## What makes Multilink PPPoE different?

Multilink Point-to-Point Protocol over Ethernet (PPPoE) is a type of Internet technology that began as a technique to increase bandwidth speeds by bundling multiple DSL phone lines together. It works much like aggregated ADSL technology, except it is more reliable because it does not depend on software to translate information passed through the multiple wires.

PPPoE is a system that is able to transfer packets of information through individual lines that, like aggregated services, are also bundled together (albeit in a different way). Data packets are often sent at different speeds on the multiple linked wires. With aggregation, when one line slows down, the other lines have to slow down with it, to keep a harmonious balance. Multilink PPPoE, on the other hand ensures that the lines do not interfere with each other, thus providing continuous high-speed transfer rates. The difference lies in the fact that PPPoE runs at a hardware level and not through software with limited 'understanding' about what to do with the packets. Therefore, data can be transferred without interference, unlike aggregation. The PPPoE lines are bundled to achieve higher speeds, but still act independently of one another.

Not only that, in the event that one of the bundled lines goes down, the system contains inevitable redundancy backup because other linked lines will continue to function as normal. To the end user, the result is less downtime when maintenance has to be done. PPPoE is the only Internet connection with this type of built-in accountability. This can be critical for applications that rely on continuous Internet connectivity, such as Virtual Private Networks (VPNs) for accessing company data across different locations, or for VoIP telephony, so phone calls are not dropped or prevented.

For industries that require higher upload speeds for transmitting large amounts of data, Multilink PPPoE is also a competitive option when compared to other Internet offerings, such as cable or wireless Internet. The speed and availability, plus the low-cost infrastructure and quick, interruption-free setup process make it hard to beat.

Cable speeds at average business package pricing can achieve only 1 to 5 Mbps (megabits per second) when downloading and 2 Mbps when uploading. Multilink PPPoE, on the other hand, can provide between 6 and 24 Mbps for downloads and anywhere from 1 to 4 Mbps for uploads. Since lines on Multilink PPPoE are based on DSL technology, clients still have direct access to their service provider, without having to share a line with other users, as is the case with cable. This way, data traffic blockages and slowdowns are not a concern.

When compared to fiber, PPPoE stands the test for locations that are hard to reach or where expensive infrastructure and long wait-times prevent implementation. In cases like these, the benefits may not outweigh the costs and PPPoE can provide top-of-the-line Internet connections that can satisfy remote users as well as fiber would anyway.

Wireless Internet offerings are still not as absolute as connections based on hard infrastructure. Where objects are in the way, wireless antennas may have trouble communicating and therefore the technology cannot be relied upon as a primary route of data transfer. Speeds also do not compare to

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other Internet types. With Multilink PPPoE, installation can happen anywhere DSL lines are located, and its built-in redundancy eliminates the need for a backup wireless connection.

To conclude, Multilink PPPoE is a technology that, although not new, is now adaptable to meet the needs of business class Internet users. Those that require high upload speeds and reliability can make the most of PPPoE. Even those simply looking for a cost-saving Internet service at high quality standards will find PPPoE attractive. Certainly, more is to be gained by the service than any loss, if any, incurred from switching over.