues an LOA to permit the aggregator to act on behalf of the jurisdiction in procuring circuits from commercial providers under E-rate rules.
Local Loop	A generic term for the connection between the customer's premises (home, office, etc.) and the provider's serving central office. Historically, this has been a copper wire connection; but in many areas it has transitioned to fiber optic. Also, wireless options are increasingly available for local loop capacity.
LTE - Long Term Evolution	In telecommunication, a standard for wireless communication of high-speed data for mobile phones and data terminals.
MAN – Metropolitan Area Network	A high-speed intra-city network that links multiple locations with a campus, city or LATA. A MAN typically extends as far as 30 miles.
MBPS - Megabits per second	A data transmission rate; 1,000,000 bits per second. 1000 Mbps = 1 GBPS.
Middle mile	The segment of a telecommunications network linking a network operator's core network/backbone to the local provider's network, typically situated in the incumbent telephone company's central office that provides access to the local loop.
MPLS – Multiprotocol Label Switching	A mechanism in high-performance telecommunications networks that directs data from one network node to the next based on short path labels rather than long network addresses, avoiding complex lookups in a routing table.
MPOE - Minimum Point Of Entry	In telephony, the demarcation point where a service provider's cabling ends and the customer's on-premises cabling or hardware begins. This point represents the division of responsibility between the provider and the customer.
MRC	Monthly recurring costs.
NAP - Network interface device	A device that serves as a distribution point within the PON network.
NID - Network interface device	A device that serves as the demarcation point between the carrier's local loop and the customer's premises wiring.

NOC - Network Operation Center	A central location from which network operators manage, control and monitor one or more networks. The overall function is to maintain optimal network operations across a variety of platforms, mediums and communications channels.
Node site	A point of intersection/connection within a network. Through accidents of history, CENIC engineers have also used this term to refer to a K-12 aggregation site, but typically do not use it to refer to aggregation sites for other CENIC members.
NRC	Non-recurring or one time costs. For example, the purchase price for hardware or the labor to perform an installation.
NTE - Network Termination Equipment	Refers to the hardware that telecom providers place on site when they install a circuit at a location. Also, sometimes referred to as CPE (Customer Premise Equipment).
OLT - Optical Line Terminal	OLT (Optical Line Terminal) is the endpoint hardware device located at the central office in a Passive Optical Network (PON). The OLT contains a central processing unit, a gateway router, voice gateway uplink cards and passive optical network cards. The main functionality of the OLT is to adapt the incoming traffic (voice/data/video) from the metropolitan rings into the PON transport layer.
ONT/U – Optical Network Terminal/Unit	Used to terminate the fiber-optic line, demultiplex the signal into its component parts (voice telephone, television, and Internet), and provide power to customer telephones.
Optronics	Short for optoelectronics or devices that manipulate and convert digital data between the optical and electronic domains.
OSS/BSS - Operations support system and business support system	Refers to operations support system and business support system. The distinction emphasizes a separation of concerns between maintaining network operations (OSS) and the business (BSS) around which that network is built.
Overbuilding	The practice of building excess capacity. In this context, it involves investment in additional infrastructure projects to provide competition.
OVS – Open Video Systems	OVS is a new option for those looking to offer cable television service outside the current framework of traditional regulation. It would allow more flexibility in providing service by reducing the build out requirements of new carriers.

Peering	A relationship between two Internet Service Providers (ISP) in which they share a direct network connection instead of routing traffic through the Internet. Peering is either done directly between the ISPs or through a centralized peering exchange. Peering allows for very fast traffic at low cost because the ISPs connect directly to each other.
PON – Passive Optical Network	A Passive Optical Network consists of an optical line terminator located at the Central Office and a set of associated optical network terminals located at the customer's premise. Between them lies the optical distribution network comprised of fibers and passive splitters or couplers. In a PON network, a single piece of fiber can be run from the serving exchange out to a subdivision or office park, and then individual fiber strands to each building or serving equipment can be split from the main
POP - Point of Presence	A telecommunications industry term that refers to a physical location where the provider places their hardware for delivering services to customers.
Port	A physical connection point on a network device such as a switch or router. A single copper or fiber optic cable is connected to a port.
PPP – Public-Private Partnership	A Public–Private Partnership (PPP) is a government service or private business venture that is funded and operated through a collaborative partnership between a government and one or more private sector organizations. In addition to being referred to as a PPP, they are sometimes called a P3, or P3.
QOS – Quality of Service	QoS (Quality of Service) refers to a broad collection of networking technologies and techniques. The goal of QoS is to provide guarantees on the ability of a network to deliver predictable results, which are reflected in Service Level Agreements or SLAs. Elements of network performance within the scope of QoS often include availability (uptime), bandwidth (throughput), latency (delay), and error rate. QoS involves prioritization of network traffic.
Rack unit	Is a standardized measurement that refers to the height or space between shelves on a vertical storage rack, which are designed to hold NTEs. Referred to as U or RU, one rack unit is 1.75 inches in height.
Rate limit	In networking, a technique for controlling the achievable data rate on a circuit or interface. Rate limiting is a bandwidth management tool that can be used to achieve a desired performance profile for a variety of purposes.

