

VoIP Hosted Telecommunications Call Quality

Growing small to medium size (SMS) business firms have long faced the dilemma of how to best grow their telephone and fax services at affordable prices. The transition of going from simple key telephone systems to ownership and operation of a Private Branch eXchange (PBX) phone system involves a large capital outlay, monthly operational and maintenance costs, and the acceptance of risks associated with technical obsolescence. Traditional telephone companies addressed this need by offering Centrex service. Centrex provides a hosted telecommunications solution where customers rely on their local central office switch to provide PBX-like services but without the capital investment necessary to purchase a switch. Today, hosted telecommunications is rapidly becoming a synonym for a variety of hosted VoIP (Voice over Internet Protocol) service offerings. In this article, we examine call quality issues you should consider when deciding if a hosted telecommunications service is the right choice for your business.

The telephone system that people used in the 1990's didn't start out with Alexander Graham Bell using a Class 5 Electronic Switching System (5ESS). High-quality telephone calls were achieved over a long period of time. Just about the time when telephone calls were reaching a state of perfection, along came cell-phones and call quality kinda moved back to square 1. With cell phones long distance costs dropped but so did lots of telephone calls. The new consumer paradigm became lower costs and lower quality communications. This nicely set the stage for the development in Israel of Voice over the Internet.

The Internet was designed from the ground up to meet the technical requirements of computer-to-computer communications. The protocol mechanisms support cool things like allowing data to arrive over the network out of chronological order because computers don't really mind rearranging data after transit. Humans, however, tend to become a bit flustered if the end of a sentence repeatedly arrives before the beginning. Nevertheless, because it is less expensive to build a network with TCP/IP routers than with 5ESS systems the lure of reducing phone costs resulted in lots of effort to create VoIP.

VoIP, and other real-time applications, require low-latency queuing, jitter control, and other mechanisms to control the Quality of Service (QoS) allocated by network resources. One drawback to deploying QoS, however, is that it increases operational complexity and costs. QoS on the Internet is also at the center of a hotly contested debate known as Internet Neutrality or "net neutrality". The capability to prioritize traffic flows on the Internet has broad revenue and equal access implications for data applications such as the world wide web. Without QoS support, however, the quality of any given VoIP connection over the Internet is little more than a coin toss. In many areas of the world ISP's have overprovisioned network capacity obviating the need for QoS. In cases where a transit network is not adequately overprovisioned, however, call quality can suffer substantially. Thus, it has become common to hear stories about consumers who have fantastic VoIP hosted telecommunications service from a given provider while a different set of customers of the same service experience terrible call quality to the extent that they discontinue service. VoIP hosted telecommunications providers have no control over call quality on public Internet transit networks. Business consumers especially need to weigh call quality issues verses cost when evaluating VoIP hosted telecommunications services.

The best way to actually determine if a given VoIP hosted telecommunications service will satisfy your business needs is to try it out. But before you try out any service make sure they offer a 30-day money back satisfaction guarantee. The guarantee can prevent you from getting stuck with charges should your chosen provider not turn out to deliver the call quality your business needs. After surveying the marketplace for VoIP hosted telecommunications services and considering factors such as the underlying network provisioning we recommend that you give Packet8 Virtual Office a try. Packet8 currently has one of the largest subscriber bases in the industry. Packet8 has a strategic arrangement with Level 3 communications for use of its 23 thousand mile fiber optic backbone. If anyone has an adequately overprovisioned network backbone for VoIP it is Level 3. You can also rest assured with the 30-day money back guarantee Packet8 offers for its Virtual Office service. To find out more about Virtual Office click [here](#).