



BrightRidge[®]

Broadband

Glossary of Terms:

Access point - Device that allows wireless connectivity to a network.

Active Ethernet - Uses concentration points, which can be located up to 80km from the distribution point and subscriber access points located up to 80km from concentration points, instead of passive components.

Asymmetrical - Internet service with a large portion of capacity devoted to downstream communications with less to the upstream, often a residential type service.

Backbone - The principal data routes between large, strategically interconnected computer networks and core routers on the Internet. It enables connectivity in global networks.

Bandwidth – Amount of data transmitted in a given amount of time; measured in bits per second, kilobits per second (kps) and megabits per second (Mbps).

Broadband – A descriptive term for evolving technologies that provide consumers with integrated access to voice, high-speed data service, video-demand services and interactive delivery services. Often used to describe high-speed Internet service.

CATV (Community Antenna Television) - A cable television system that receives television broadcasts by antenna and relays them by cable to paying subscribers in areas where direct reception is either poor or not possible.

Cloud computing - The practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server or a personal computer.

DSL – Digital subscriber line is used to describe a copper telephone line deliver of broadband Internet service.

Ethernet - A system for connecting a number of computer systems to form a local area network, with protocols to control the passing of information and to avoid simultaneous transmission by two or more systems.

Existing coverage - Areas that are considered “serviceable locations” for BrightRidge Internet service.

Federal Communications Commission (FCC) – a federal regulatory agency that is responsible for regulating a variety of communications.

Fiber optics - The use of thin flexible fibers of glass or other transparent solids to transmit light signals. May be used for telecommunications.

FTTP (Fiber to the Premise) – A fiber optic system connected directly from the carrier to user premises.

FTTH (Fiber to the Home) – used to describe a FTTP to a residential service.

gBPS (billions of bits per second) - A measure of bandwidth on a digital data transmission medium such as optical fiber. With slower media and protocols, bandwidth may be in the Mbps (millions of bits or megabits per second) or the Kbps (thousands of bits or kilobits per second) range.

Head-end - Centralized computer hardware and databases required for providing Internet (or other) service. For example, the JCPB Tantalus server that powers the AMI system is its “head-end.”

High-speed Internet - Generic definition of Internet service that is faster than average.

High-speed data - A data stream that transmits information at a faster pace than normal data feeds. A high-speed data feed is one in which data, such as quotes and yields, are transmitted in real time and without delays. In addition, high-speed data feeds will communicate information in a non-netted format, as opposed to previous “fast” feeds, which present data in a pulsed format.

ISP (Internet Service Provider) – A company providing Internet access to consumers and businesses, acting as a bridge between customers and infrastructure designed for delivery of high-speed Internet services.

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 Internet connection.

Last mile - The infrastructure that brings connectivity from a central office or substation to a customer’s home or business.

Last mile providers - Various wireless providers; such as, satellite providers, mobile/cellular providers, or fixed wireless providers.

Mobile 3G/4G - 3G and 4G represent the third and fourth generations of mobile broadband Internet. As a rule, provided that you’re on the same carrier, a 4G connection will be faster than a 3G connection.

National Broadband Map (NBM) - A search-able, public database of information on broadband Internet availability in the United States.

ONT (Optical Network Terminal) – Equipment used to terminate the fiber optic line, demultiplex the signal into its component parts (voice, data and video), and provide power to customer telephones.

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 fiber using passive splitters /couplers. This allows for an expensive piece of fiber cable from the exchange to the customer to be shared amongst many customers, thereby dramatically lowering the overall costs of deployment for fiber to the business (FTTB) or fiber to the home (FTTH) applications.

Point of presence (POP) - A POP may actually reside in rented space owned by the telecommunications carrier, such as Sprint, to which the ISP is connected. A POP usually includes routers, digital/analog call aggregators, servers, and frequently frame relays or ATM switches.

Quality of Service (QOS) - Refers to related aspects of telephone and computer networks that allow transport of traffic with special requirements. In particular, much technology has been developed to allow computer networks to become as useful as telephone networks for audio conversations, as well as supporting new applications with even stricter service demands.

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 (ROW) -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 antennae.

Sector array - The sector array houses three independent antennas providing 360 degrees horizontal and wide.

Symmetrical - Transmission of digital data where the bandwidth in the downstream direction (network to subscriber) is identical to the bandwidth in the upstream direction (subscriber to network), opposite of asymmetric.

Triple play - A marketing term for the provisioning, over a single broadband connection, of the following: two bandwidth-intensive services, broadband Internet access and television, and the latency-sensitive telephone.

Video streaming - Content sent in compressed form via Internet and displayed by the viewer in real time.

Voice Over IP (VOIP) - A methodology and group of technologies for the delivery of voice communications and multimedia sessions over Internet Protocol (IP) networks, such as the Internet.

VPN (Virtual Private Network) – a software-defined network offering the appearance, functionality, and usefulness of a dedicated private network.

WAN (Wide Area Network) –A network that covers a broad area such as a metropolitan, regional or national boundaries using private or public network.

WiFi - A facility allowing computers, smart-phones, or other devices to connect to the Internet or communicate wireless within a particular area.

WiFi router - A wireless router is a device that performs the functions of a router and also includes the functions of a wireless access point. It is used to provide access to the Internet or a private computer network.

Wireless Internet – Internet service delivered via a wire- less connection, such as a tower, to multiple locations or devices.