RF – Radio Frequency	A rate of oscillation in the range of about 3 kHz to 300 GHz, which corresponds to the frequency of radio waves, and the alternating currents which carry radio signals.
Right-of-Way	A legal right of passage over land owned by another. Carriers and service providers must obtain right-of-way to dig trenches or plant poles for cable systems, and to place wireless antennas.
RMS – Resource Management System	A system used to track telecommunications assets.
Router	A device that receives data packets from one network and sends them to other networks based on information contained in the packets themselves. Routers generally base the forwarding decisions on the destination IP address in a packet. A router is generally used to connect networks together and also may act as an administrative boundary between networks.
RPR – Resilient Packet Ring	Also known as IEEE 802.17, is a protocol standard designed for the optimized transport of data traffic over optical fiber ring networks.
RUS – Rural Utility Service	A division of the United States Department of Agriculture, it promotes universal service in unserved and underserved areas of the country with grants, loans, and financing. Formerly known as "REA" or the Rural Electrification Administration.
SCADA – Supervisory Control and Data Acquisition	A type of industrial control system (ICS). Industrial control systems are computer controlled systems that monitor and control industrial processes that exist in the physical world.
SNMP – Simple Network Management Protocol	An Internet-standard protocol for managing devices on IP networks.
SONET – Synchronous Optical Network	A family of fiber-optic transmission rates.
Start of Service	The date in which the local service provider has completed the installation of a circuit and becomes billable.
Streaming	Streamed data is any information/data delivered from a server to a host where the data represents information that must be delivered in real time. This could be video, audio, graphics, slide shows, web tours, combinations of these, or any other real time application.
Submarine Network	Submarine networking is the process by which data is carried on subsea cables to connect continents. Submarine networks carry 95 percent of the world's intercontinental electronic communications traffic.
Subscribership	Subscribership is how many customers have subscribed for a particular telecommunications service.

Switch	A computer networking device that connects networks together. Switches generally base the forwarding decisions on low-level addresses specific to each type of media (e.g., copper or fiber optic cable, Wi-Fi). It is generally used to interconnect devices.
Switched Network	A domestic telecommunications network usually accessed by telephone, key telephone systems, private branch exchange trunks, and data arrangements.
T-1 – Trunk Level 1	A digital transmission link with a total signaling speed of 1.544 Mbps. It is a standard for digital transmission in North America.
T-3 – Trunk Level 3	28 T1 lines or 44.736 Mbps.
Throughput	Rate of data transmission per unit time; see "Capacity/High Capacity".
UNE – Unbundled Network Element	Leased portions of a carrier's (typically an ILEC's) network used by another carrier to provide service to customers. Over time, the obligation to provide UNEs has been greatly narrowed, such that the most common UNE now is the UNE-Loop.
Universal Service	The idea of providing every home in the United States with basic telephone service.
UPS – Uninterruptable Power Supply	An electrical apparatus that provides emergency power to a load when the input power source, typically main power, fails.
Upstream	Data flowing from your computer to the Internet (sending E-mail, uploading a file).
USAC - Universal Service Administrative Company	The not-for-profit corporation designated by the FCC as the administrator of Universal Service Fund and the E-rate program. The Universal Service Fund is supported with fees on telecommunications subscribers collected by telecommunications providers. These funds are used to advance FCC policies for availability and quality of communications services throughout the country.
VDSL – Very High Data Rate Digital Subscriber Line	A developing digital subscriber line (DSL) technology providing data transmission faster than ADSL over a single flat untwisted or twisted pair of copper wires (up to 52 Mbit/s downstream and 16 Mbit/s upstream), and on coaxial cable (up to 85 Mbit/s down and upstream); using the frequency band from 25 kHz to 12 MHz.
Video on Demand	A service that allows users to remotely choose a movie from a digital library whenever they like and be able to pause, fast-forward, and rewind their selection.

VLAN – Virtual Local Area Network	In computer networking, a single layer-2 network may be partitioned to create multiple distinct broadcast domains, which are mutually isolated so that packets can only pass between them via one or more routers; such a domain is referred to as a Virtual Local Area Network, Virtual LAN or VLAN.
VoIP – Voice over Internet Protocol	An application that employs a data network (using a broadband connection) to transmit voice conversations using Internet Protocol.
VPN – Virtual Private Network	A virtual private network (VPN) extends a private network across a public network, such as the Internet. It enables a computer to send and receive data across shared or public networks as if it were directly connected to the private network, while benefitting from the functionality, security and management policies of the private network. This is done by establishing a virtual point-to-point connection through the use of dedicated connections, encryption, or a combination of the two.
VRF - Virtual routing and forwarding	Technology included in IP (Internet Protocol) network routers that allows multiple instances of a routing table to exist in a router and work simultaneously. This increases functionality by allowing network paths to be segmented without using multiple devices
WAN – Wide Area Network	A network that covers a broad area (i.e., any telecommunications network that links across metropolitan, regional, or national boundaries) using private or public network transports.
Web caching	A technique for the temporary storage (caching) of web documents, such as HTML pages and images, at a point between the end user and the authoritative server to reduce bandwidth usage, server load, and perceived response time. A web cache system temporarily stores copies of documents passing through it; subsequent requests for these documents may be satisfied from the cache.
Wi-Fi	WiFi is a popular technology that allows an electronic device to exchange data or connect to the Internet wirelessly using radio waves. The WiFi Alliance defines WiFi as any "wireless local area network (WLAN) products that are based on the Institute of Electrical and Electronics Engineers' (IEEE) 802.11 standards".

WiMAX	WiMAX is a wireless technology that provides high-throughput broadband connections over long distances. WiMAX can be used for a number of applications, including “last mile” broadband connections, hotspot and cellular backhaul, and high speed enterprise connectivity for businesses.
Wireless	Telephone service transmitted via cellular, PCS, satellite, or other technologies that do not require the telephone to be connected to a land-based line.
Wireless Internet	1) Internet applications and access using mobile devices such as cell phones and palm devices. 2) Broadband Internet service provided via wireless connection, such as satellite or tower transmitters.
Wireline	Service based on infrastructure on or near the ground, such as copper telephone wires or coaxial cable underground or on telephone poles.