

enTouch Network Performance Metrics

Performance Definitions:

ISP-Internet service provider

Upstream speed- Speed at which data can be transferred from the customer to the server

Downstream-Speed at which data is sent from a network service provider to a customer

Packet loss-When parts of data fail to reach their destination

Latency- Time delay in transmitting or receiving packets on a network

Internet Gateway- Data communication device used to connect equipment to the internet. Examples include modem, router or ONT

The actual speed a customer experiences at their home can vary depending on numerous conditions. Many of these conditions are beyond the control of the ISP.

1. **Performance of on-site computer.** This would include computer age, processing capability, operating system, the number of applications running simultaneously, and the presence of any adware and viruses.
2. **Type of connection between a customer's computer and internet gateway.** In-home wireless connections between the computer and the router or modem will be slower than wired connections. EnTouch recommends that customers confirm that their in-home wireless connections are able to support the speeds that enTouch's services deliver. Certain older in-home wireless connections and routers cannot perform at the speeds delivered by EnTouch's higher speed tiers. Customers can purchase their modem and router at a retail outlet, or they can lease the necessary equipment from EnTouch, though even wireless routers leased from EnTouch are subject to some of the same limitations mentioned above.
3. **The distance packets travel (round trip time of packets)** between a customer's computer and their final destination on the Internet, including the number and quality of the networks of various operators in the transmission path. The Internet is a "network of networks." A customer's Internet traffic may

traverse the networks of multiple providers before reaching its destination, and the capabilities of those networks may affect the overall speed of that Internet connection.

4. **Congestion or high usage levels at the website or destination.** When you access a site or particular destination that is being visited by others at the same time, you may experience a slower connection if the site or destination does not have sufficient capacity to serve all of the visitors efficiently at the same time.
5. **Gating of speeds or access by the website or destination.** To control traffic or performance, many websites limit the speeds at which a visitor can download from their site. Those limitations will carry through to a customer's connection.
6. **The performance of the cable modem installed.** Modem performance may degrade over time, and certain modems are not capable of handling higher speeds