

Glossary of terms for understanding Multilink PPPoE

Having trouble understanding the terms involved in Multilink PPPoE service? Use this glossary as an aid to get basic knowledge on the components of the Internet technology.

PPP: Point-to-Point Protocol. A set of technical machine instructions telling computers to connect to each other over a phone line.

Ethernet: refers to the way that LANs work, providing a reference point to the linked devices so that they all understand each other and what they are supposed to do. Often computers connect to the Internet using an Ethernet cable that runs to a router or wall jack. The cable looks almost like a larger version of a telephone wire.

PPPoE: Point-to-Point Protocol over Ethernet. A configuration that allows the PPP technology to connect to the Internet using Ethernet systems in a Local Area Network.

Multilink PPPoE: An Internet service offering multiple PPPoE lines, which are combined in a special way for the purpose of increasing the rate at which data is transferred.

ISP: Internet Service Provider. A company or organization that connects users to the Internet using its own network and machinery.

DSL: Digital Subscriber Line. DSL is the use of a copper telephone line to send data instead of phone calls between devices. In other words, it is a way to provide Internet using infrastructure that already exists. Since today virtually all buildings come with telephone jacks, DSL Internet can be provided anywhere. PPPoE uses DSL as the foundational building block to its technology, which can double, triple, or even quadruple the power and speed of this type of Internet connection.

Layer: Can be thought of as a building block within a structure that provides Internet connection. PPP operates at a hardware level. Other parts of the service operate at other levels, such as software levels, network levels, and so on. The levels work together to compose the technology. Where a certain device is on the layering system will determine how an Internet connection will work. Variations in layering produce variations in Internet service products.

Packets: In the sense of Internet development, packets are bits of data pieces that have been divided at one end of a communication channel and then put back together at their destination. The idea behind packets is that data can be sent through a network using many routes, instead of relying on one link that could possibly fail. In the event that a link does fail, packets can simply take another route, ensuring a communication channel is always available. PPPoE is able to transmit packets across different ADSL lines. This way, if one line is slow, the packets can still be delivered through the other lines at normal speed. PPPoE makes it so that packets do not have to 'wait' for a single line to push data through to its destination before more packets can be delivered.

Network: Networks can be as small as interconnected computers in an office building, or as large as a city-wide telephone system. They are basically a structure of linked objects and lines connecting them.

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The objects, in this case, are called 'nodes'. A node can be a computer, a router or other machinery that makes up the network. All the objects in the network communicate with each other to produce a desired effect. With PPPoE, the effect is to deliver high rates of data at fast speeds for Internet usage. The PPPoE network consists of nodes located at both a user's location and the ISP's data center, where the Internet service is controlled.

LAN: Local Area Network. Put simply, a LAN is a collection of computer-controlled devices that are linked together in the same building through wires, which also act as communication channels so that information can pass from one device to another. This way, a computer can tell a printer to print something, or it can send a message to another computer, and so on.

Router: A router is a node in a network that acts as a gatekeeper of data packets. Its function is to send information from one network to another, so that the two networks can communicate. With PPPoE, the local network at the user's location (literally the ADSL wires and boxes, plus the computers in the building) are connected to the network at SmarttNet's data center. There, the special PPPoE router device is told to retrieve requested information (such as loading a Web site's homepage) and then deliver it back to the user (the point at which you see something appear on your computer screen).